

3.2.1. Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

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1. AIT Website Links for various activities

Link for Year wise report of Technical Board activities (TECH AKRITI & SOLUTIONS) is

<https://www.aitpune.com/TechnicalBoard.aspx>

Link for Year wise report of SUPRA/BAJA is

<https://www.aitpune.com/SAEClub.aspx>

Link for Year wise report of ROBOTICS CLUB is

<https://www.aitpune.com/COEforAIRobotics.aspx>

Link for MOU with various Industries

<https://www.aitpune.com/ResearchNDevelopment.aspx>

Link for activities in 3DPLM Lab

<https://www.aitpune.com/Student-Branch.aspx>

Link for Year wise Students Project list (BE Project, Mini Project, Project based Learning) of all departments

<https://www.aitpune.com/Electronics-and-Telecommunication.aspx>

<https://www.aitpune.com/Computer-Engg.aspx>

<https://www.aitpune.com/Information-Technology.aspx>

<https://www.aitpune.com/Mechanical-Engg.aspx>

<https://www.aitpune.com/Applied-Science.aspx>

Link for student chapters

<https://www.aitpune.com/ieee/index.html>

<https://www.aitpune.com/iete.aspx>

<https://www.aitpune.com/Student-Branch.aspx>

Link for Innovation & Entrepreneurship Cell (I&E Cell)

<https://www.aitecell.in/>

<https://www.aitpune.com/Student-Branch.aspx>

Link for Institution' s Innovation Council (IIC)

<https://www.aitpune.com/iic1.aspx>

Link for Open Source Software Club

<https://www.aitpune.com/OpenSourceSoftwareClub.aspx>

Link for Patents/Copyrights

<https://www.aitpune.com/ResearchNDevelopment.aspx>

Link for Industry and Academic Collaboration (Industry sponsored Labs, Industrial visits , Internships/Industrial Training)

<https://www.aitpune.com/ResearchNDevelopment.aspx>

2. Institution's Innovation Council (IIC)





Army Institute Of Technology , Pune

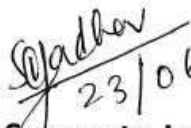
Notice


Date:- 23rd June 2020

**Following members will scrutinize the Idea submitted by
Students for IIC National Innovation Contest 2020 .**

- 1) Dr. Sangeeta Jadhav (Member IT)**
- 2) Dr. Shradha Oza (Member E&TC)**
- 3) Prof. Geeta Patil (Member IT)**
- 4) Prof. R. B. Gurav (Member Mech)**

They will submit the report in given format by 2nd July 2020.


23/06/2020
Dr. Sangeeta Jadhav
President IIC


23/06/2020
Dr. B. P. Patil
Principal



Institution's Innovation Council
MHRD's Innovation Cell, AICTE

Idea Submission Form

PART A: Idea/PoC (Product/Service/Process)

| | | | | |
|---|--|---|-----------------------------------|--------------------|
| Team Details | Team Lead: | | | |
| | Name | | Email | Contact no. |
| | Ritesh Kumar | | mail cheqit@gmail.com | 8446583256 |
| | Team Members Details: | | | |
| | Sr. No. | Name | Email | Contact no. |
| | 1. | Naman Agarwal | namanagarwal_16262@aitpune.edu.in | 9158381373 |
| 2. | Raj Kumar | rajkumar_16254@aitpune.edu.in | 9834734628 | |
| | Mentor (if any) | | | |
| | Sr. No. | Name | Email | Contact no. |
| | 1. | Vijender Yadav | vijender.yadav@accops.com | 96374 52253 |
| | | | | |
| | Institute Name and Address: Army Institute Of Technology, Pune. | | | |
| | | | | |
| Name of the Idea/Proof of Concept (PoC) | | CheqIt: Your Brand Custodian An Anti-Counterfeiting Solution | | |
| Theme | | ICT, cyber physical systems, Block chain, Cognitive computing, Cloud computing, AI & ML. | | |
| Define the problem & relevance to today's market/society/industry need (Max 100 words) | | Counterfeited (Duplicate) products are sold in the market under the brands name. These leads to loss to the company revenue, loss to the government in the form of tax and loss of faith of the customers with the brand. The pharmaceuticals, auto spare part sector, alcohol and beverage sector are the major sectors where counterfeiting is done. | | |
| Propose the solution to Problem Identified (Max 100 words) | | We are providing anti-counterfeiting tags, which looks similar to QR codes and are one-time scan tags, using which the end consumer can verify whether the product is genuine or not just by scanning the tag using our patent pending technology. We are capturing the demographic information at the time of scanning which is analysed and presented on the dashboard to the companies for target marketing. The comparison between the valid scans and invalid scans can be also seen. The companies can also monitor the supply chain of their products. | | |
| Describe the product/process/ service and write how it is innovative / unique. (Max 100 words) | | The tags are peel-off tags which will be peeled by the end consumer at the time of purchase and scan the code below it only using our mobile application. The tags are a one-time scan unique image tag. We are providing an API for producing one time scan unique images for every single product OEM Manufacturers. The companies can track the supply chain using the dashboard, that will show the demographic data like location at the time of scanning, comparison between genuine and non-genuine scans. | | |

| | |
|---|--|
| How is your proposed product/ process/service being different/ better from a similar product/ process/ service, if any, in the market (Max 100 words) | We are providing a dashboard using which the companies can get the information about the genuine scan of their product and can get the location of the consumers that will help in target marketing. Consumer can scan the tag (which looks like a QR code) and can verify whether it is genuine or not. The algorithm that is used for generating the tags has been filed for the patent. |
| If your Idea is technology based, then specify the TRL Level (Technology Readiness Level) and Expecting the features of Idea/PoC. | We are at TRL level 6. We have completed the beta testing of our product and ran a pilot project with Garage works, as a result our product is working as per expectation in the intended environment. One-time scan tags, Capturing the user demographic data at the time of scanning, tracking the supply chain of the product and information for the target marketing are the features of our idea. |
| Feasibility of Idea/PoC solution (SMART) (Check the appropriateness of the Idea/PoC) (Max 50 words for each from a-e) | |
| (a) Specific- Specify the features of Innovative Idea/PoC. | One-time scan tags to verify whether the product is genuine or not. Dashboard for analytics of the demographic information captured at the time of scanning for target marketing. Supply chain monitoring of the product. Comparison between the valid scans and invalid scans with the locations. |
| (b) Measurable- Mention the approach to convert idea/PoC to Prototype/Innovation with milestones. | We have started in May'19: <ul style="list-style-type: none"> May'19- Ideation June'19-Jul'19- Validation of Idea Aug'19- Started building the prototype Sept'19- Validation of Prototype Oct'19- Integrated the change as per the feedback of validation stage Dec'19- Ran our first commercial Beta testing with a Start-up Jan'20- Participated as a student start up at Pune start up Fest and received the 4th award in the category. Feb'20: Revised our business model and got incubation help from Bhau Institute Pune. June'20: Patent Filed Aug'20: Looking forward to get our first client Sept'20: Deliver our first client with complete functioning of the product |
| (c) Attainable- Explain how you are going to achieve the prototype development objective with the available resources at your disposal. | We have a very competent team with a great skill set and more importantly we all look to solve problems and make our product convenient for our customers. We have defined a timeline and we follow that to achieve our goals. We have developed a ready to deliver product with a secure system. We have formed teams who lead at the different fronts of the product. We have created our own platform where we manage and discuss different modules of the Startup. |
| (d) Realistic- what kind of skillset of team and resources required to achieve the goal in specific time period? | We are looking to provide B2B SAAS model to our customers which is majorly a technology based solution for supply chain monitoring and counterfeiting detection systems Skills required: Team Player Technologically sound and aware person Critical Thinker and Problem solver Business Lead generator Our team comprises of highly energetic and competent team players which include: |



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Education**
Government of India



**MoE's
INNOVATION CELL**
(GOVERNMENT OF INDIA)



**INSTITUTION'S
INNOVATION
COUNCIL**
(Ministry of Education Initiative)



IIC5.0 Calendar Activities for Academic Year 2022-23


Semester -1 (Sept. - Feb.)


Quarter 1 (1st Sept. - 30th Nov.)


| Sr. No | Activity | Mode of Conduct | Thrust Area |
|--------|---|-----------------|--------------------------------------|
| 1 | Workshop on "Entrepreneurship and Innovation" as Career Opportunity | Offline/Online | Inspiration, Motivation and Ideation |
| 2 | My Story - Motivational Session by Successful Innovators | Offline/Online | |
| 3 | My Story - Motivational Session by Successful Entrepreneur/Start-up founder | Offline/Online | |
| 4 | Session on Problem Solving and Ideation Workshop | Offline/Online | |
| 5 | Exposure and field visit for problem identification | Offline | |
| 6 | Organise an Inter/Intra Institutional Idea Competition/Challenge/Hackathon and Reward Best Ideas - Manage through YUKTI-NIR | Offline | |
| 7 | Mentoring Event: Demo Day/Exhibition/Poster Presentation of Ideas/PoC & linkage with Innovation Ambassadors/Experts for Mentorship Support - Manage through YUKTI-NIR | Offline/Online | |


Quarter 2 (1st Dec. - 28th Feb)

| | | | |
|---|--|----------------|------------------------------------|
| 1 | Workshop on Design Thinking, Critical thinking and Innovation Design | Offline/Online | Validation and Concept Development |
| 2 | Organising Innovation & Entrepreneurship Outreach Program in Schools/Community | Offline | |
| 3 | Organise an Expert talk on Process of Innovation Development, Technology Readiness Level (TRL); Commercialisation of Lab Technologies & Tech-Transfer | Online/Offline | |
| 4 | Workshop on Entrepreneurship Skill, Attitude and Behaviour Development | Online/Offline | |
| 5 | Conduct a Session on Achieving Problem-Solution Fit and Product-Market Fit | Online/Offline | |
| 6 | Field/Exposure Visit to Pre-incubation units such as Ideas Lab, Fab lab, Makers Space, Design Centres, City MSME clusters, workshops etc. | Offline | |
| 7 | Organise an Inter/Intra Institutional Innovation Competition/Challenge/Hackathon and Reward Best Innovations - Manage through YUKTI-NIR | Offline | |
| 8 | Mentoring Event: Demo Day/Exhibition/Poster Presentation of Innovations/Prototypes & linkage with Innovation Ambassadors/Experts for Mentorship Support - Manage through YUKTI-NIR | Offline/Online | |


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INSTITUTION'S INNOVATION COUNCIL
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IIC5.0 Calendar Activities for Academic Year 2022-23

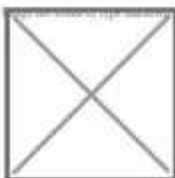
Semester II (Mar. - Aug.)

Quarter 3 (1st Mar. - 31st May)

| | | | |
|---|--|----------------|--|
| 1 | Workshop on Prototype/Process Design and Development. | Offline/Online | Prototype, Design, Process Development for Business Model/ Process/ Services |
| 2 | Session/ Workshop on Business Model Canvas (BMC) | Offline/Online | |
| 3 | Field/Exposure Visit to Incubation Unit/Patent Facilitation Centre/Technology Transfer Centre such as Atal Incubation Centre etc. | Offline | |
| 4 | Session on "How to plan for Start-up and legal & Ethical Steps" | Offline/Online | |
| 5 | Workshop on Intellectual Property Rights (IPRs) and IP management for start up | Offline/Online | |
| 6 | Organise an Inter/Intra Institutional Business Plan Competition and Reward Best Innovations - Manage through YUKTI-NIR | Offline | |
| 7 | Mentoring Event: Demo Day/Exhibition/Poster Presentation of Business Plans & linkage with Innovation Ambassadors/Experts for Mentorship Support - Manage through YUKTI-NIR | Offline/Online | |

Quarter 4 (1st Jun. - 31st Aug.)

| | | | |
|---|---|----------------|--|
| 1 | Session on Innovation/Prototype Validation – Converting Innovation into a Start-up or Session on Achieving "Value Proposition Fit" & "Business Fit" | Offline/Online | Awareness about Startup and related Ecosystem Support Services for Startup Development |
| 2 | Session on Accelerators/Incubation - Opportunities for Students & Faculties - Early Stage Entrepreneurs | Offline/Online | |
| 3 | Organise Session on "Lean Start-up & Minimum Viable Product/Business"- Boot Camp (or) Mentoring Session | Offline/Online | |
| 4 | Session on Angel Investment/VC Funding Opportunity for Early Stage Entrepreneurs. | Offline/Online | |
| 5 | Session/ Panel discussion with innovation and Start-up Ecosystem Enablers from the region/state/national level | Offline/Online | |
| 6 | Organising Innovation & Entrepreneurship Outreach Program in Schools/Community | Offline | |
| 6 | Organise an Inter/Intra Institutional Start-up Competition and Reward Best Start-ups - Manage through YUKTI-NIR | Offline | |
| 7 | Mentoring Event: Demo Day/Exhibition/Poster Presentation of Start-Ups & Linkage with Innovation Ambassadors/Experts for Mentorship Support - Manage through YUKTI-NIR | Offline/Online | |



IIC Report Details

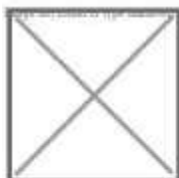
Army Institute of Technology , Maharashtra , PUNE

Activity Report submitted for the academic year 2019-20



| S.NO. | ACTIVITY | TOTAL SUBMISSION | STATUS |
|-------|-----------------------|------------------|--------------------------------|
| 1 | MIC Driven | 21 | Verified - 20 Submitted - 1 |
| 2 | IIC Calender Activity | 18 | Verified - 18 |
| 3 | Self Driven | 7 | Verified - 7 |

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IIC Report Details

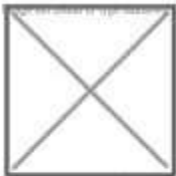
Army Institute of Technology , Maharashtra , PUNE

Activity Report submitted for the academic year 2020-21



| S.NO. | ACTIVITY | TOTAL SUBMISSION | STATUS |
|-------|-----------------------|------------------|----------------------------------|
| 1 | MIC Driven | 7 | Verified - 7 |
| 2 | IIC Calender Activity | 26 | Verified - 26 |
| 3 | Self Driven | 25 | Disapproved - 17 Verified - 8 |

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IIC Report Details

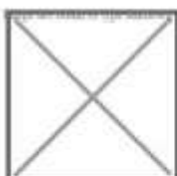
Army Institute of Technology , Maharashtra , PUNE

Activity Report submitted for the academic year 2021-22



| S.NO. | ACTIVITY | TOTAL SUBMISSION | STATUS |
|-------|-----------------------|------------------|---------------|
| 1 | IIC Calender Activity | 15 | Verified - 15 |
| 2 | Self Driven | 9 | Verified - 9 |
| 3 | Celebration | 7 | Verified - 7 |
| 4 | MIC Driven | 5 | Verified - 5 |

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IIC Report Details

Army Institute of Technology , Maharashtra , PUNE

Activity Report submitted for the academic year 2022-23



| S.NO. | ACTIVITY | TOTAL SUBMISSION | STATUS |
|-------|-----------------------|------------------|---------------------------------|
| 1 | IIC Calender Activity | 10 | Verified - 10 |
| 2 | Self Driven | 17 | Verified - 9 Disapproved - 8 |
| 3 | MIC Driven | 3 | Verified - 3 |
| 4 | Celebration | 7 | Verified - 7 |

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3. Innovation & Entrepreneurship Cell

Innovation and Entrepreneurship Cell

Academic Year 22-23

Report

1. Visit to incubation Centers

| Sr. No. | Name of the Center | Name of the Official, In Charge | Participants | Date |
|---------|--------------------------------------|---|-----------------------------|-----------|
| 1 | Visit to Inali Foundation | Dr. Shraddha Oza, Dr. Harjeet Kaur | E Cell students and faculty | 5 Aug 22 |
| 2 | Deftech Manufacturing and Expo Visit | Dr Surekha K S, Dr Shraddha Oza, Prof Geeta Patil, Prof Pankaj Dorlikar | E Cell students and faculty | 9 Nov 22 |
| 3 | Visit to Vigyan Ashram | Dr. Shraddha Oza | E Cell students and faculty | 18 Jan 23 |

2. Guest Lectures Organised

| Sr. No. | Name of the Session and Speaker | Name of the organisation | Target Audience | Date |
|---------|---|--------------------------|-----------------|--|
| 1 | "Future of Drones " by Mr Santosh Sharma , Co-Founder, Vyom vista | Yyom vista | FE to BE | 4 th february 2023 11.00 am - 12.00 pm |



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| Sr. No. | Name of the Session and Speaker | Name of the organisation | Target Audience | Date |
|---------|---|--------------------------|-----------------|---|
| 2 | "Engineer to Entrepreneur", by Mrs Pallavi Tyagi , digital marketing strategist, Founder, 26 Technologies | 26 Technologies | FE to BE | 6 th february 2023 4pm - 6pm |
| 3 | "Master class in design Entrepreneurship" by Samir Chabukswar , Ceo & founder, Yuj Designs | Yuj Designs | FE to BE | 15 th February 2023 3pm - 4pm |
| 4 | "Decode Startup to build Startup, celebrating struggle over success" Mr Ravi Kumar, Founder, udChalo | udChalo | FE to BE | 27 Feb 23 |
| 5 | "Student Entrepreneurs " by Mr Nishant Pandey, director of product management, jll technologies | JLL Technologies | FE to BE | 28 th March 2023 3pm - 4pm |
| 6 | "Why no/low code " by Mr Vaibhav Gupta , Director of Technology , udchalo | udchalo | FE to BE | 12 th April 2023 3pm - 4pm |
| 7 | "Finding co-founder" by Ms Rakhii Pal ; co-founder, Eventbeep | Eventbeep | FE to BE | 14 th April 2023 4pm - 5pm |



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| Sr. No. | Name of the Session and Speaker | Name of the organisation | Target Audience | Date |
|---------|--|-----------------------------|-----------------|---|
| 8 | "Startup journey" by Mr Ayush Agarwal , Director, Regional Head, cars24 | cars24 | FE to BE | 15 th April 2023 3pm - 4pm |
| 9 | "Building an Enterprise" by Mr Amitav Saha , CEO & COO, Firstcry & Xpressbees | Firstcry & Xpressbees | FE to BE | 21 st April 2023 4:30 pm - 5 pm |
| 10 | "Making Career " by Mr Rishab Lunia , Director, Knowise Learning Academy | Knowise Learning Academy | FE to BE | 16 th April 2023 3pm - 4 pm |
| 11 | "College to Corporate, what skills are required " by Mr Amit Andre , ceo , The Datatech Labs | The Datatech Labs | FE to BE | 16 th April 2023 2pm-3pm |

3. Workshops Organized

| Sr. No. | Name of the Session and Speaker | Name of the Speakers / organisation | Target Audience | Date |
|---------|---|---|-----------------|---------------------------------|
| 1 | Preincubation Program ("Lemonade to Juice Center") Abhijeet Deogirikar, Vandana Balkrishna , Pallavi Tyagi | CopperCloud Technology, 26 Technologies | FE to BE | 16 June 23 and 23 June 23 |



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| Sr. No. | Name of the Session and Speaker | Name of the organisation | Target Audience | Date |
|---------|---------------------------------|--------------------------|-----------------|------------|
| 2 | Spark your Startup | KliqueStart Community | FE to BE | 8 April 23 |

4. Events Organized

| Sr. No. | Name of the Event | Name of the Faculty In Charge | Target Audience | Date |
|---------|--|---------------------------------------|-----------------|--|
| 1 | World Entrepreneurship day Celebration | Prof Geeta Patil | FE to BE | 30 Aug 22 |
| 2 | Impressions 2.0 | Dr. Shraddha Oza, Prof P. V. Dorlikar | FE | 12 th Oct – 19 th Oct 22 (Online) |
| 3 | Cold Emailing | Dr. Shraddha Oza Prof P. V. Dorlikar | SE | 4 th , 5 th November 2022 |
| 3 | Unnati 2.0 | Dr. Shraddha Oza, Prof P. V. Dorlikar | FE-SE | 11 th and 12 Nov 22 |
| 4 | Decode branding | Dr. Shraddha Oza, Prof P. V. Dorlikar | Only FEs for | 12 - 19 december 2023 |



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| Sr. No. | Name of the Event | Name of the Faculty In Charge | Target Audience | Date |
|---------|-------------------------------|--|-----------------|---------------------|
| 5 | Quiz on National Start-up Day | Dr. Shraddha Oza, Prof P. V. Dorlikar | FE to BE | 16 Jan 23 |
| 6 | Thursday Capsules | Dr. Shraddha Oza, Prof P. V. Dorlikar | | Throughout the year |

STARTUP SAGA

| | | | | |
|---|--|--|--|-----------------|
| 7 | Niveshathon A 24-hour trading league hosted on the StockGro app, which allowed participants to trade cryptocurrencies with 10 lakhs of virtual money | Dr. Shraddha Oza, Prof P. V. Dorlikar | Open to all (AIT + Non Aitians) | 12-13 Apr 23 |
| 8 | Nocode Startup a three-phase competition that focused on building a prototype for a problem statement in different domains such as IoT, software track, and 3D prototype track. | Dr. Shraddha Oza, Prof P. V. Dorlikar | Open to all (AIT + Non Aitians) | 14-15 Apr 23 |



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- CSD Express – Nitesh Kumar, Nishu Singh , BE E&Tc
- SSB Accommodation Platform – Ankit Kumar, SE, E&Tc
- Kashida - Ankit Singh, Kavya Chauhan, SE IT

7. Student Startup initiatives

| Sr. No. | Event/Activity | Date/Time | Attendees |
|---|--|--|----------------------------------|
| Student Startup Initiative – “Stumato” | | | |
| 1 | “Stumato”, app launched, A food app to order food from student Mess, A student startup initiative by SE IT Students First Pilot Run conducted | 1 st May 23 6pm to 9pm | FE Students (40) |
| 2 | Subsequent pilot runs of the app User Manual ready. | 5, 7, 12 and 13 th May 23 6pm to 9pm | FE Students + Girls Hostel (150) |
| 3 | Testing phase of “Stumato” app with Amazon Development Platform | June 8- June 21, 2023 | |
| Student Startup Initiative – “Kashida” | | | |
| 4 | A platform to promote handcrafted goods made by Indian Army welfare organizations Status – Platform ready and hosted, Revenue generated of Rs. 20,000 in the year | - | - |



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| Sr. No. | Event/Activity | Date/Time | Attendees |
|---|---|----------------------------|---------------------------------|
| Preincubation Program ("Lemonade to Juice Center") | | | |
| 1 | Session 1 - Market Survey / idea Validation by Pallavi Tyagi, Founder, 26 technology Services | 16 June 23 9 pm to 10pm | 3 FE student teams (7 Students) |
| | Session 2 - Technology Execution By Mr Abhijeet Deogirikar, Founder, CopperCloud IOT | 23 June 23 9pmto 10pm | 2 FE student Teams (5 Students) |

Faculty in Charge

Dr Shraddha Oza

Student Secretary

Mr Samik Chaudhary

Ms Tanu Sharma



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Report for Visit to Inali Foundation

Date: 5 August 2022
Time: 1000 to 1300 hours

| Required Field | Information to be filled |
|--|--|
| Social link | https://aitecell.in/ |
| Academic Year * | 2022-2023 |
| Program driven by *(to be decided by social media coordinator) | AIT I&E Cell |
| Program/Activity/Name * | Field group visit to Inali Foundation |
| Select one of the Program Type *(Workshop/Leadership Talk/Motivation Speech/Field Visit/Other) | Field Visit |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | Entrepreneurship/Startup |
| * Start Date | 5 th August 2022 |
| * End Date | 5 th August 2022 |
| Number of External Participants, If any | - |
| *Mode of Session delivery (offline/online) | Offline |
| *Number of Student Participants | 18 |
| *Number of Faculty Participants | 2 |
| Expenditure Amount, If any | - |
| Remark | Excellent conducted field visit |
| *Benefit in terms of learning/Skill/Knowledge obtained (Up to 150 character) | The Benefits of the visit are :- 1. understand working of NGOs and NFP Organizations. 2. students got motivated for social enterprunership. 3.We understood technology usage in Prosthetic (Social cause) |
| *Objective (Up to 100 character) | The objectives of the visit were:- |



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| | |
|---|--|
| | <p>1. To know about the working of a not for profit organization.</p> <p>2. To learn about innovations that help mankind.</p> <p>4. Make students aware about Social Entrepreneurship.</p> |
| *Faculty Name (Faculty involved in organizing event) | Dr. Shraddha Oza, Dr Harjeet Kaur |
| *Student Name((student involved in organizing event) | Samik Choudhury, Sandeep Kumar Mishra |
| *Video URL | - |
| *Photograph1 (JPEG Format max size 2 Mb which shows strength of audience with speaker) |  |
| *Photograph2 (JPEG Format max size 2 Mb which shows strength of audience with speaker) |  |
| *Session plan/Brochure/Document/overall report of the activity(JPEG or PDF Format max size 2 Mb | - |



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Report for Entrepreneurship Day Celebration

Celebration of Entrepreneurship Day in I&E Cell



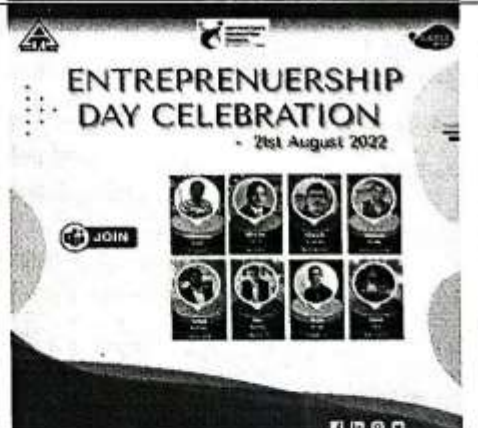
Date: 30th August 2022

Time: 6:30 PM

| Required Field | Information to be filled |
|--|--|
| Link for publicity on Social media * (Facebook//twitter/Instagram) | https://www.facebook.com/ecellait/photos/pcb.5447601948659072/5447558758663391 |
| Academic Year * | 2022-2023 |
| Program driven by *(to be decided by social media coordinator) | AIT I&E Cell |
| Program/Activity/Name * | Organized Event |
| Select one of the Program Type *(Workshop/Leadership Talk/Motivation Speech/Field Visit/Other) | Leadership Talk/Other |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | Entrepreneurship |
| * Start Date | 30 th August 2022 |
| * End Date | 30 th August 2022 |
| Number of External Participants, If any | 6 |
| *Mode of Session delivery (offline/online) | Online |
| *Number of Student Participants | 30 |
| *Number of Faculty Participants | 2 |
| Faculty Coordinators | Geeta Patil |
| Student Coordinators | Tanu |
| Expenditure Amount, If any | - |
| Remark | A successful organized event |
| * Benefit in terms of learning/Skill/Knowledge obtained (Up to 150 character) | The benefits of the session are:- :- Students interacted with alumni entrepreneurs and understood their Journey. :- Students realized the importance of entrepreneurs in nation building and understood the significance of |



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| | |
|--|---|
| | Entrepreneurship day. |
| *Objective (Up to 100 character) | The Objectives of the session were:- :- A proper interaction between students and their Alumni entrepreneurs :- A platform to share opinions and ideas openly. :-To Celebrate Entrepreneurship Day |
| *Faculty Name (Faculty involved in organizing event) | Prof Geeta Patil |
| *Student Name((student involved in organizing event) | Samik Choudhury and Tanu Sharma |
| *Video URL | https://aitpuneedu-my.sharepoint.com/:v:/g/personal/samikchoudhary_20485_aitpune_edu_in/EWjdJPEoQGpLsJXrrTNC-T-AB_c4jEIIK77AWdeMsvBpqAg?e=9Jkm8F |
| *Photograph1 (JPEG Format max size 2 Mb which shows strength of audience with speaker) |  |
| *Photograph2 (JPEG Format max size 2 Mb which shows strength of audience with speaker) |  |
| *Session plan/Brochure/Document/overall report of the activity(JPEG or PDF Format max size 2 Mb) |  |



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Report of Impression 3.0

19th October 2022

| Required Field | Information to be Filled |
|--|---|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/CjnGOhtBvwl/?utm_source=ig_web_copy_link |
| Academic Year* | 2022-23 |
| Program driven by *(ti be decided by social media coordinator) | AIT Innovation and Entrepreneurship Cell |
| Program/Activity/Name* | Impression 3.0 |
| Select one of the Program Type Talk / Motivation *(Workshop / Leadership Speech / Field Visit / Other) | Other |
| Select of the Program Theme *(IPR / Innovation / Entrepreneurship / Startup / Other) | Other |
| *Start Date | 12 th October 2022 |
| *End Date | 19 th October 2022 |
| Number of External Participants, if any | NA |
| *Mode of Session delivery (offline/online) | Online |
| *Number of Student Participants | 25 |
| *Number of Faculty Participants | 2 |
| Expenditure Amount, if any | Rs. 3,000 |
| Remarks | NA |
| *Benefit in terms of Learning / Skill / Knowledge obtained | <ol style="list-style-type: none"> 1. Get a better understanding of how existing companies work and what problems they face. 2. Improve the problem-solving skills of students and focus on solutions to existing problems. 3. Helped in encouraging students in researching deeper about different business models so that they have a better understanding before starting their entrepreneurship goals. |



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| | |
|--|---|
| *Objective | The main objective of this event is to know more about different companies and their business models and bring out the problem-solving abilities of students. |
| *Faculty Name (Faculty involved in organizing the event) | Dr. Shraddha Oza & Prof. Geeta Patil |
| *Student Name (Faculty involved in organizing the event) | Ms. Tanu Sharma & Mr. Samik Chaudhary |
| *Video URL | NA |
| *Photograph1 (Jpeg Format max size 2Mb) which shows the strength of audience with speaker (can attach separate file) |  |
| *Photograph2 (Jpeg Format max size 2Mb) which shows the strength of audience with speaker (can attach separate file) |  |
| *Session plan / Brochure / Document / overall report of the activity (can attach separate file) |  |



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Overview:

Impression 3.0 was an online event conducted by the Innovation and Entrepreneurship Cell of Army Institute of Technology, Pune, wherein students were given four topics out of which one had to be chosen and the student had to write solutions to the problem given.

The topics were about different companies having different issues in their company, such as "PayTM's huge losses" or "The strikes by the drivers of Ola / Uber". This event was conducted so that students are well-informed about the current market situations and they get to figure out the solutions to the existing problems of these top businesses.

All in all, it was a great event with 25 participants having various solutions and ideas to the given problems!



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Report for Cold Emailing



Event : Cold Emailing

9th November 2022

| Required Field | Information to be filled |
|---|---|
| Link for publicity on Social media * (Facebook//twitter/ Instagram) | https://www.instagram.com/p/Ci7n_PUtQQ/?igshid=YmMyMTA2M2Y= |
| Academic Year * | 2022-23 |
| Program driven by *(to be decided by social media coordinator) | AIT I & E Cell |
| Program/Activity/Name * | Cold Emailing |
| Select one of the Program Type *(Workshop/Leadership Talk/Motivation Speech/Field Visit/Other) | Other |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | Innovation and Entrepreneurship |
| * Start Date | 4 th November 2022 |
| * End Date | 5 th November 2022 |
| Number of External Participants, If any | No |
| *Mode of Session delivery (offline/online) | Online |
| *Number of Student Participants | 30 |
| *Number of Faculty Participants | 0 |
| Expenditure Amount, If any | Rs. 3,000 |
| Remark | |
| * Benefit in terms of learning/Skill/Knowledge obtained | <p>1. Creates awareness and develops relationship with the prospects. Provides the knowledge about the product demonstration. This helps in gathering competitive intelligence in the real world.</p> <p>2. Get to know about the presentation skills and more about the startups and existing companies.</p> |



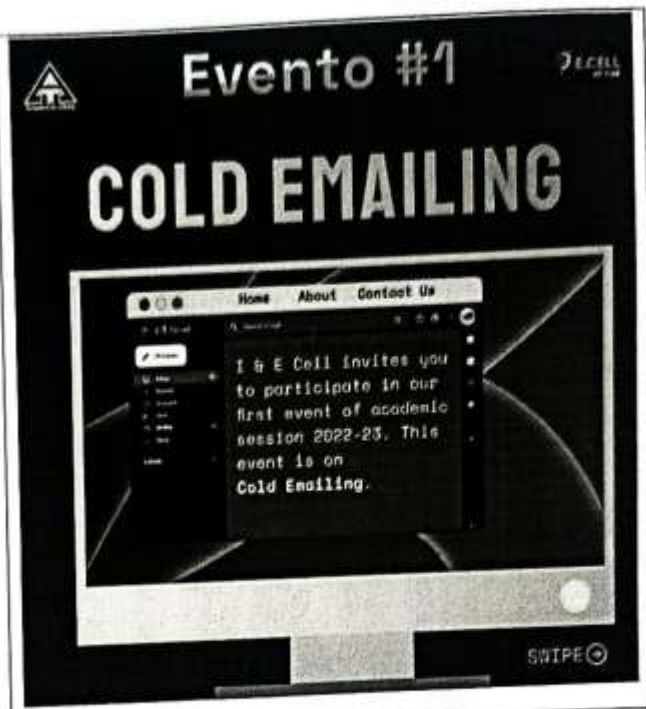
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| | |
|---|--|
| | <p>3. We have got to know about marketing and promotion of the product.</p> <p>4. We also meet our college alumni who have their own companies and doing great job in their respective field.</p> <p>5. Helped in encouraging the innovation and if someone have deep interest, they can get the ideas about sales, opportunity.</p> |
| *Objective | The main objective of this amazing event is to present your thoughts and strong writing abilities. |
| *Faculty Name (Faculty involved in organizing event) | Dr. Shraddha Oza & Prof. Geeta Patil |
| *Student Name (student involved in organizing event) | Ms. Tanu Sharma & Mr. Samik Chaudhary |
| *Video URL | NA |
| *Photograph1 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |
| *Photograph2 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |




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*Session plan/Brochure/Document/overall report of the activity (can attach separate file)



Overview of the event:

It was an event organized by Innovation & Entrepreneur Cell of Army Institute of Technology. Participants were requested to send their emails to ecellait@gmail.com on the topics that were provided to them.

Topics were:

- Funding for startup ideas from the industry.
- Internships and referrals from industry experts.
- Seek clients as a freelancer.

The event was open for SEs and TEs only.

Result was declared on 14 October

Prizes were distributed on 12 NOVEMBER 2022

WINNERS:

1. ABHAY SAHU
2. AYUSH KUMAR
3. ROHIT KUMAR





[Signature]
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Event : Deftech and Manufacturing Expo Visit9th November 2022

| Required Field | Information to be filled |
|--|---|
| Link for publicity on Social media * (Facebook//twitter/ Instagram) | NA |
| Academic Year * | 2022-23 |
| Program driven by *(to be decided by social media coordinator) | |
| Program/Activity/Name * | Deftech |
| Select one of the Program Type *(Workshop/Leadership Talk/Motivation Speech/Field Visit/Other) | Other |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | Other |
| * Start Date | 7 th November 2022 |
| * End Date | 9 th November 2022 |
| Number of External Participants, If any | 2 |
| *Mode of Session delivery (offline/online) | Offline |
| *Number of Student Participants | 50 |
| *Number of Faculty Participants | 4 |
| Expenditure Amount, If any | |
| Remark | |
| * Benefit in terms of learning/Skill/Knowledge obtained | 1. Exposure to state of art technology products, and industries in Pune 2. Building network for student internship, projects. |
| *Objective | The objectives – 1. To give exposure to students about different industries with their technology domains in Pune. 2. To explore opportunities for student internship, projects 3. Exposure to companies and their products for defense sector 4. Exposure state of art technology based products |



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| | |
|---|--|
| *Faculty Name (Faculty involved in organizing event) | Dr Surekha K S, Dr Shraddha Oza, Prof Geeta Patil, Prof Pankaj Dorlikar |
| *Student Name (student involved in organizing event) | Vignesh Hari B and Likhith Reddy |
| *Video URL | NA |
| *Photograph1 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |
| *Photograph2 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |



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*Session plan/Brochure/Document/overall report of the activity (can attach separate file)



The brochure for the Pune Manufacturing Expo 2022 features a gear icon on the left. The main text includes the MCCIA logo (Maharashtra Chamber of Commerce, Industries and Agriculture) and the event title 'PUNE DEFTECH' and 'PUNE MANUFACTURING EXPO 2022'. It lists the Principal Sponsor as 'itMapper' and the Gold Sponsor as 'Ritambhara'. The event dates are 'On 7th, 8th and 9th November 2022' from '10:00 am to 6:00 pm' at 'Auto Cluster Premises, Chinchwad - Pune'. It provides a website for details: 'www.mcciapune.com'. At the bottom, it states 'Entry is free' and lists 'Ecosystem Partners' with logos for 'MCCIA' and 'Auto Cluster'.

Overview of the event:

Student and faculty team visited the expo on 8th and 9th November. Brief about the same -

Pune Manufacturing Expo 2022 was organised by MCCIA, Pune. MCCIA (Maratha Chamber of Commerce Industries and Agriculture) is an Indian business advocacy and networking group located in Pune, serving businesses in the state of Maharashtra.

Pune is one of the most prominent centres for manufacturing, IT and ITEs, Education and Research in India. It hosts companies and organisations almost all the major sectors from India and abroad. Most of



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the companies from across the sectors in Pune and other parts of India have surpassed the Pre-Covid levels. Many of them have developed innovative products / solutions and have diversified in different segments. These companies are also an important part of the domestic and global value chain. In an effort to provide an avenue to the companies which are engaged in manufacturing or serving the manufacturing sector with unique products and services, to showcase their capabilities.

The focus sectors included defence, engineering and engineering design, autocomponents, electronics, energy and electricals, environment technologies, IoT, AI, machine learning, ERP, data integration, financial, and other solutions for manufacturing, research relevant to manufacturing sector.

The exhibit was organised at auto cluster premises, Pimpri Chinchwad Pune wherein almost 100 companies participated. The whole area was divided into two sections - one dedicated to the defence related products and the other was for non defense product based companies.

Few exhibits were from following companies

1. **AYAAN Autonomous Systems Pvt Ltd** – The company builds customized advanced drone systems using Drones, Marine Vehicles, Robotic Systems and Unmanned Platforms, for the most reputed enterprises and government agencies.
2. **Bit Mapper Integration Technologies** - is a high-reliability design house specialized in developing customized solutions for industrial use as well as Defense.
3. **Defspace** – the company enables to buy or sell products, find jobs, raise funds & more. Its an exclusive global platform for Defence, Space & Aerospace.
4. **Ethosh** – The company helps drive user engagement, accelerate sales and build advocacy by transforming legacy customer experiences based on AR/VR technology.
5. **Envicare Technologies** – Its an Organic waste management & Environmental Solutions Company.
6. **Mavericks labs** – The company provides GPS tracking information anywhere in India and can also predict the next step with help of speed and direction which helps at the time emergency.
7. **Rubiscape** – The company provides the services of data engineering, data science and visual effects and it is the first company in India.
8. **CopperCloud Pvt Ltd.** - is a start-up in Internet of Things (IoT) space, incorporated in 2018. Their primary focus is on Industrial IoT, with the objective of assisting MSMEs transition to Industry 4.0, through customized Industrial IoT solutions. The company is by an AIT alumnus, Mr Abhijeet Deogirikar (2003, Computer Science)

Outcomes:

1. The visit is useful for selecting suitable internships for the students.
2. The Army Design Bureau (ADB) is looking at specific technological capabilities from the academia. The faculty and students of AIT will undertake some of the projects under Army Design Bureau.



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Report for Unnati 2.0

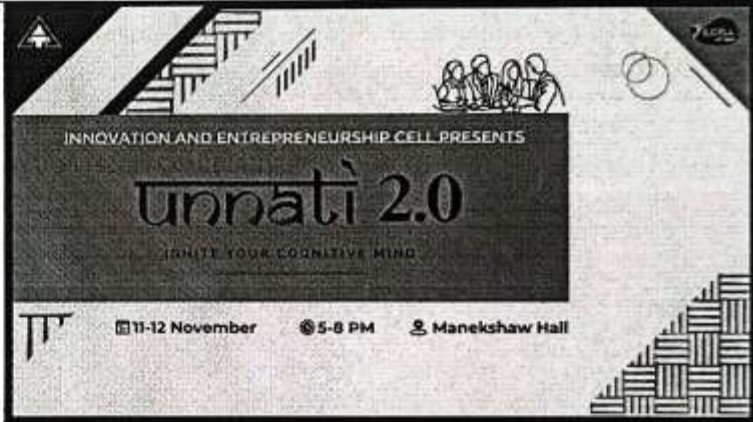
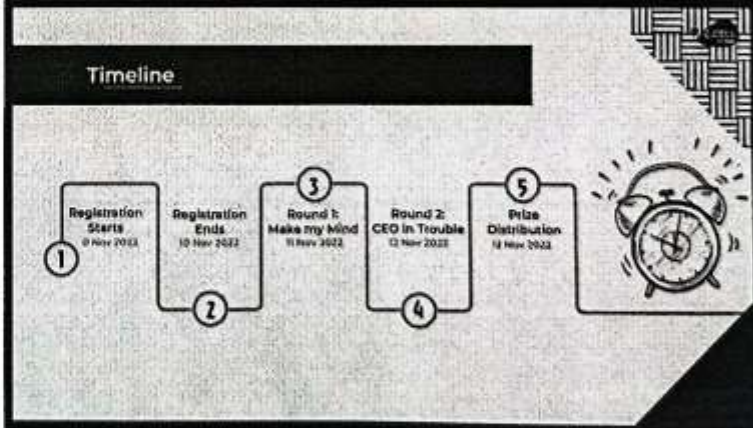
Event : Unnati 2.0

11th - 12th November 2022

| Required Field | Information to be filled |
|---|---|
| Link for publicity on Social media * (Facebook/twitter/ Instagram) | https://www.instagram.com/p/Ckx-sRSBzc1/?utm_source=ig_web_copy_link |
| Academic Year * | 2022-23 |
| Program driven by *(to be decided by social media coordinator) | |
| Program/Activity/Name * | Unnati 2.0 |
| State the Event Type | Competition |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | Innovation & Entrepreneurship |
| * Start Date | 11 th November 2022 |
| * End Date | 12 th November 2022 |
| No. of Rounds Conducted | Two |
| Number of External Participants, If any | Mr. Abhijeet Deogirikar, Mr. Avinash Pandey & Mr. Deepak Kumar Yadav |
| *Mode of Competiton (offline/online) | Offline |
| *Number of Student Participants in Round 1 (No. of teams) | 250+ (102 Teams) |
| *Number of Faculty Participants | Dr. Shraddha Oza & Prof. Geeta Patil |
| *Number of Teams Qualified for Round 2 | 16 |
| Expenditure Amount, If any | Rs. 31,000 |
| Remark | |
| * Benefit in terms of learning/Skill/Knowledge obtained | <p>1. Gives you real-time experience for product demonstration. This helps in gathering competitive intelligence in the real world.</p> <p>2. Sharpens your presentation skills and improve your public speaking skills.</p> <p>3. We also meet our college alumni who own companies and are doing great jobs in their respective fields.</p> |



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| | |
|--|--|
| | <p>4. We have got to know about marketing and promotion of the product.</p> <p>5. Helped in encouraging innovation.</p> |
| *Objective | The main objective of Unnati 2.0 was to provide a fantastic platform to showcase your originality and persuasiveness. And to inspire an entrepreneurial mentality. |
| *Faculty Name (Faculty involved in organizing the event) | Dr. Shraddha Oza & Prof. Geeta Patil |
| *Student Name (student involved in organizing the event) | Whole I&E cell team |
| *Video URL | NA |
| *Photograph1 From Round 1 (Jpeg Format max size 2 Mb) which shows the strength of audience with speaker (can attach separate file) | |
| *Photograph2 from Round 2 (Jpeg Format max size 2 Mb) which shows the strength of audience with speaker (can attach separate file) | |
| *Poster |  |
| *Session plan/Timeline (can attach separate file) |  |



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Overview of the event:

I&E-Cell organized the most exciting and engaging event, Unnati 2.0. The registrations for the event started on 8th Nov and ended on 10 Nov 2022. Unnati 2.0 was organized in two phases: Round 1 - "Brand Battle" and Round 2 "CEO In Trouble". Registrations for the event were done on the official website of UNNATI 2.0. We were delighted to receive 106 team registrations.

Round 1

was scheduled on 11th Nov 2022. The judges for Round 1 were Abhishek Kumar Meel sir, Rohit Yadav sir, Shubham Singh sir, and Nishu Malik sir. Two Teams were assigned to companies of the same domain on the spot. Each Team had to present their company to the audience and judges. They had to pitch the audience about their company products and service in the first 3 min. In the next 1 min, they had to state their plans about the company. The last 1 min was the brand battle round where the teams had to criticize each other's company and state what their does better than their rival company.

Round 2

Round 2 was scheduled on 12th Nov 2022. The judges for Round 2 were Abhijeet Deogirikar sir, Awanish Pandey sir and Deepak Yadav sir (Alumni of Ait). The qualified teams were given a case study on actual world companies who were on the verge of bankruptcy. The team members were the CEO of that company. The judges were the board of directors. The teams had to understand the reasons for the crisis in the first 3 min and state the solution for the same in the next 2 min.

After all presentations of the teams, results were announced: the Abhiyantrikis secured the first rank, the business insiders secured the second rank and Joders secured the third rank. The participants also got the chance to interact with the alumni. The winners were awarded certificates, goodies, and cash prizes.

The winners of impression 3.0 were also facilitated with certificates and goodies. And with this event ended.




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Fw: Meeting to explore possibility of collaboration between E Cell, AIT and Bluebricks

Dr Shraddha Oza <sdoza@aitpune.edu.in>

Fri 11/25/2022 11:15 AM

To: 5237 NIKITA KUMARI <nikitakumari_21500@aitpune.edu.in>

From: vikram sareen <vikram@blue-bricks.com>

Sent: Friday, November 25, 2022 8:37 AM

To: Dr Shraddha Oza <sdoza@aitpune.edu.in>

Cc: GEETA PATIL <gpatil@aitpune.edu.in>; P V Dorlikar <pvdorlikar@aitpune.edu.in>; 5338 SAMIK CHOUDHURY <samikchoudhary_20485@aitpune.edu.in>

Subject: Re: Meeting to explore possibility of collaboration between E Cell, AIT and Bluebricks

Thanks a ton Dr.

I will be there and all points are well understood. Lets discuss them and we will do the best from my side to contribute and add value by self and my company.

regards
vikram

On Thu, Nov 24, 2022 at 3:35 PM Dr Shraddha Oza <sdoza@aitpune.edu.in> wrote:

Dear Vikram,

This is wrf to our scheduled meeting tomorrow at 2pm.

Attendees from AIT:

Faculty - My Self, Prof Geeta Patil and Prof Dorlikar P.

Students - Mr Samik Chaudhary, Secretary E Cell, Mr Rishabh T

Agenda:

To imbibe "Entrepreneurship skills" amongst students ECell @AIT wishes to collaborate with ur esteemed organization and explore whether

1. E Cell can execute its activities in collaboration with Bluebricks as this would increase brand/value of E Cell making its initiatives more authentic and in alignment with agenda of "Entrepreneurship"
2. Expert sessions conducted by Bluebricks
3. Mentoring by Bluebricks to existing Startups
4. Collaborative "idea projects from planning to execution with a timeline" :-

We at E Cell are planning "**Product lab (Ind 4.0)**" wherein we propose to take up an idea under ur expert guidance and complete it as a product in a defined timeline. The idea may be in the domain of "Cyber Security for IoT" or any other that u may suggest.

5. Bluebricks may donate a resource in the form of SW license / equipment required for the prototype building / product testing.

<https://outlook.office.com/mail/id/AAQKADgxMmE1OTI0LWQ4OGEINGYwOC04MWWQ4LTA3MzBIMzg5YmlwY0AQAQJocel%2FODb79AltgxFWHzVPs%3D> 1/3



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This is what we have in thoughts for now. Please feel free to give your valuable suggestions, input.

We sincerely wish to explore the collaboration as we feel it would add value to us in a substantial way.

Sharing the link for meeting

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZWJkNmY4NGEtODhmYi00MTJlLWI1YTctYTQ2MjcxOTcwMzhk%40thread.v2/0?context=%7b%22Tid%22%3a%226d28e4fb-9074-4a0b-a5b8-9a89f632cc60%22%2c%22Oid%22%3a%22c714a86b-2594-4588-92b0-7450218e101d%22%7d



Join conversation

teams.microsoft.com

Thnx
Shraddha Oza

Warm Regards,
Vikram

Lets Share And Learn, I am available for you...
Our 2 minute video showcasing company introduction...
Click here to Subscribe Our Updates And Newsletter...
Let's Partner. Quick Questionnaire to get started....

<https://outlook.office.com/mail/id/AAQkADgxMmE1OTI0LWQ4OGEINGYwOC04MWQ4LTA3MzBIMzY1MjYQAQAJoel%2F00b79A1lgxFWHzVPs%3D>



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**Vikram Sareen***Chief Architect, Co-Founder***Blue Bricks Group Of Companies**e: vikram@blue-bricks.com m: +61478665482

a: Level 2, 11 Mounts Bay Road, Perth, WA 6000, Australia

w: www.blue-bricks.com s: vikramsareen ph: 61863238407[Twitter Handle](#) [My LinkedIn](#) [Company LinkedIn](#)

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Report on National Startup Day

Event : Quiz on National Start-up Day

16th January 2023

| Required Field | Information to be filled |
|---|---|
| Link for publicity on Social media (Facebook/twitter/Instagram) | https://www.instagram.com/ecell_ait/ |
| Academic Year | 2022-23 |
| Program driven by (to be decided by social media coordinator) | AIT I & E Cell |
| Program/Activity/Name | Quiz on National Startup Day |
| Select one of the program type (Workshop/Leadership Talk/ Motivation speech/ Field Visit / Other) | Other |
| Select one of the program theme (IPR/Innovation/Entrepreneurship/Startup/Other) | Entrepreneurship |
| Start Date | 16 th January 2023 Time: 4:00 pm |
| End Date | 16 th January 2023 Time: 5:00 pm |
| Number of External Participants, if any | Nil |
| Mode of session delivery (offline/online) | Offline |
| Number of Students Participated | 90 |
| Number of faculty Participated | 3 |
| Expenditure Amount, if any | Nil |
| Remark | Nil |
| Benefit in terms of learning/skill/knowledge obtained | <ol style="list-style-type: none">1. Foster a spirit of entrepreneurship and innovation by involving start-up related quiz.2. Normalizing business related terms among students, for example: equity.3. Giving 100% in whatever you do. |
| Objective | <ol style="list-style-type: none">1. Being curious to create and courage to implement.2. Open to all kind of innovative ideas. |
| Faculty Name (Faculty involved in organizing event) | Dr. Shraddha Oza Ma'am |
| Student Name (Student involved in organizing event) | I&E cell team |
| Photograph1 (Jpeg Format max size 2 mb) which show strength of audience with speaker (can attach separate file) |  |



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Photograph 2 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file)



Session Plan/Brochure/Document / overall report of the activity (can attach separate file)



Event: "Quiz on National Startup Day"

Overview of the Event:

"The Entrepreneur always searches for change, responds to it, and exploits it as an opportunity"- with these lines session started with a great energy. In order to strive the objective of supporting entrepreneurs and building robust startup ecosystem, few glimpses of Shark Tank India were presented in front of participants. The ideology behind the event was to develop a sense of transforming India into a country of job creators instead of job seekers among students. As we know many students dream about startups but their goal remains just out of reach sometimes, so to give a kickstart towards making them real, a quiz was conducted. The quiz was conducted on an online platform called slido.



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Report for Vigyan Ashram Visit



Visit : Visit to Vigyan Ashram

18th January 2023

| Required Field | Information to be filled |
|--|--|
| Link for publicity on Social media * (Facebook//twitter/ Instagram) | https://www.instagram.com/ccell_ait/ |
| Academic Year * | 2022-23 |
| Program driven by *(to be decided by social media coordinator) | AIT I & E Cell |
| Program/Activity/Name * | Visit to Vigyan Ashram |
| Select one of the Program Type *(Workshop/Leadership . Talk/Motivation Speech/Field Visit/Other) | Student talk with founder of Vigyan Ashram |
| Select one of the Program Theme *(IPR/Innovation/Entrepreneurship/Startup/Other) | To promote self sustainability . Support your local farmers. |
| * Start Date | 18 th January 2023 |
| * End Date | 18 th January 2023 |
| Number of External Participants, If any | No |
| *Mode of Session delivery (offline/online) | Offline |
| *Number of Student Participants | 38 |
| *Number of Faculty Participants | 2 |
| Expenditure Amount, If any | 3800 |
| Remark | |
| * Benefit in terms of learning/Skill/Knowledge obtained | 1. Raises awareness of self-sufficient settlements and shows images of current advancements. 2. We now know that farmers' production can be increased |



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| | |
|---|--|
| | <p>via the application of technology.</p> <p>3. Additionally, we met the founder of Vigyan Ashram, who gave us a tour of the facilities available there. – The fab lab 0.</p> <p>4. Helped to promote creativity, and if someone is really interested, they may find ideas for invention that will lead to self-sufficiency.</p> |
| *Objective | This great event's primary goal was to implant a sense of self-sustainability in the minds of the students. |
| *Faculty Name (Faculty involved in organizing event) | Dr. Shraddha Oza |
| *Student Name (student involved in organizing event) | Miss. Tanu Sharma Mr. Samik Chaudhary |
| *Video URL | NA |
| *Photograph1 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |
| *Photograph2 (Jpeg Format max size 2 Mb) which shows strength of audience with speaker (can attach separate file) |  |



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*Session plan/Brochure/Document/overall report of the activity (can attach separate file)



VIGYAN
ASHRAM


Overview of the event:

It was an event organized by Innovation & Entrepreneur Cell of Army Institute of Technology. Participants were requested to submit a form provided to them by I&E cell.

The event was open for First Year students only.

Event was scheduled on 18th January 2023.




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4. Technical Club

THE TECHNICAL BAORD (2022–23)



OUR MOTTO

Engineering and Technical board has its motto to deliver information regarding every happening in the gallery of engineering world that is competitions, seminars and conferences taking place out there.

FACULTY INCHARGES : P. B. Karandikar (EnTC Dept)
Dr. Ashwini Sapkal (IT Dept)
Mrs. Vaishali Ganganwar (Comp Dept)
Dr. R. B. Gurav (Mech Dept)
Dr. Ganesh Mundhe (ASGE Dept)

BOARD SECRETARIES : Bhaumik Maan (IT), Khushi (Comp-B)

LINKS TO TECHNICAL BOARD AT DIFFERENT PLATFORMS:

INSTAGRAM: <https://www.instagram.com/aittechnicalboard/igshid=1g7kvxse9zmmu&fbclid=IwAR078YmXx4k8xmfcIAPp0Rgl35ra9e41iRDakt7LoRlaKluPjclUWWWh86k>

GITHUB: [ait-techboard.github.io](https://github.com/ait-techboard)

Technical Secretaries



Khushi
Comp-B

Bhaumik
IT



Khushi: 99103 90489
Bhaumik Maan: 73878 23677

JOINT SECRETARIES

On the path of rejuvenation and with goals to achieve the next level, The Technical Board has its Joint Secretaries!

Vansh Vatsal
Khushi Shah
Anushna Panwar
Prashant Chauhan
Rakesh Pradhan
Harsh Bisht
Jangveer
Aditya Tiwari
Giriraj



TE MEMBERS

“Individually we perform great deeds, but when put together, it becomes wonderful”

Introducing the TE members for the year 2k22-23

Aayush Singh Rathore

Abhay Shukla

Ashwani Kumar

Neha

Paidi Ajay

Pawan Kumar

Prince Harshwardhan

Rishabh Rai

Rishabh Tiwari

Shaurya Singh

Shubham Bisht

Suraj Singh

Tejaswini

Vishal Singh

Vipin Kumar Yadav

Yugandhar Patil

Abhay Mishra

Looking forward to an amazing year with such tech geeks!



SEMINAR - DIGITAL AND AI TWINS

Dated 26th AUGUST

5:00 PM

Venue: BC JOSHI Hall

“Some people call this artificial intelligence, but the reality is this technology will enhance us. So instead of artificial intelligence, I think we’ll augment our intelligence.” – Ginni Rometty

A magnificent speech with a motivational aura by **Mr. VISPI NEVILLE KARKARIA, PhD researcher at North Western University, Illinois, USA**. This live session was conducted by the TECHNICAL BOARD OF AIT in the remarkable hall of famed General BIPIN CHANDRA JOSHI (RETD.). A good amount of 30 interested fellows attended the live session with great enthusiasm. The session was followed by great counter questions and doubts by the listeners, about how to implement the **AI Twins** in carrying out big time data analysis. He focused on why Data analysis is required, and why we needed to be one, as the market is evolving so is the requirements of daily activities and the need for simplistic and adaptable technology. Giving an example of a **Tesla Model** of how it AI adapts to the environment and how it can adapt to Indian roads with great speed bumpers and a massive traffic. He used a very simple way to explain sophisticated terms and interacted with the fellow audience. Through the session Mr. Karkaria picked up a great response from the audience.

On the lovely evening Mr. Karkaria discussed about the Digital and AI Twins and its practical applications. The explanations included that a digital twin is a digital representation of a physical object or system. The technology behind digital twins has expanded to include buildings, factories and even cities, and some have argued that even people and processes can have digital twins, expanding the concept even further. Furthermore, a digital twin begins its life being built by specialists, often experts in data science or applied mathematics. These developers research the physics that underlie the physical object or system being mimicked and use that data to develop a mathematical model that simulates the real-world original in digital space. He explained all this with a well detailed presentation on the topic. Giving out real life examples of where digital and AI twins can be implemented. At the end of the session Mr. Karkaria gave out a motivational speech of studying abroad which was very beneficial for the students. The TECHNICAL BOARD OD AIT presented him with a gift and had a photography session.



AIT TECHNICAL BOARD



Live Session

Digital and AI Twins

Vispi Nevile Karkaria

PhD Research Scholar
at Northwestern University, IL, USA



5:00 p.m.
26th Aug 2022
Venue: BCJ Hall



EVENT- 2 COGNITARE (ENGINEER'S DAY CELEBRATIONS)

Dated: 15th SEPTEMBER

5:00 PM

Venue: Manekshaw Hall

“As curious as little minds, as creative as da Vinci’s designs, as flexible as a climbing vine and a great observer all the time.”

– Sir Mokshagundam Vishveshwaraya

On a very special occasion of Engineer’s Day, the TECHNICAL BOARD of AIT conducted a great event. It was held in the renowned SAM MANEKSHAW HALL. A figure of 33 tech enthusiasts came to the event. The room was filled with motivated future engineers. All engineering year students participated in the event. The board chose Kahoot as a platform to conduct the event.

The event kickstarted with a devotional speech from the joint secretaries. Engineers’ Day was established by the Indian government in 1968, on the birth anniversary of Sir Mokshagundam Vishveshwaraya and this was his 162nd. Since then, this day has been observed to honor and recognize all engineers who have contributed to the development of a modern and developed India, as well as those who continue to do so. Vishveshwaraya was the chief engineer for construction of Krishna Sagara dam on Kaveri River in Mysuru, which was the biggest reservoir in Asia during his time. Visvesvaraya revolutionized the irrigation system in India by implementing irrigation and drinking water systems all over the country. There were other mentions of magnificent personalities like APJ ABDUL KALAM, E SREEDHARAN, SATISH DHAWAN, PRIYA BALASUBRAMANIAM and SUNDAR PICHAI.

The questions varied from easy ones to challenging ones. The last set of questions even exhilarated the event as it had a twist at the end. The last questions included questions from the speech. In the end, it was declared to announce the result on the board’s social media handle and yet another successful event carried out by the board.

GLIMPSES FROM THE EVENT—

Cognitare

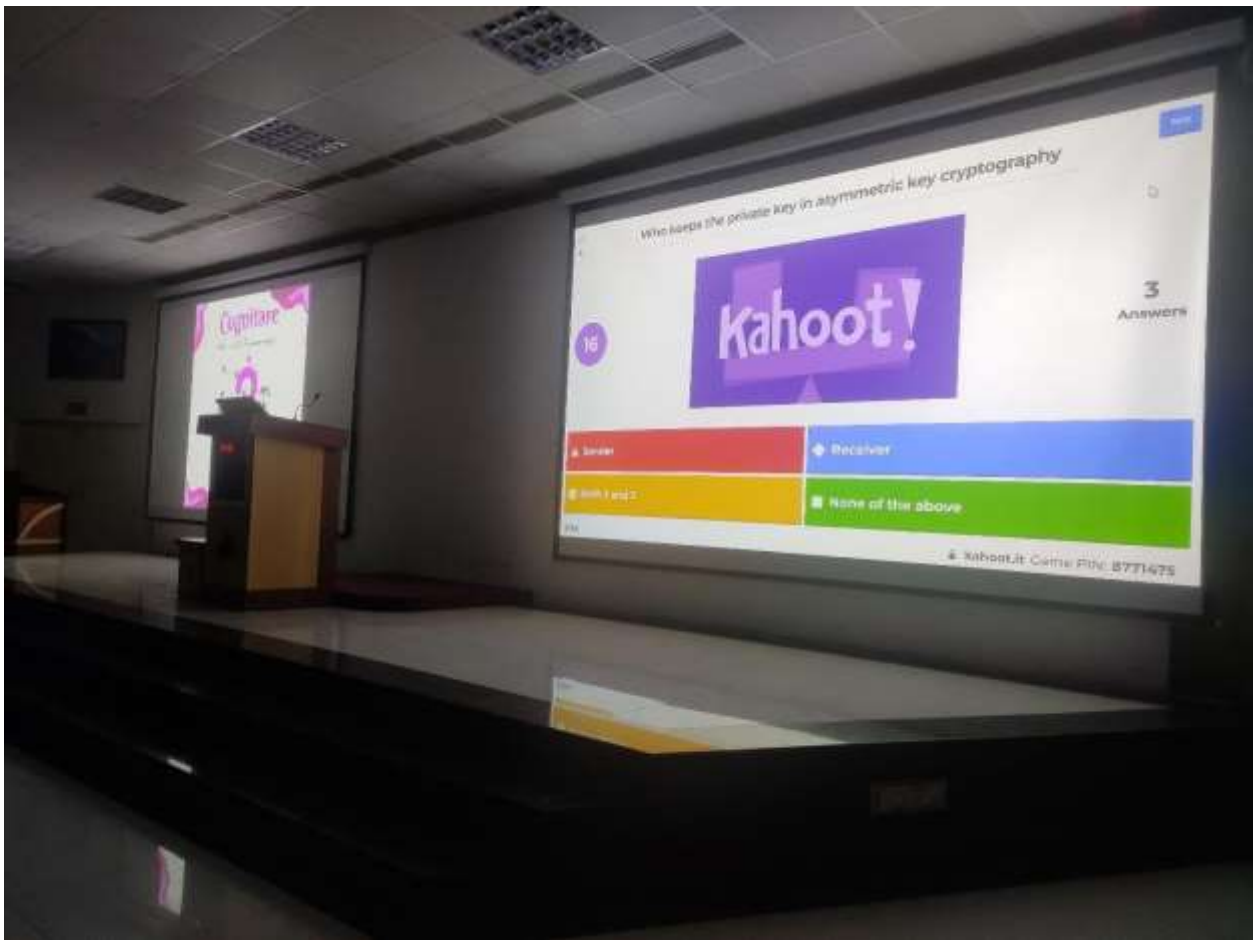
Quiz on CS Fundamentals!



15th Sept 2022

Venue : Mankeshaw Hall

Prizes worth 9K+





FE INDUCTION

Dated: 10th OCTOBER

2:00 PM

Venue: Manekshaw Hall

On the eve of 10th October, the Technical Board of AIT, organized a session for the first-year students. The session intended to introduce the students with the board activities such as Technical Aakriti, Solutions (Inter college technical fest) and other events organized by the board.

The session began with introduction of the secretaries and joint secretaries, followed by a video, which displayed events hosted by the board in previous academic year. Then, each joint secretary, with the help of presentations, explained events organized by the board.

The students showed a great enthusiasm and were quite attracted towards the “Research related activities” organized by the board.

At the end of the presentation, the secretaries cleared the doubts of students and motivated them towards technical activities.

The session ended successfully and served its purpose.



EVENT – 3 SNAPHUNTS

ARMY INSTITUTE OF TECHNOLOGY

TECHNICAL BOARD

SNAPHUNTS

Dated 10th OCTOBER, 2022

5:00 PM

Venue: Central Gazebo

“Exploration is really the essence of human spirit”

– Frank Borman

The Technical Board has conducted another fabulous event, Snaphunts. This event was kept exclusive for first year students. So, the whole first year batch participated in this enthusiastic event, everyone more curious than the other. There was 70+ teams, that is 280+ students participated. It started just after the induction. The event kickstarted with an introduction to the event while the induction and the students were briefed to be at the Central Gazebo. This time it was google forms for a change. There was a team of 4 people. The riddle set consisted of 15 questions that pointed out certain places in the campus that the first-year students were introduced to at the time of campus tour. Each riddle funnier and sophisticated than the last one. Later on, scanners kept popping up on the participant's phones. Everyone got their set of riddles and vanished into the campus. Fascinating and cunning minds just swift past the other groups trying to solve the riddle. After an hour, the event wound up with students returning to the starting point and notifying the board members for completion of the quiz set and successfully submitting the google form.

Another successful and exciting event came to an end with the declaration of results on the social media handle of the board.

GLIMPSES FROM THE EVENT:



EVENT – 4 QUANTIVISUALS

ARMY INSTITUTE OF TECHNOLOGY, PUNE
TECHNICAL BOARD

QUANTIVISUALS

Dated: 20th OCTOBER

6:00 PM

Venue: Manekshaw Hall

“Knowledge is lost without putting it into practice; a man is lost due to ignorance; an army is lost without a commander; and a woman is lost without a husband”

– Chanakya

The Technical Board of AIT conducted a yet another successful and amazing event, Quantivisuals. It took place in the MANEKSHAW HALL dedicated to the Field Marshall Sam Manekshaw. A great number of 110+ tech enthusiasts participated in the event. It started with a heartwarming welcome to all by the board as it was the second event after SNAPHUNTS. For a change the board chose SLIDO as a platform to conduct the event and was a smooth flowing website. The questions were based on CS Fundamentals and aptitude questions ranging from easy to complex ones. It consisted of total 35 questions each having different time limits, making it even more interesting. The event started with best wishes and the participants were off brainstorming. There was a tough tussle on the leaderboard as the participants fought their way up.

At the end, it was a close call on the leaderboard and the event came to an end. It was declared by the board that results to **be declared on the social media handle.**

GLIMPSES FROM THE EVENT:





EVENT – 5 IDEATHON

ARMY INSTITUTE OF TECHNOLOGY, PUNE
TECHNICAL BOARD

IDEATHON

Dated 4th November 2022

5:00 PM

Venue: Manekshaw Hall

“Creativity is seeing what others see and thinking what no one else ever thought”

In series of great events, The Technical Board of AIT, conducted “Ideathon” which is also a part of Technical Aakriti. The event had 2 rounds. The participants were informed well before time through the social media handles of the Technical Board, and we received great participation for the first round. In the first rounds the teams were supposed to submit their original and innovative ideas through presentations.

After all the submissions, the best 15 ideas were picked up and were called for Round 2.

In the second round each team was supposed to present their ideas to the teachers within 9 minutes. Last one minute was reserved for questions. All the teams presented their ideas beautifully, they explained how they look forward to implement their idea and gave the pros of their project. A healthy interaction was observed between teams and teachers. The ideas were judged on the certain parameters such as originality, practicality, cost of its implementation etc.

The second round went on for around 3 hours and after all the presentations were over, the committee of teachers went on to declare the winners of the event. The event ended successfully with a lot of learning for all the participants.

Glimpses from the event:



Ideathon | *idea presentation...*



IDEATHON

Idea Pitching :
29th Oct till 11:59 p.m.

Idea Presentation :
4th Nov 2022

Prizes worth 10K+







EVENT – 6 VULCAN

ARMY INSTITUTE OF TECHNOLOGY
TECHNICAL BOARD

VULCAN

Dated: 11th November 2022

5:00 PM

Venue: Manekshaw Hall

“Innovation, as I understand it, is both about doing different things as well as doing things differently.”

– Kiran Mazumdar Shaw

The great event of Vulcan arrives with the best paper writing event in the institute. This was a two round event that included participants to write a research paper on a vast range of given topics to choose from, in addition to their personal topics. The participants had to do this in a group of 3 – 4 members and submit the paper in a provided format to a specific email id of the board. The submissions were in great numbers. And there was a fixed quota for first termers to participate in the event. After selecting from a set of groups and passing each one of them through defined criterion of plagiarism check, a total of 15 groups were selected.

The anchors started the event with great quotes and giving a heartwarming welcome to the knowledgeable staff members who were also the judges for the event. The teams were called upon the stage and introduced with their team’s name, plagiarism percentage and other necessary details. In the second round the teams needed to present a presentation on their topics in a detailed manner and its implementation with a time limit of 9 minutes and an extra 1 minute for questions and answers. This went on a loop with all 15 teams giving their best performances and a detailed presentation on their topics.

At the end of the event, the staff members compiled their decisions and points and gave it to the board members to select the winners of the event. The result was then declared on the social media platform of the board.

GLIMPSES OF THE EVENT:



Vulcan| *paper presentation...*



Idea Pitching:
5th Nov till 11:59 a.m.

Paper Presentation

Round 1:

8th Nov 2022

Round 2:

9th Nov 2022

Prizes worth 13K+







TECHFEST (IIT BOMBAY)

ARMY INSTITUTE OF TECHNOLOGY, PUNE
TECHNICAL BOARD

TECHFEST (IIT BOMBAY)

Dated – 16 Dec to 17 Dec 2022

Venue – IIT Bombay Campus

PAINTBALL

A wonderful and joyful event of paintball was conducted at IIT Bombay during Techfest (tech event). A good amount of 30 interested fellows were allowed to attend with great enthusiasm. Everyone was excited to participate which could easily be seen by the distance of the queue out there. First all 30 participants were divided in a group of 2 with 15 members in each team and the instructions were given to each member on how to proceed the game and each and every rule related to it. Each player was equipped with a paintball gun, also known as a marker, and a hopper filled with round, paint-filled pellets. The game took place in a designated playing field, beside the Gymkhana of the campus.

At the start of the game, players took positions on the field and the game began when the referee blew a whistle or signals the start in some other way. Players then tried to eliminate the other team's players by shooting them with their markers. When a player is hit with a paintball, he was eliminated from the game and must leave the field.

The game continued until one team was eliminated all of the other team's players or has captured their flag. The team that achieved the objective wins the game.

The event was sponsored by the big gaming giants like. The paintball event was under the category of Ozone events. Ozone was the zone of recreation amidst the technical events of the Techfest. The fun part of Techfest, Ozone is synonymous with festive excitement. It was a kind of a place for someone looking for an adrenaline rush.

INTERNATIONAL EXHIBITION

A spectacular exhibition was organized by IIT Bombay during TechFest 2022 showcasing some of the innovations from around the world. It was one of the most visited programs of the TechFest and was open for all three days of the fest. People were really excited to visit the exhibition. As the event was really popular among the viewers, people had to wait in a long line to get in. But the wait was worth it, as you entered the exhibition, at the first booth, there were two cute robots waiting to interact with you which was quite fun. Then after advancing in the exhibition, you come across some of the really cool inventions and techs. There was a new part for gripping the objects in drones called Raptors, different robots from different companies, a driver's safety solution device etc. In each booth people were exposed to new fountains of knowledge. Every booth taught one or the other thing. Also, it was

a great opportunity for connecting to the people as people from all around the world had come there. Apart from international companies there were many Indian tech and research companies that were showcasing their products. DRDO had come with some combat vehicles and missiles, ISRO with miniature models of the satellites that they have launched etc. They ended the exhibition in the best way possible by showcasing the F1 racing car made by Mahindra & Mahindra, such a beautiful car. It was one of the most memorable events of the Techfest 2022.

UBISOFT GAMING

Ubisoft is the creator and distributor of interactive entertainment and services and the maker of blockbuster favorites Assassin's Creed and Wii Just Dance. The company was founded by the five Guillemot brothers in 1986 in Brittany, France. It went public on the Paris stock exchange ten years later, making key acquisitions over the next several years (including Red Storm Entertainment, maker of the Tom Clancy games, and Blue Byte Software) and opening studios in Shanghai and Montreal. By 2011 Ubisoft was one of the world's top 10 independent publishers; the company now has more than 10,000 employees on six continents. Ubisoft organized a gaming arena under the OZONE program of the Techfest. They made displays, playing stations and more. They showcase their major games and let people come try those games. There were heart pumping action games like assassin creed: Valhalla, division heartland, for honor, rainbow six etc. there were also arcade games like mario and Brawhalla. Racing games including Treachmania and rider's republic. Each and every game was built with great visuals and control. People were really excited to play those games and the spectator crowd was huge. They also created a small dance floor game where people participated with great enthusiasm. It was surely one of the most fun and exciting events of the Techfest 2022.

AUTO EXPO

The event auto expo was held in three different phases from 16 to 18 dec where all the luxury cars were present to grab the attention of the audience out there. Some of the brands worth mentioning were Mercedes Benz, Audi, Porsche, BMW, Nissan etc . Various sports car was also present there where the sound and the roar they made while entering the stage was on another level where the sound echoing miles to the whole campus, grabbing and developing the interest of other persons to have a look over them. The total cost of all the cars featuring in event would be in millions of dollars thus giving us the insight of luxury and performance they provide. The enthusiasm of the people to just have a look over all these cars were on another level. Auto expo gave a platform where all the automobile companies show their new concepts, technology, and new ideas to influence the people. All the companies show their competition skills. Many new cars with electric technology with luxury and comfort were introduced by the Mercedes, Audi, Porche and various other industry giants. The main aim to conduct these exhibitions was to present a stage where the companies showcase their new technologies. The auto expo comes under various exhibitions event of Techfest. Every year, Exhibitions mesmerizes thousands of young minds by presenting technological avant-grade of the world, helping them to broaden their vision and to update their technical know-how.

UNMANNED AUTONOMOUS GROUND VEHICLES

The TECHNICAL BOARD conducted a trip to INDIAN INSTITUTE of TECHNOLOGY BOMBAY for TECHFEST 2022. The main attraction there was TechConnect which is an exhibition placed within the campus

where the prototypes built or technologies invented by the IITians were showcased to the tech enthusiast's and the students who were a part of the prototypes, disseminated about their projects and explained about the working model and functions of the prototypes.

UNMESH MASHRUWALA INNOVATION CELL IIT BOMBAY PRESENTED PROJECT SeDriCa (Self Driving Car) IITB has a 5 years of experience in autonomous vehicles and had won awards like IGVC 2017 which was organized in Michigan, USA and in MAHINDRA RISE DRIVERLESS CAR CHALLENGE were among TOP 11 Teams out of 250 in INDIA and were awarded a MAHINDRA E20 CAR for development and research purposes the developed car has a DUAL CAMERA SETUP with lane detection and has a high Accuracy GPS for localization and path planning and STEREO VISION CAMERA with depth sensing technology and a 2D LiDAR sensor to detect obstacle detection system for detecting objects in front of the self-driving car.

And everything is controlled by a module called as CAN MODULE, It has a tri-directional obstacle avoidance sensor and cameras all around the car which reduces the risk of crashes and in IITB TECHFEST 2017 the SeDriCa had more than 50000+ visitors.

IQLIPSE NOVA

Depanshu raj popularly known as Iqlipse nova, He is graduate of *Indian Institute of Technology, Delhi*. He is a *chemical engineer, YouTuber, singer, social media influencer* and he is also Co-founder of BigBrainco.

The show was conducted in IIT Bombay, techfest and with the help of TECHNICAL BOARD OF AIT many students from AIT could attend the live show with great enthusiasm. A large amount of people can be seen attending his event and whosoever attending his event will never forget that evening. That day we learnt many life lessons from him, his journey of IIT, the choices he made in his life, how he handled things in his life, he talked about his musical journey his new release *mera safar* is becoming and many got a chance to see the live performance of *mera safar*. And he also sang his one of the upcoming song *Meri bari*, that will release in few months in 2023. After that he also motivated everyone to explore opportunities, and lastly there was a photographic session where everyone took photos with him.

ROBO WAR

A huge event of robotics called robowar was held in OAT. It was a very energetic event where 2 (or more) teams bring their robots in robocar arena to fight with each other's robots. The arena was 32*32*12 ft closed arena. It was closed by metal strips and polycarbonate sheets. It was finals of 15 kg weight category. The rules were simple robots could have any dimensions but their weight could not exceed 15Kg. robots were allowed to use any kind of magnetic weapons, cutters, flippers, saws, lifting devices, spinning hammers etc. A good amount of 2000 follows attended the event with great excitement. In finals, 3 teams A, B, C were ready to fight with their opponents. Along with teams, audience was also very excited for the match. And then whistle was blown, ROBOWAR! The match was started. In the beginning of the match, Robo A starts off very well by giving some hard hits to their opponents. Robo A was showing his strength. Robo B had very nice and very unique stability mechanism. And Robo C seemed very strong and stable. The match was going very well but robot B got movement issues after getting some strong hits by Robo A and Robo C. Team B fans were very disappointed. Then there was very close match between team A and Team C. one hit from team A,

one hit from team C, the match was very interesting. Everyone was sitting on edges with excitement and curiosity. The cheering was getting louder and louder. The match was going very well until robot A got a hit from robot C and robot A got flipped and could not manage to get up. And that was the end of the finals. Team C was the winner. It was very fun event. Everyone had fun. We learnt many things from this event (/This event taught us many things) like competitive spirit, team work, sportsmanship, etc.

DRONE SHOW

A bright and colorful event took place grabbing attention of everyone present there. There were over 200 drones (just an idea) spreading their magic in air. All drones were programmed in computer. All drones were lightweight, consists of a battery, an LED module, and GPS sensor. And a huge crowd of 20k+ people was experiencing that magic. It started off with making some waves with colorful lights in the air. all people got excited when it was started. Then it writes “#dream on” in the air. After that they made Techfest logo in the air with sliding T and F. Then a small dance with lights. The excitement was on its peak. And to take it to next level, they made map of India with saffron, white and green color. Whole crowd was crazy at that moment. Then they generated a light wave in map of India. They ended with some more light show. We learnt a lot about drone and drone show. Everyone enjoyed a lot. We learnt lighter the drone, the power it needs to stay airborne and the easier to control. And drones were pre programmed.it was overall a great experience.

LASER TAG AND RC CAR RACING

Laser Tag was an event organized at the Techfest IIT Bombay and with the help of TECHNICAL BOARD OF AIT many students from AIT were able to enjoy this adventurous event. It was an electrifying event in which a team game was organized to shoot rival team members with laser.

Each team member was equipped with a body suit with five sensors on, to detect the laser. A specific area was set up to simulate the battle ground with some obstacles. Where each team was to defend itself and try to knock out more hits from rival players. A large number of people took part in this event. People have to wait in long que for their chance for this enjoyment.

A thrilling event of IC engine car racing was organized at Techfest IIT Bombay. Many World Rankers were in the arena to compete against one another to win the prize money of INR 1,30,000. Due to the efforts of TECHNICAL BOARD OF AIT many students were able to take glimpse of such world class event.

There were variety of IC engine car some were electric and some with nitro power. The thrill to see such a engaging event where the competition was so tense each part of a second mattered. And the requirement for accuracy on each turn and each jump was on another level. It was a great experience for all the students. Where with enjoyment we also learned and got inspired a lot from the event.

TECH CONNECT

BRAIN CONTROLLED WHEELCHAIR: 15% of the world population has some form of disability and require assistance to locomote. The Virtual wheelchair mimics dynamic behavior of real wheelchair through the Brain Machine Interface (BMI). The virtual wheelchair movement is successful in 4 directions—

Front, back, left and right. The Electroencephalogram (EEG), connected to the wheelchair user, detects changes in the brain signals allowing control for the direction of the virtual wheelchair movement in real time.

ATTENTION DETECTOR: Amidst the physical classroom situation, teachers observe the facial expressions of students for determining their attention levels. In consideration of the post-pandemic online classroom scenario, mobile brainwave sensors will be helpful to gauge easier and reliable attention levels for teachers, students and primary caregivers. This will not only encourage students to remain attentive but can also enable teachers to customize their learning content for efficient learning of students.

WICTRE: Its FULL FORM IS WATER INNOVATION CENTER TECHNOLOGY. So basically, the water we use for drinking purpose consists of Ions of Barium, Arsenic, cadmium etc. which are usually removed by normal RO machine and the microorganism present in it is killed by UV light present in RO but there is one more aspect which contaminate the drinking water and that is Industrial dyes. Industrial dyes are one of the dominant chemicals that make water unfit for drinking. Among these dyes, Methylene blue (MB) is toxic, carcinogenic, and non-biodegradable and can cause a severe threat to human health and environmental safety. It is released in natural water sources, which becomes a threat to human beings and living organisms, hence there is a need to develop an environmentally friendly, efficient technology for removing MB from wastewater. Photodegradation is an advanced oxidation process widely used for removing (MB) Methylene Blue from freshwater.

SOIL MOISTURE SENSOR, INTEGRATED CIRCUITS AND SYSTEMS: So basically, this device is mainly constructed with a setup of electrolytic capacitors inside the soil which is being inserted inside the soil with a particular dielectric constant and when the water start dripping inside the soil, the equivalent dielectric constant shift toward the dielectric constant of water and this is how the amount of irrigation is determined. This is used for strategic agriculture and it is cheapest of all the same kind so that everyone can afford this device and it is very easy to use also. This Soil Moisture Sensor is very simple. Here we have used a soil moisture detector probe to sense the moisture in the soil and an NPN transistor to trigger the Buzzer and LED. This soil moisture detector probe is homemade and built using general purpose PCB (Printed circuit board). Buzzer and LED are used as an indication of soil moisture detection.

AIRSHIP PROJECT: Airship is basically a full-sized balloon mechanism working air body which is filled with light gases like helium or hydrogen. This type of airship is majority used for the branding and advertising purpose of big commercial brands. They might have less velocity as compared to other air bodies like helicopter or airplane but this airship has the better aerodynamic stability. "We started the work eight months back and have drawn inspiration from our earlier Akashdeep aerostat project. The feasibility study for the unmanned airship is over and we are all set to enter the design phase. With a 22-m length, seven-meter diameter and weighing around 350 kg, the airship gives the option for both surveillance and tourism. "By developing Akashdeep, we learned the aerodynamics shape optimization, fabrication technology and integration of payload and systems.

IIT BOMBAY ROCKET: IIT Bombay rocket is basically an air body made by 30 students of IIT Bombay which basically consist of two models of 1 and 27 kgs respectively, for support purposes parachute is used. This body also contains pressure dominating sensors, with a budget of 8 lakhs, this project comes out to be a successful project and practicing in us very soon. The IIT Bombay Rocket Team unofficially started as a small group of rocket enthusiasts in the summer of 2019. The Team plans to

participate in Spaceport America Cup 2022. The rocket consists of many interacting subsystems, each of which handles certain aspects of the rocket's testing, launch, and recovery. A vast range of disciplines in the functionality of the rocket is covered. In thrust we trust. The propulsion subsystem is the heart of the rocket. Very simply, their function is to produce thrust. The individuals in charge of the subsystem also ensure that the motor is stably mounted and remains secured during flight. The Team would also be running simulations to gather flight data useful for the optimization of the rocket's trajectory.

TIH FOUNDATION FOR IOT AND IOE: Technology Innovation Hub for translational research on IoT (Internet-of-Things) and IoE (Internet-of-Everything) (TIH-IoT), is conceptualized by the National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) in its quest for Industry 4.0 and related areas. In order to leverage the strength of academia in innovation and to ensure proximity to captains of industry, the TIH-IoT is established as a section 8 company (not for profit) in IIT-Bombay. The TIH-IoT aims to emerge as a world leader in IoT and IoE technology solutions through multidisciplinary in-house R&D, interact with world leaders in this area, and support the industry for the transformation. TIH-IoT will leverage fundamental and applied research to innovate and apply to industry needs. At TIH-IoT, research and development activities are focused on agriculture, health, industrial applications using IoT-based wireless sensors networks, bio-IoT, aquatic IoT and distributed/Hybrid IoT.

GLIMPSES FROM THE EVENT:







TECHNICAL AAKRITI

ARMY INSTITUTE OF TECHNOLOGY
TECHNICAL BOARD

TECHNICAL AAKRITI

Dated: 11th – 13th March

Venue: AIT Campus

The so long-awaited event of AIT, the TECHNICAL AAKRITI. Started with an uplifting and inspirational inauguration followed up by a great speech by Brig. Abhay Bhatt sir (Director). Off with a great start, the first event was conducted in the Raman Theatre of AIT named Placement Apti. Many participants showed up for the event in mass numbers, everyone in full spirit to place his branch at the top of the leaderboard. There was a chain of events that were held in the three days. Branches had their ups and downs but later everyone had their contribution. There were various events to suit everyone's field of interest, it had gaming, core, coding and open events. Sending the best of their branches in a particular event, it was a competitive environment. The rush was all around, people going to the event venues, the organizing team holding everything together and managing the crowd.

The ending ceremony was held in the Raman Theatre, with declaring the winning branch of every event. For the final suspense, the winning branch was declared. The theatre was alive and full of cheerful screams and enthusiasm. The ceremony ended up in a JAM session where the winning branch was called upon the stage and handed over the trophy.

SOLUTIONS

ARMY INSTITUTE OF TECHNOLOGY
TECHNICAL BOARD

SOLUTIONS

Dated: 21st – 23rd April

Venue: AIT Campus

SOLUTIONS, a premier annual Technical Fest organized by the Army Institute of Technology, Pune was inaugurated on 21st April 2003 by Brig Abhay Bhatt (Director) and was successfully conducted by Technical Board between the 21st to 23rd of this April. It had more than 20 events in various respects such as coding, gaming, robotics, etc. This time SOLUTIONS also had events such as PROJECT JUPYTER and FLASH 500 where participants had to use their knowledge of Machine learning and reach a solution. For participants' ease, the events were conducted in both online and offline modes.

This year, SOLUTIONS 2023 saw incredible participation of more than 5000 students from many premier institutes of India such as IITs and NITs bagging various positions in many events. The Fest not only had just events but included an amazing and insightful session by Kushal Vijay(Microsoft Engineer, YouTuber Sensation, and former intern at Microsoft and Stack Guardian) which helped a lot of students to clear their career-related doubts.

In the end, a heart-storming bike show was conducted on the campus which thrilled the audience with their unbelievable wheelies, burnouts and other stunts.

5. Open Source Software Club

Report for A Y 2022-23

Open Source Software

VISION

To promote the use of Open Source Systems and Application Software for Technical Developments among students and to establish de-facto standards for the same.

MISSION

To create technically aware developers and a space where they can actively participate and contribute towards the Open source community while developing their individual skills.

| Name of faculty in-charges | | |
|-------------------------------------|-----------------------|-------------------------------|
| 1 | Prof Vaishali Ingale | |
| 2 | Prof Gauri Doke | |
| 3 | | |
| Name of Student Secretaries | | |
| 1 | Anand Prakash Dwivedi | |
| 2 | Vidushi Singh | |
| Budget Allocated by Institute | | Rs 2,49,000 |
| Sponsorship received | | Rs 2,50,000 |
| | | |
| Name of activities/events conducted | | |
| | | |
| Sr No. | Name of activity | Type (Inter/Intra college) |
| 1. | Spark | Intra College |
| 2. | Graphica | Intra-College |
| 3. | DeVerse | Intra College |
| 4. | Pre-Innerve Games | Inter College |

| | | |
|----|---------------------|---------------|
| 5. | Innervate Hackathon | Inter College |
|----|---------------------|---------------|



Reports of all activities/events

Activity No 1

| Required Field | Information to be filled |
|---|---|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/Cj-ISaVBnou/ |
| Academic Year | 2022-23 |
| Name of coordinator | Prof Vaishali Ingale |
| Program/Activity/Name | Spark |
| Select one of the Program Type (Workshop/FDP/Seminar/conference/intercollege event/intra college event/ other) | Workshop |
| Start Date | 21 October 2022 |
| End Date | 10 December 2022 |
| Mode of event (offline/online) | Offline |
| Number of Student Participants | 150+ |
| Number of Faculty Participants | 3 |
| Number of External Participants, If any | 0 |
| Expenditure Amount, If any | ₹ 21,280 |
| Objectives of activity (min 2) | 1. To make students learn Web Development skills. 2. Provide Hands-On experience of Web Development |
| Description of activity(50-150 words) | SPARK is a one-month-long event organised exclusively for the first-year engineering students at our college to introduce them to the field of web development. The motive of the event is to provide students with hands-on experience in web development under the guidance of experienced mentors and to get a chance to interact with industry professionals. |
| Faculty Name (Faculty involved in organizing event) | Prof Vaishali Ingale |
| Student Name (student involved in organizing event) | Anand Dwivedi, Vidushi Singh |
| Video URL (optional) | |



| | |
|---|---|
| <p>Geo tagged Photograph1 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  |
| <p>Geo tagged Photograph2 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  |
| <p>Session plan/Brochure/Document/overall report of the activity (JPEG or PDF Format max size 2 Mb)</p> | <p>https://spark2022.netlify.app/</p> |



Reports of all activities/events

Activity No 2

| Required Field | Information to be filled |
|---|---|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/Cj-ISaVBnou/ |
| Academic Year | 2022-23 |
| Name of coordinator | Prof Vaishali Ingale |
| Program/Activity/Name | Graphica |
| Select one of the Program Type (Workshop/FDP/Seminar/conference/intercollege event/intra college event/ other) | Intra-College Event |
| Start Date | 17 October 2022 |
| End Date | 18 December 2022 |
| Mode of event (offline/online) | Offline |
| Number of Student Participants | 40+ |
| Number of Faculty Participants | 3 |
| Number of External Participants, If any | 0 |
| Expenditure Amount, If any | ₹ 14,348 |
| Objectives of activity (min 2) | <ol style="list-style-type: none"> 1. To make students learn Web Development skills 2. Provide Hands-On experience of Web Development by the competition |
| Description of activity(50-150 words) | <p>GRAPHICA is a mini hackathon organised only for the first year students where they use their knowledge of web-technologies to build software solutions for the problem statement of their own choice.</p> <p>OUTCOMES: > Students were able to use their knowledge of web technologies to create a webpage using HTML, CSS and Bootstrap.</p> |
| Faculty Name (Faculty involved in organizing event) | Prof Vaishali Ingale |
| Student Name (student involved in organizing event) | Anand Dwivedi, Vidushi Singh |
| Video URL (optional) | |

| | |
|---|---|
| <p>Geo tagged Photograph1 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  <p>The poster for 'Graphica' is a dark-themed graphic. At the top, 'Graphica' is written in large white letters, with 'A Frontier Skills Development Competition' in smaller text below it. A date stamp shows '18 December'. A 'Register Now' button is prominent, with a note 'Till 17 December Midnight'. Below this, it says 'It's Daytime!' and 'Participate in Teams'. A 'Link in Bio' button is also present. The 'PRIZES' section highlights 'Rs. 30,000'. A note mentions 'Make your teams, create a website in 6 hours using your creative ideas, skills, and expertise, and compete for fantastic prizes and goodies.' A small badge says 'Exclusively for FE'. The AIT OSS Club logo is at the bottom right.</p> |
| <p>Geo tagged Photograph2 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  <p>The 'Graphica WINNERS' poster is dark-themed. It congratulates all winning and participating teams. It lists three winners: 'THIRD Technocrat', 'FIRST Quirks', and 'SECOND Avinya', each with a laurel wreath icon. A 'Consolation: The Learners' section is also mentioned. The AIT OSS Club logo is at the bottom right.</p> |
| <p>Session plan/Brochure/Document/overall report of the activity (JPEG or PDF Format max size 2 Mb)</p> | <p>https://drive.google.com/file/d/1U1mG3XfreHBwwqUXx-Rf4uvyYNEAtmit/view</p> |



Reports of all activities/events

Activity No 3


| Required Field | Information to be filled |
|---|--|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/CixgX_FBXjc/ |
| Academic Year | 2022-23 |
| Name of coordinator | Prof Vaishali Ingale |
| Program/Activity/Name | De'Verse |
| Select one of the Program Type (Workshop/FDP/Seminar/conference/intercollege event/intra college event/ other) | Workshop |
| Start Date | 24 September 2022 |
| End Date | 30 September 2022 |
| Mode of event (offline/online) | Offline |
| Number of Student Participants | 150+ |
| Number of Faculty Participants | 3 |
| Number of External Participants, If any | 0 |
| Expenditure Amount, If any | ₹ 50,176 |
| Objectives of activity (min 2) | <ol style="list-style-type: none"> 1. To make students learn new development skills 2. Implementing the skills that they have acquired |
| Description of activity(50-150 words) | <p>Devlok is a 15 day event exclusively for SEs and TE's of AIT only. The Purpose for the event is to make students learn the new development skills and implement the same using our problem statement. The problem statements are given such that they could learn the basics of any tech-stack they choose to learn from basics. To monitor and enhance the learning journey they are learning under the mentors. This not only helps them to learn, but also builds team spirit. To make the whole journey for the student learnfull there will be 2 sessions by mentors. The whole event was created to make them learn along with projects which they could add in their resume.</p> |
| Faculty Name (Faculty involved in organizing event) | Prof Vaishali Ingale |
| Student Name (student involved in organizing event) | Anand Dwivedi, Vidushi Singh |
| Video URL (optional) | |


| | |
|---|--|
| <p>Geo tagged Photograph1 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  <p>De'Verse Inauguration Ceremony poster. It features the text 'De'Verse' in large blue letters, 'Celebrate Contribute Create' below it, and '10:00 AM' with a clock icon. The date '24-09-2022' and 'Monakshw Hall' are also present. A cartoon character is on the right. The top says 'OPEN SOURCE SOFTWARE CLUB'.</p> |
| <p>Geo tagged Photograph2 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  <p>De'Verse Winners poster. It shows three trophies for '422mmr', 'Tech Trinity', and 'Parivahan'. Below the trophies, it says 'Congratulations!!' and lists 'Consolation Prize: Just stellar' and 'Consolation Prize: 1001001'. A cartoon character is on the right. The top says 'De'Verse WINNERS' and 'OSS'.</p> |
| <p>Session plan/Brochure/Document/overall report of the activity (JPEG or PDF Format max size 2 Mb)</p> | <p>https://deverse.netlify.app/</p> |



Reports of all activities/events

Activity No 4

| Required Field | Information to be filled |
|--|---|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/CoruGisDyEU/ |
| Academic Year | 2022-23 |
| Name of coordinator | Prof Vaishali Ingale |
| Program/Activity/Name | Pre-Innerv Games |
| Select one of the Program Type (Workshop/FDP/Seminar/conference/intercollege event/intra college event/ other) | Workshop |
| Start Date | 15 February 2023 |
| End Date | 28 February 2023 |
| Mode of event (offline/online) | Offline |
| Number of Student Participants | 150+ |
| Number of Faculty Participants | 3 |
| Number of External Participants, If any | 0 |
| Expenditure Amount, If any | ₹ 14,255 |
| Objectives of activity (min 2) | |
| Description of activity(50-150 words) | |
| Faculty Name (Faculty involved in organizing event) | Prof Vaishali Ingale |
| Student Name (student involved in organizing event) | Anand Dwivedi, Vidushi Singh |
| Video URL (optional) | |
| Geo tagged Photograph1 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker) |  |



| | |
|---|--|
| <p>Geo tagged Photograph2</p> <p>(JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  <p>The poster for 'CSS BATTLE @FEs' features a bright orange background with a yellow sun and blue clouds. At the top, the title 'CSS BATTLE' is in a yellow box. Below it, '@FEs' is in a yellow speech bubble. A blue circle on the left says 'When? 27th - 28th February'. A yellow box in the center explains the game: 'CSS Battle is a game for all CSS lovers, where you have to replicate a target image with the least amount of code.' A green button at the bottom left says 'Details? Swipe'. A sword icon is on the right.</p> |
| <p>Session plan/Brochure/Document/overall report of the activity</p> <p>(JPEG or PDF Format max size 2 Mb)</p> | <p>https://www.instagram.com/p/CpDhU_uD_VO/</p> |



Reports of all activities/events

Activity No 5

| Required Field | Information to be filled |
|---|--|
| Link for publicity on Social media (Facebook//twitter/Instagram) | https://www.instagram.com/p/CnmcqGzvOyl/ |
| Academic Year | 2022-23 |
| Name of coordinator | Prof Vaishali Ingale |
| Program/Activity/Name | Innerv 7 Hackathon |
| Select one of the Program Type (Workshop/FDP/Seminar/conference/intercollege event/intra college event/ other) | Inter - College Event |
| Start Date | 20 January 2023 |
| End Date | 11 March 2023 |
| Mode of event (offline/online) | Offline |
| Number of Student Participants | 60 (2500+ registrations) |
| Number of Faculty Participants | 3 |
| Number of External Participants, If any | 56 |
| Expenditure Amount, If any | ₹ 1,50,000 |
| Objectives of activity (min 2) | 1. To promote Innovation and Entrepreneurship among students. 2. To Provide a stage for students to showcase their skills and ideas. |
| Description of activity(50-150 words) | Innerv is India's largest student driven hackathon, which imparts a platform for students to present their adept ideas and technical skills at a renowned forum. This is the impeccable opportunity to get those magnificent ideas out of their steadfast minds onto the computer screens. Innerv is conducted in two phases - > Idea Submission and Presentation round > Prototype Making Round |
| Faculty Name (Faculty involved in organizing event) | Prof Vaishali Ingale |
| Student Name (student involved in organizing event) | Anand Dwivedi, Vidushi Singh |
| Video URL (optional) | |

| | |
|---|--|
| <p>Geo tagged Photograph1 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  |
| <p>Geo tagged Photograph2 (JPEG Format max size 2 Mb which shows strength of audience /participants with speaker)</p> |  |
| <p>Session plan/Brochure/Document/overall report of the activity (JPEG or PDF Format max size 2 Mb)</p> | <p>https://innerve.tech/</p> |



6. Electric Vehicle Club

Electric Vehicle Club

AY 2021-22

AIT ELECTRIC VEHICLE CLUB aspires:

1. To explore the state-of-art-technology behind Electric Vehicles and to create an environment conducive for research by encouraging and motivating students to enhance their engineering skills through project-based learning.
2. To provide opportunities for young minds to absorb and learn the cutting-edge technologies used in the ever-growing EC scenario by engaging them in hands-on projects

MISSION

1. To unite students in an educational environment and provide them a platform where they can improve their technical skills with research based projects based on EV.
2. To promote awareness among the students about the importance of the EV and the available opportunities, and to encourage their minds to invest their time in this field.
3. To engage the students in innovation, develop strong technical skills, build team qualities like cooperation, perseverance and self-confidence by giving them experience in organising events like project-based competitions, holding webinars and endless opportunities to learn .

| | |
|---|---|
| Name of faculty in-charges | |
| 1 | Dr. P B Karandikar |
| 2 | Dr Ashwini Sapkal |
| 3 | Prof Mrs Preeti Warriar |
| 4 | Prof Rajesh Godse |
| 5 | Mr AG Jirgale, Mr S G Joshi, Mrs Deepali Apraj, Mr BD Sonawane |
| Name of Student Secretaries | |
| 1 | Bharat S , Manojkumar (Secretaries) |
| 2 | Kumar Som, Gaurav Kumar,Himanshu Singh(Joint Secretaries) |
| Budget Allocated by Institute | Rs 60000 |
| Sponsorship received for setting up lab | Rs 10,00,000 (From Prof Mrs Asha Suhas Gogate to set up EV lab with name of Lt Col Suhas Gogate lab) Tool kit of Rs 8000 is given by Mr Devinder Singh, VP of Stanley Black & Decker India Private Limited No. 28, "Akemps", 1st Floor, 3rd Main, 1st Cross, Ashwini Layout, Koramangala Intermediate Ring Road, Bangalore - 560047 |
| Intra college event | Nil (newly formed Club) |
| Inter college event | Nil |

ACHIEVEMENTS

- * Battery capacity testing facility is developed
- * One e cycle – PIMO is available for trials
- * Tool kits required for projects are made available
- * One bike – Detel Easy is available for projects
- * EV charging station is taken up as BE project
- * EV wireless charging development is taken up as BE project under guidance of Prof Mrs Preeti Warriar
- * Cycle rickshaw conversion to electric mode is taken up as project by SE mech students under guidance of Prof Rajesh Godse sir
- * One two wheeler is converted as retrofitted vehicle by Sahil Uttekar of BE Mech student



e-bike :PIMO



Nitrogen/air filling station



Retrofitted scooter



7. ROBOTICS CLUB

ARMY INSTITUTE OF TECHNOLOGY


CENTER OF EXCELLENCE FOR AI AND ROBOTICS




VISION: To become a leading learning center for Artificial Intelligence and Robotics by providing a conducive environment with transferring engineering knowledge, inculcating creative thinking, and generating passion for doing it yourself approach which will make them Industry ready.





MISSION:



- Provide students the knowledge that makes them professional engineers, inculcate within, a solid base in mechatronics engineering, analytical and rational skills, for making them future leaders.
- Develop an accomplished human resources with an aptitude for entrepreneurship capabilities, team spirit and novel approach for their professional careers with lifelong learners.
- Impart quality learning culture to students to promote high standards of professional ethics, transparency, and accountability.

| | | |
|-------------------------------|---|---|
| Academic Year | : | 2022-23 |
| Name of Faculty IC | : | Avinash Patil |
| Name of Secretary | : | 1. Kapil Kharita 2. Priyanka Nikam |
| Budget Allocated by Institute | : | 14,00,000 |
| Sponsorship Received | : | -- |
| Events Conducted | : | 12 |

| S.No | Name of Event | Details of Events | No. of Participants | Remarks | Photo of Event with Caption |
|------|-----------------------------|--|-------------------------|--|---|
| 1. | First Year Induction | The club induction was conducted in Manekshaw Hall, where the First Year students where demonstrated the projects and functioning of | All First Year Students | Ideation - An Idea pitching round, where First Years gave their Ideas for new projects |  |

| | | | | | |
|---|-----------------------------|--|--|--|---|
| | | club. | | | |
| 2 | IIT Guwahati Esacade | Participated in theme based robotics competition : Tube Climbing Robot | 1. Vikas Saran SE ENTC 2. Shubham Tiwari SE ENTC | Third Runner up |  |
| 3 | E-Yantra | Every Year students of CEAR Club Participate in different themes of E-Yantra | 1. Aditi More 2. Shubham Tiwari 3. Rahul Chaudhary 4. Birendra Mohapatra | Participated and qualified for the Second round |  |
| 4 | 3D Printing Workshop | This 3D printing workshop was conducted by the TE Member of the club Harshdeep (TE MECH) and the club students where encouraged for the 3D Printing and modelling. | 1. Abhi Sirohi FE ENTC 2. Mehermeet FE ENTC 3. Surendra FE MECH 4. Nikita FE ENTC 5. Unnati FE ENTC Along with these students there where 30 more participants. | This was a club event, which was proposed for the club students. |  |

| | | | | | |
|----|----------------------------|--|---|--|---|
| 5 | IIT Bombay Techfest | Students of the club participated in Meshmerize and cozmo clenched event in IIT Bombay Techfest with 2 different bots of line tracer and pick and place bot. | <ol style="list-style-type: none"> 1. Kapil Kharita [TE ENTC] 2. Ankit [TE ENTC] 3. Deepak [TE ENTC] 4. Harshdeep [TE MECH] | Participated and learned from the experience the team got in the IIT Bombay Techfest |  |
| 6 | WarTech | Technical Event held in Solutions (Inter college technical fest of AIT) | Managed by team of CEAR Club Under the Guidance of Faculty IC. | |  |
| 7. | Use The Pins Wisely | Workshop on arduino And esp32 Microcontroller for First year and Second Year Students | Attended by 48 First year Students and 27 Second Year Students | 120 Students in batch of 40 each attended the workshop |  |
| 8 | Robocon 2022-23 | Asia Level Robotics Theme Based Robotics Competition ABU ROBOCON Cambodia | Team of 68 Students Participate and share their knowledge to compete at national level | Short-listed for First round of CAD model submission. |  |

| | | | | | |
|-----|--------------------------------|--|---|--|---|
| 9. | Projects Based Learning | Projects: <ol style="list-style-type: none"> 1. Robotic Arm 2. Pick and Place Bot 3. Line Tracer 4. Robo Soccer Bot | <ol style="list-style-type: none"> 1. Kapil TE ENTC 2. Ankit TE ENTC 3. Harshdeep TE MECH | All projects are working completed in the tenure |  |
| 10. | BITS QUARK | Participated in technical event of Bits Goa | <ol style="list-style-type: none"> 1. Rahul Chaudhary 2. Avinash Puniya 3. Birendra Mohapatra | Second Runner Up in Pick and Place Competition |  |
| 11 | Robotic Newsletter | Monthly news related to Robotics technology and club activities | <ol style="list-style-type: none"> 1. Aditi More 2. Niraj | -- | -- |
| 12 | Robotics Website | College CEAR website, in development stage. | <ol style="list-style-type: none"> 1. Ronak SE E&TC 2. Nepal Singh 3. Tanishk 4. Tushar | -- | -- |

8. SAE CLUB

ARMY INSTITUTE OF TECHNOLOGY

CLUB DETAILS



Name of Club: SAE-AIT Collegiate Club

| | | |
|-------------------------------|---|---|
| Academic Year | : | 2018-19 |
| Name of Faculty IC | : | Prof. Pankaj Vinayak Dorlikar, Prof R S Godse |
| Name of Secretary | : | Jagat Jyoti Das |
| Budget Allocated by Institute | : | Rs 5 Lac |
| Sponsorship Received | : | None |
| Events Conducted | : | None |

| Sr. No. | Name of Event | Details of Events | Name of Participants | Name of Winner with Position | Photo of Event with Caption |
|---------|---|----------------------------|--|--|-----------------------------|
| 1 | INTERNATIONAL GO-KART CHAMPIONSHIP (LPU) 2019 | Go-Cart Design Competition | FE - Prateek Shukla, Manjeet Singh Saini, Mangesh Shivaji Jadhav, Manish Kumar, Harshvardhan Singh Shekhawat, Devansh Rai, Rajvir Singh, Pranav Menon SE - Yash Shendokar, Shiwam Kumar, Amal Narikodan, Sanket Hegde Rahul Bhaskar, Tarun Rawat Manpreet Singh, Hitender Singh, Sanjay Yadav, Shubham Kumar Singh TE - Jagat Jyoti Das (Captain), Rohit Kumar | Best Design Winner, Dynamic Event Winner | |

| | | | | | |
|--|--|--|-------------------------------------|--|--|
| | | | ME - Shubham Katait (21) | | |
|--|--|--|-------------------------------------|--|--|

ARMY INSTITUTE OF TECHNOLOGY

CLUB DETAILS



Name of Club: SAE-AIT Collegiate Club

| | | |
|-------------------------------|---|---|
| Academic Year | : | 2021-22 |
| Name of Faculty IC | : | Prof. Pankaj Vinayak Dorlikar, Prof R S Godse |
| Name of Secretary | : | Azaj Shaikh, Pravin Manik Yadav |
| Budget Allocated by Institute | : | Rs 7.26 Lac |
| Sponsorship Received | : | None |
| Events Conducted | : | None |

| Sr. No. | Name of Event | Details of Events | Name of Participants | Name of Winner with Position | Photo of Event with Caption |
|---------|--------------------------------------|-----------------------------------|---|------------------------------|-----------------------------|
| 1 | SAEINDIA EFFICYCLE CHAMPIONSHIP 2022 | Eco Quad-Cycle Design Competition | FE - Abhay Kumar Shukla, Harsh Poonia, Arunima P, Arin Singh, Prashant Kumar Tiwari, Saloni Kumari SE - Pravin Manik Yadav (Captain), Azaz Shaikh, Karthik Sharma, Abhishek Kumar Meel, Vaibhav Kumar Chaudhary, Arpit Singh TE - Shiva Charak (13) | | |

9. Session on Vedic Mathematics in Technology



Army Institute Of Technology (AIT) Dighi Camp, Pune - 15.

Director : (020) 27157758, Joint Director : (020) 27157977, Principal : (020) 27157741

Exch : (020) 27157612, (020) 27157534 Fax : Extn : (020) 27157534

Website : ailt Pune.com, Email : ait@aitpune.edu.in

Recognised by AICTE and DTE Maharashtra and affiliated to Savitribai Phule Pune University

To,
Prof. Avinash Patil
E&TC Dept
AIT, Pune

LETTER OF APPRECIATION


Dear Sir,

Thank you very much for delivering an informative and thought provoking lecture on "Use of Vedic Mathematics in Technology" at the one day workshop on "Vedic Mathematics" held on 2nd Feb 2018 at Army Institute of Technology, Pune.

The students appreciated the talk and benefited from your views on the subject.

We are looking forward to your cooperation in holding such interesting sessions in near future.

Yours Sincerely,


Dr. B. P. Patil
Principal
Army Institute of Technology
Dighi Camp, Pune-411 015.



22/06/2024 18:36

10. R&D and IPR Cell



SOUTHERN STAR ARMY ACADEMIA INDUSTRY INTERFACE(S2A2I2)



**To be hosted jointly by
Regional Technology Node,
HQ Southern Command, Pune
&
Army Institute of Technology, Pune**

TRANSFORMATION TO ATMANIRBHAR BHARAT IN DEFENCE TECHNOLOGY

The Indian Army's Make in India initiative is spearheaded by Army Design Bureau (ADB). The role of ADB is to undertake technology scan, identify technologies for acquisition and development, facilitate R&D efforts with Industry, Academia, DRDO & DPSUs, provide inputs and enable them to understand user requirements while initiating cases of design & development with the industry, all with the aim of promoting indigenisation.

Army Institute of Technology, Pune (AIT) is an undergraduate engineering college affiliated to the University of Pune. AIT is located at Dighi Hills, Alandi Road area in Pune, Maharashtra, India. Only wards of army personnel are allowed admission. The admission is done through JEE MAINS exam. AIT functions under the aegis of the Army Welfare Education Society (AWES) and has the senior most officer of the Indian Army, the Chief of Army Staff of the Indian Army (COAS), as the President of its Board of Governors.

A seminar and exhibition on “**Transformation to Atmanirbhar Bharat in Defence Technology**” is being organised to highlight the current and emerging trends as well as opportunities for industries in this domain. Active participation from Defence Stakeholders, R&D Institutes, Academia and Private Industries is contemplated.

Seminar Objectives

- Overview of upcoming trends in modern technologies and requirements in Defence
- Academia and industry participation for development of indigenous defence technology.
- Introducing Start-ups and industries to defence eco system
- Opportunities to interact with Defence officials
- Sharing of quality practices and processes
- Spreading awareness amongst students and faculty of AIT and other colleges about futuristic trends in Defence Technology

The event will be held at Army Institute of Technology, Pune from 10:00 A.M. to 5.30 P.M. on 12th May 2023. The main focus of the event is to highlight each other's capabilities and needs. Broadly the programme shall be as given in the attachment.

- Active participation from our esteemed guests from Defence, R&D institutions, industries, Start-ups, academia etc. are the major highlight of the programme
- Over 100 delegates and 15+ exhibition stalls are expected
- Publication of event proceedings in seminar proceedings

Based on the role and expertise, we are inviting senior officers from the Armed Forces, Industries, Start-ups and R&D organizations to share their experiences and interact with the delegates.



SOUTHERN STAR ARMY ACADEMIA INDUSTRY INTERFACE(S2A2I2)



**TO BE HOSTED JOINTLY BY
REGIONAL TECHNOLOGY NODE, PUNE
HQ SOUTHERN COMMAND, PUNE
&
ARMY INSTITUTE OF TECHNOLOGY, PUNE**



Seminar & Exhibition on Transformation to Atmanirbhar Bharat in Defence Technology

**Date: Friday 12th May 2023
Time: 10.00 am to 5.30 pm
Venue: Army Institute of Technology,
Pune**



The Indian Army's Make in India initiative is spearheaded by Army Design Bureau (ADB). The role of ADB is to undertake technology scan, identify technologies for acquisition and development, facilitate R&D efforts with Industry, Academia, DRDO & DPSUs, provide inputs and enable them to understand user requirements while initiating cases of design & development with the industry, all with the aim of promoting indigenisation.

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Seminar Objectives

- Overview of upcoming trends in modern technologies and requirements in Defence
- Academia and industry participation for development of indigenous defence technology.
- Introducing Start-ups and industries to defence eco system

- Opportunities to interact with Defence officials
- Sharing of quality practices and processes
- Spreading awareness amongst students and faculty of AIT and other colleges about futuristic trends in defence technology

The event will be held at Army Institute of Technology, Pune from 10:00 A.M. to 5.30 P.M on 12th May 2023. The main focus of the event is to highlight each other's capabilities and needs. Broadly the programme shall be as given in the attachment.

- Active participation from our esteemed guests from Defence, R&D institutions, industries , Start-ups, academia etc. are the major highlight of the programme
- Over 100 delegates and 15+ exhibition stalls are expected
- Publication of event proceedings in seminar proceedings

Based on the role and expertise, we are inviting senior officers from the Armed Forces, Industries, Start-ups and R&D organizations to share their experiences and interact with the delegates.

We invite your gracious presence at this Seminar and Exhibition and request you for sponsorship

Contact details:

Dr. Surekha K S (Dean R&D, Army Institute of Technology)

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surekhaks@aitpune.edu.in

Dr. Lokesha M (Dean PP, Army Institute of Technology)

Mob: 9632352437

lokeshamarulaiah@aitpune.edu.in

Granted Patents



क्रमांक : 022123592
SL No :



भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 24 of The Patents Rules)

पेटेंट सं. / Patent No. : 427334
आवेदन सं. / Application No. : 202021008947
फाइल करने की तारीख / Date of Filing : 02/03/2020
पेटेंटी / Patentee : 1.Dr S.K. Bajpai 2.Dr Seema Tiwari 3.Aniteshma Chanpuria
4.Dr Manjula Bajpai et al.

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में विवक्षित PROCESS FOR PREPARATION OF MAGNETITE LOADED SULFUR OIL (MLSO) COMPOSITE ADSORBENT नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख मार्च 2020 के दूसरे दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled PROCESS FOR PREPARATION OF MAGNETITE LOADED SULFUR OIL (MLSO) COMPOSITE ADSORBENT as disclosed in the above mentioned application for the term of 20 years from the 2nd day of March 2020 in accordance with the provisions of the Patents Act, 1970.



अनुदान की तारीख : 28/03/2023
Date of Grant :

Controller of Patent

टिप्पणी - इस पेटेंट के लंबीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, मार्च 2022 के दूसरे दिन को और उसके बादल प्रत्येक वर्ष में उसी दिन देय होगी।

Note - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 2nd day of March 2022 and on the same day in every year thereafter.



Økad : 022113045
SL No :



Hkkjr ljdkj
GOVERNMENT OF INDIA
isVsV dk;kZy;
THE PATENT OFFICE
isVsV cekoki7
PATENT CERTIFICATE
(Rule 74 Of The Patents Rules)

isVsV la. / Patent No. : 365936
vkosnu la. / Application No. : 201921014084
Qkby djus dh rkjhak / Date of Filing : 08/04/2019
isVsVh / Patentee : 1.MR. PATIL AVINASH SUBHASH 2.DR. PATIL SHAILAJA
C. 3.DR. BORMANE D S 4.MS. WADAR SUSHMA RAJU

çekfokr fd;k tkrk gS fd isVsVh dks mijksä vkosnu esa ;FkkçdVr METHOD, APPARATUS AND SYSTEM FOR FINDING A SQUARE ROOT OF A PERFECT SQUARE NUMBER. uked vkfoedkj ds fy,] isVsV vf/kfu;e] 1970 ds mica/kksa ds vuqlkj vkt rkjhak 8th day of April 2019 ls chl oekZ dh vof/k ds fy, isVsV vuqñUk fd;k x;k gSA

It is hereby certified that a patent has been granted to the patentee for an invention entitled METHOD, APPARATUS AND SYSTEM FOR FINDING A SQUARE ROOT OF A PERFECT SQUARE NUMBER. as disclosed in the above mentioned application for the term of 20 years from the 8th day of April 2019 in accordance with the provisions of the Patents Act, 1970.



vuqñUk dh rkjhak : 03/05/2021
Date of Grant :

isVsV fu;a7d
Controller of Patent

fVliokh - bl isVsV ds uohdjok ds fy, Qhl] ;fn bls cuk, jakk tkuk gS] 8th day of April 2021 dks vkSj mlds iepkr çR;sd oekZ es mlh fnu ns; gksxhA

Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 8th day of April 2021 and on the same day in every year thereafter.



**INTELLECTUAL
PROPERTY INDIA**

एकस्व/PATENTS | अभिकल्प/DESIGNS |
व्यापार चिह्न/TRADE MARKS | भौगोलिक
उपदर्शन/GEOGRAPHICAL INDICATIONS



सत्यमेव जयते

**भारत सरकार
GOVERNMENT OF INDIA**

एकस्व कार्यालय / THE PATENT OFFICE
बौद्धिक सम्पदा भवन / I.P.O. BUILDING
प्लॉट नं. 32 / PLOT NO. 32
सेक्टर -14 / SECTOR 14, द्वारका/ DWARKA
नई दिल्ली/NEW DELHI -110078
दूरभाष / Tel. No. : 011-25300200
फैक्स / Fax : 011-28034301/02/15
ई मेल / Email : delhi-patent@nic.in
वेबसाइट / Website: <http://ipindia.nic.in>

सं. \ No. 202211055093

दिनांक \ Dated the 25/04/2023

सेवा में, \ To :

Address of Service:- BOUDHIK IP LLP C 122, Jal Vayu Vihar, Sector 30, Gurgaon – 122001, Haryana, India

Email Id:- vivek@boudhikip.com

विषय :- पेटेंट आवेदन संख्या 202211055093 के संबंध में अधिनियम की धारा 43 के तहत पेटेंट अनुदान तथा पेटेंट रजिस्टर में प्रविष्टि की सूचना

Sub :- Intimation of the grant and recordal of patent under section 43 of the Act in respect of patent application no. 202211055093

महोदय/महोदया,

Sir/Madam,

आपको सूचित किया जाता है कि पेटेंट अधिनियम, 1970 की धारा 12 व 13 तथा उस आधार पर बने नियम के तहत उपर्युक्त पेटेंट आवेदन के परीक्षण [व ----- को हुई सुनवाई] के उपरान्त एतद्वारा पेटेंट अनुदान किया जाता है। तथा पेटेंट अनुदान की प्रविष्टि 25/04/2023 को पेटेंट रजिस्टर में कर दी गयी है।

This is to Inform you that following the examination of above mentioned patent application under section 12 and 13 of The Patents Act, 1970 and Rules made thereunder [and hearing held on -----] a patent is hereby granted and recorded in the Register of Patents on the 25/04/2023. The Patent Certificate is enclosed herewith.

| | |
|---|---|
| पेटेंट संख्या \ Patent No | : 429886 |
| आवेदक का नाम \ Name Of Applicant | : 1.Dr. Rini Saxena 2.Ms. Puja Gupta 3.Dr. Renuka Bhandari 4.Mr. Raj Gupta et al. |
| पेटेंट दिनांक \ Date of Patent | : 26/09/2022 |
| पूर्विका तिथि \ Priority Date | : 26/09/2022 |
| परीक्षण हेतु अनुरोध दाखिल करने की तिथि \ Filing date of Request for examination | : 04/10/2022 |
| शीर्षक \ Title | : A SMART LIGHT POLE SYSTEM |
| दावों की संख्या \ Number of claims | : 10 filed on 20/02/2023 |

उपर्युक्त पेटेंट के अनुदान का प्रकाशन अधिनियम की धारा 43 के तहत पेटेंट कार्यालय के आधिकारिक जर्नल में किया जाएगा।

The grant of above mentioned patent will be published in the Official Journal of the patent Office under section 43 of the Act.

पेटेंट अधिनियम 1970 यथा संशोधित पेटेंट (संशोधन) नियम, 2005/ पेटेंट नियम, 2003 यथा संशोधित पेटेंट (संशोधन) नियम, 2016 की धारा 142 की उप-धारा (4) के प्रावधानों के तहत उपरोक्त प्रविष्टि की तिथि से 3 माह के भीतर इस कार्यालय में नवीकरण शुल्क जमा किया जाना चाहिए।

The payment of renewal fee is required to be made at this office within three(3) months from the aforesaid date of recording according to the proviso in sub-section(4) of Section 142 of The Patents Act,1970, as amended by The Patents (Amendment) Act, 2005 / The Patents Rules, 2003 as amended by The Patents (Amendment) Rules, 2016.

Sanjay Bhattacharyya

(नियंत्रक पेटेंट)

Controller of Patents

टिप्पणी / Note :

1. संशोधित नवीकरण शुल्क हेतु कृपया महानियंत्रक पेटेंट, अभिकल्प एवं व्यापार चिह्न की आधिकारिक वेबसाइट www.ipindia.gov.in पर उपलब्ध पेटेंट (संशोधन) नियम 2016 की प्रथम अनुसूची (शुल्क) देखें।

For revised renewal fees kindly refer to the First Schedule (fees) of The Patents (Amendment) Rules 2016 available on the official website of Controller General of Patents, Designs and Trade Marks www.ipindia.gov.in

2. कार्यालय द्वारा पेटेंट प्रमाणपत्र की कोई भी कागजी प्रति अलग से जारी नहीं की जाएगी।

No hard copy of Patent Certificate shall be issued separately by the office.



सत्यमेव जयते

Økad : 011160248
SL No :



Hkkjr ljdkj
GOVERNMENT OF INDIA
isVsV dk;kZy;
THE PATENT OFFICE
isVsV cekoki7
PATENT CERTIFICATE
(Rule 74 of The Patents Rules)

isVsV la. / Patent No. : 429886
vkosnu la. / Application No. : 202211055093
Qkby djus dh rkjhak / Date of Filing : 26/09/2022
isVsVh / Patentee : 1.Dr. Rini Saxena 2.Ms. Puja Gupta 3.Dr. Renuka Bhandari
4.Mr. Raj Gupta et al.

çekfokr fd;k tkrk gS fd isVsVh dks] mijksä vkosnu esa ;FkkçdfVr A SMART LIGHT POLE SYSTEM uked vkfoedkj ds fy, isVsV vf/kfu;e] 1970 ds mica/kksa ds vuqlkj vkt rkjhak flrEcj 2022 ds Nēchlosa fnu ls chl oekZ dh vof/k ds fy, isVsV vuqnUk fd;k x;k gSA

It is hereby certified that a patent has been granted to the patentee for an invention entitled A SMART LIGHT POLE SYSTEM as disclosed in the above mentioned application for the term of 20 years from the 26th day of September 2022 in accordance with the provisions of the Patents Act, 1970.



vuqnku dh rkjhak : 25/04/2023
Date of Grant :

isVsV fu;a7d
Controller of Patent

fVliokh - bl isVsV ds uohdjok ds fy, Qhl] ;fn bls cuk, jakk tkuk gS] flrEcj 2024 ds Nēchlosa fnu dks vkSj mlds iēprk çR;sd oekZ es mlh fnu ns; gksxhA

Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 26th day of September 2024 and on the same day in every year thereafter.



Australian Government

IP Australia

CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2020102246

The Commissioner of Patents has granted the above patent on 14 October 2020, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

S.K. Bajpai of Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur MP 482001 India

Seema Tiwari of Army Institute of Technology, Dighi Hills Pune-411015 India

Aniteshma Chanpuria of Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur (M.P.)-482001 India

Manjula Bajpai of Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur (M.P.)-482001 India

Deepika Dubey of Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur (M.P.)-482001 India

Title of invention:

PROCESS FOR PREPARATION OF MAGNETITE LOADED SULFUR OIL (MLSO) COMPOSITE ADSORBENT

Name of inventor(s):

Bajpai, S.K.; Tiwari, Seema; Chanpuria, Aniteshma; Bajpai, Manjula and Dubey, Deepika

Term of Patent:

Eight years from 14 September 2020

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 14th day of October 2020

Commissioner of Patents

PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

Extracts from the Patents Act, 1990

Sect 120(1A) Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

Sec 128 Application for relief from unjustified threats

- (1) Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:
- (a) a declaration that the threats are unjustifiable; and
 - (b) an injunction against the continuance of the threats; and
 - (c) the recovery of any damages sustained by the applicant as a result of the threats.
- (2) Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

Sec 129A Threats related to an innovation patent application or innovation patent and courts power to grant relief.

Certain threats of infringement proceedings are always unjustifiable.

- (1) If:
- (a) a person:
 - (i) has applied for an innovation patent, but the application has not been determined; or
 - (ii) has an innovation patent that has not been certified; and
 - (b) the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be; then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

Courts power to grant relief in respect of threats made by the applicant for an innovation patent or the patentee of an uncertified innovation patent

- (2) If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

Courts power to grant relief in respect of threats made by the patentee of certified innovation patent

- (3) If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

Schedule 1 Dictionary

certified, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent



Australian Government

IP Australia

CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2020102665

The Commissioner of Patents has granted the above patent on 18 November 2020, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

D. Aruna Kumari of (Professor), Department of Computer, Science and Engineering ,Vidya Jyothi, Institute of Technology, Aziznagar Gate Chilukur Balaji Road Hyderabad, Telangana 500075 India

Seema Tiwari of Army Institute of Technology Dighi Pune,MH 411015 India

R. Sumalatha of (Associate Professor), Department of ECE Vardhaman College of Engineering Hyderabad 501218 India

D. Nagajyothi of (Associate Professor), Department of ECE Vardhaman College of Engineering Shamshad 501218 India

M. Rajani Devi of (Associate Professor), Department of ECE Vardhaman College of Engineering Shamshad 501218 India

G. A. E Satish Kumar of (Professor), Department of ECE Vardhaman College of Engineering Hyderabad 501218 India

L. Smitha of (Assistant Professor - GNITS), H.No. 36A, behind bible house RP Road Secundrabad ,Hyderabad 500003 India

Manas Ranjan Sahoo of C/O -Upendra Sahoo, At-Manisahu Chhak, PO - Buxi Bazar Cuttack Odisha 753001 India

Jyoti Lamba of H.No. 477 Surya Nagar, Opp Dalal Bhavan, Gohana Road Rohtak Haryana 124001 India

Nidhi Jain of B-503, Mont Vert Dieu, Pashan Sus Road Pashan Pune,MH 411021 India

Title of invention:

AMTH- Biomedical Waste Management: Automatic Method and Technologies for Biomedical Waste Management Including Ayurveda Hospitals Using IoT- Based System

Name of inventor(s):

Kumari, D. Aruna; Tiwari, Seema; Sumalatha, R.; Nagajyothi, D.; Devi, M. Rajani; Kumar, G. A. E. Satish; Smitha, L.; Ranjan Sahoo, Manas; Lamba, Jyoti and Jain, Nidhi

Term of Patent:

Eight years from 10 October 2020

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 18th day of November 2020

Commissioner of Patents

PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

Extracts from the Patents Act, 1990

Sect 120(1A) Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

Sec 128 Application for relief from unjustified threats

- (1) Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:
- (a) a declaration that the threats are unjustifiable; and
 - (b) an injunction against the continuance of the threats; and
 - (c) the recovery of any damages sustained by the applicant as a result of the threats.
- (2) Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

Sec 129A Threats related to an innovation patent application or innovation patent and courts power to grant relief.

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- (1) If:
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 - (i) has applied for an innovation patent, but the application has not been determined; or
 - (ii) has an innovation patent that has not been certified; and
 - (b) the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be; then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

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- (2) If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

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- (3) If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

Schedule 1 Dictionary

certified, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

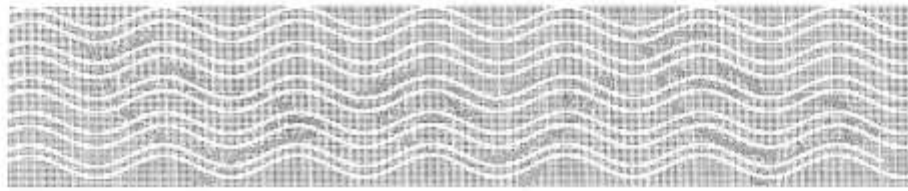


सत्यमेव जयते

e-Stamp

| | |
|---------------------------|---|
| Certificate No. | : IN-DL27297333977423T |
| Certificate Issued Date | : 10-Nov-2021 06:32 PM |
| Account Reference | : IMPACC (IV)/dl790603/ DELHI/ DL-DLH |
| Unique Doc. Reference | : SUBIN-DL79060390919490190065T |
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| Description of Document | : Article 48(c) Power of attorney - GPA |
| Property Description | : Not Applicable |
| Consideration Price (Rs.) | : 0 (Zero) |
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| Second Party | : Not Applicable |
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सत्यमेव जयते



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2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

FORM -26
THE PATENTS ACT, 1970
(39 OF 1970)

&
THE PATENTS (AMENDMENT) RULES, 2006
Form for Authorization of a Patent Agent/ or Any Person in a Matter or Proceeding Under the
Act
[Refer sections 127 and 132; and rule 135]

I, [REDACTED] of the address [REDACTED]

I, **Mr Santosh Patel (Senior IT specialist)**, of the address 18F, Building 15, Hai Yin Chang Cheng ER-QI, Ho Hai Da Dao, Nanshan District, Shenzhen, China- 518000. I, **Dr Nidhi Jain (Assistant Professor)**, of the address Bharati Vidyapeeth's College of Engineering, Lavale, Pune/ B-503, Mont Vert Dieu, Sus Road, Pashan, Pune, India. We hereby authorize **Ajay Kaushik, Vikas Garg, Monika, Anand Sankaran Iyer, and Varsha Yadav**, Registered Patent Agents of Aksh IP Associates, having their office address at, B-123, Logix Technova, Sector-132, Noida, Uttar Pradesh-201301, India to act jointly or severally on our behalf in connection with patent application/ granted patent before the Indian Patent Office or the Government of India, their filling, securing grant, renewals and maintenance, objections, oppositions, rectification's , cancellations, assignments, transfer or other interest in respect thereof, or of change in our name, address, or address for service and in general to do all acts of things and other matter and proceedings related thereto with respect to an invention of

"IPMS- SEPARATING SALTS: INTELLIGENT PROCESS AND METHOD FOR SEPARATING SALTS IN SEAWATER. (GREEN CHEMISTRY)."

and to receive all notices, requisitions and communications until further notice.

We further authorize our said agents to appoint any person or persons on our behalf to do all what is necessary in the matters and proceedings.

We hereby ratify and agree to ratify and confirm all acts or deed done by our said attorneys in respect of the matters and proceedings stated above.

We hereby revoke all previous authorizations, if any made, in respect of said matter and proceeding.

Dated this the 09th day of November, 2021

Sign: 
Dr Seema Tiwari (Associate Professor)

Sign: 
Mr Santosh Patel (Senior IT specialist)

Sign: 
I, Dr Nidhi Jain (Assistant Professor)

To
The Controller of Patents
The Patent Office
At Mumbai.

(12) International Application Status Report

Received at International Bureau: 02 February 2021 (02.02.2021)

Information valid as of: 25 August 2021 (25.08.2021)

Report generated on: 11 July 2022 (11.07.2022)

(10) Publication number:

WO2021/176462

(43) Publication date:

10 September 2021 (10.09.2021)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/IN2021/050105

(22) Filing Date:

02 February 2021 (02.02.2021)

(25) Filing language:

English (EN)

(31) Priority number(s):

20202100008947 (IN)

(31) Priority date(s):

02 March 2020 (02.03.2020)

(31) Priority status:

(51) International Patent Classification:

C01G 49/08 (2006.01); **H01F 1/0054** (2006.01)

(71) Applicant(s):

BAJPAI, S.K. [IN/IN]; Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College, Jabalpur 482001 (IN) *(for all designated states)*

TIWARI, Seema [IN/IN]; Army Institute of Technology, Dighi Hills Pune 411015 (IN) *(for all designated states)*

CHANPURIA, Aniteshma [IN/IN]; Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur 482001 (IN) *(for all designated states)*

BAJPAI, Manjula [IN/IN]; Polymer Research Laboratory, Department of Chemistry, Govt. Model Science College Jabalpur 482001 (IN) *(for all designated states)*

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(72) Inventor(s):

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(54) Title (EN): PROCESS FOR PREPARATION OF MAGNETITE LOADED SULFUR OIL (MLSO) COMPOSITE ADSORBENT

(54) Title (FR): PROCÉDÉ DE PRÉPARATION D'UN ADSORBANT COMPOSITE À BASE D'HUILE DE SOUFRE CHARGÉE DE MAGNÉTITE (MLSO)

(57) Abstract:

(EN): The present invention generally relates to the field of nanomaterials composites, and in particular relates to a process for preparation of magnetite loaded sulfur oil (MLSO) composite adsorbent. The process includes the steps of: dissolving 40ml of slightly acidified distilled water with 10.4 grams of ferrous sulphate hepta hydrate under mild stirring and following by addition of 12 grams offerric chloride anhydrous; dissolving again 12 grams of NaOH in 40 ml of distilled water under continuous stirring; adding NaOH solution drop-wise into an aqueous solution of Fe(II)/Fe(III) under moderate stirring at 70°C for a period of 1 h; collecting magnetite nano particles after the aqueous solution gets turned into brown or black, wherein the aqueous solution gets turned into brown or black when the solution is centrifuged at a speed of 2000 rpm and kept in an electric oven at 50°C.

(FR): La présente invention se rapporte d'une manière générale au domaine des composites de nanomatériaux, et concerne en particulier un procédé de préparation d'un adsorbant composite à base d'huile de soufre chargée de magnétite (MLSO). Le procédé comprend les étapes consistant à : dissoudre 40 ml d'eau distillée légèrement acidifiée avec 10,4 grammes d'hydrate d'hepta de

sulfate ferreux sous agitation modérée et après addition de 12 grammes de chlorure ferrique anhydre ; dissoudre à nouveau 12 grammes de NaOH dans 40 ml d'eau distillée sous agitation continue ; ajouter une solution NaOH dans une solution aqueuse de Fe(II)/Fe(III) sous agitation modérée à 70 °C pendant une durée de 1 h ; collecter les nanoparticules de magnétite après que la solution aqueuse a été transformée en brun ou en noir, la solution aqueuse étant transformée en brun ou en noir lorsque la solution est centrifugée à une vitesse de 2000 tr/min et maintenue dans un four électrique à 50° C.

International search report:

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AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

List of patents published

| Sr No. | Name of Inventors | Title | National/ International | Application No. | Date of filing | Date of publication | Date of Grant/Award |
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| 1 | Dr. Rini Saxena ,(Ext.), Ms. Puja Gupta (Ext.), Dr. Renuka Bhandari , Mr. Raj Gupta (Ext.), Mr. Upendra Singh (Ext.), Mr. Himanshukamal Verma | A Smart Pole System. | National | 202211055093 (Patent) | 26/09/2022 | 14/10/ 2022 | 25/04/2023 |
| 2 | Mrs. Shilpa Devram Pawar,Bharath S, C Kushi, P Divya Bharti | IOT Based Asset Tracking andAutomobile Safety System | National | 202221021209 A (Patent) | 8/04/ 2022 | 7 /10/2022 | - |
| 3 | Mrs.Shobha Ajeet Waghmode (Ext.),Mr Tabmay Pravin Jagtap Dr.Sharda R.Gadale (Ext.), Mrs. Snehal Marathe Dr.B.P.Patil Ms. Rashi M.Patil (Ext.). | To Intensify Solar Efficiency AndWater Harvesting By & NBSP; Using Core Shell (CS) Decorated Metal Organic Framework(MOF@CS). | National | 202321027929 (Patent) | 17/04/2023 | 5/05/2023 | - |
| 4 | Aparna Joshi, Gajanan Walunjkar, Vaishali Ingale, Dr. Rahul Desai, Rupali Bagate, Yuvraj Gholap | Interactive Shopping Experience Using Augmented Reality | National | 202221075977 | 27/12/2022 | 13/01/2023 | - |
| 5 | Mr. Sandeep Samleti | An artificial intelligence and Machine Learning Based Supply chain management system and method thereof | National | 202321002374 | 11/01/2023 | 27/01/2023 | - |

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| 6 | Dr. Ashwini Sapkal | Machine Learning Approach For Association Rule Maintenance And Refinement Using Incremental Data With Updating Support Thresholds | National | 202341002090 | 10/01/2023 | 20/01/2023 | - |
| 7 | Dr. Dipika Birari | Artificial Intelligence based Automatic Stock Price prediction System to predict High, Low and Closing Price using cloud computing and Machine Learning Algorithms | National | 202341032547 | 08/05/2023 | 23/06/2023 | - |
| 8 | Prof. Asha Sathe Prof. Kuldeep Hule Prof. Sharayu Lokhande Prof. P R Sonawane Prof. Mahesh Lonare | An Assessment of Strategy, Networks Complexity & Innovation on Organization Adaptability | National | 202321005105 | 25/01/2023 | 10/02/2023 | - |
| 9 | Prof. Mahesh Lonare Prof. Kuldeep Hule | Automatic Behavior Prediction for Rule-Based Data Processing using Machine Learning | National | 202241049441 | 30/08/2022 | 09/09/2022 | - |
| 10 | Prof. Mahesh Lonare Prof. Yogita Hambir Prof. Kuldeep Hule Prof. P R Sonawane | The Classification Techniques for the face detection in artificial neural networks using concepts of machine learning | National | 202221066095 | 18/11/2022 | 25/11/2022 | |
| 11 | Prof. Sita Yadav | Video Content Detection Based System to save Stray Animals | National | 202321009301 | 13/02/2023 | 31/03/2023 | |
| 12 | Prof. Poonam Rayakar | Advance Data Security System Using Machine Learning and Internet of Things | National | 202311032583 | 09/05/2023 | 09/06/2023 | |
| 13 | Mr. D. Saravanan (Ext.), Mr. Girish Kapse Dr. V. Tamizhazhagan Dr. V. Elizabeth Jesi | Child Education Monitoring System Using Internet Of Things. | National | 202241004314 (Patent) | 25/01/ 2022 | 4/02/2022 | - |

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| | (Ext.), Dr. D. Stalin David(Ext.), Dr. Hrituparna Paul (Ext.), Ms. Swati Kale (Ext.), Dr. D. Pradeep (Ext.), Dr. P. Ramya (Ext.). | | | | | | |
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| 15 | Mrs. Shilpa Pawar. Mr. Bharat S. Ms. C. Khushi. Ms. P Divya Bharti | IOT Based Asset Tracking and Automobile Safety System | National | 202221021209 (Patent) | 8/04/2022 | - | - |
| 16 | Mrs. Rupali Bagate | Agricultural water level controlling and notification using AI and IOT-Based Technology | National | 202121048705 | 25/10/2021 | 12/11/2021 | - |
| 17 | Mrs. Aparna Joshi | Agricultural water level controlling and notification using AI and IOT-Based Technology | National | 202121048705 | 25/10/2021 | 12/11/2021 | - |
| 18 | Mrs. Dipika Birari | Bitcoin price predication using machine learning | National | 202121044062 | 29/09/2021 | 26/11/2021 | - |
| 19 | Prof. Vaishali Ganganwar | Machine learning trained surveillance camera system to stop theft before it performs | National | 202121023146 | 24/05/2021 | 25/06/2021 | |
| 20 | Prof. Mahesh Lonare Prof. Asha Sathe | Intelligent Ear Pods by Voice Commands and Gestures | National | 202121039211 | 30/08/2021 | 03/12/2021 | |

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|----|--|---|---------------|---------------|------------|------------|------------|
| 21 | Prof. Mahesh B Lonare | Bitcoin Price Prediction using Machine Learning | National | 202121044062 | 29/09/2021 | 26/11/2021 | - |
| 22 | Prof. Yogita Hambir Prof. Kuldeep Hule | Non-intrusive Personalized Smart Home Automation using Big Data | National | 202141048156 | 22/10/2021 | 29/10/2021 | - |
| 23 | Prof. Mahesh Lonare Prof. Yogita Hambir Prof. Kuldeep Hule | Agriculture Water Level Controlling and Notification using AI and IoT- Based Technology | National | 202121048705 | 25/10/2021 | 12/11/2021 | - |
| 24 | Prof Raviraj B. Gurav | Design and development of wheel alignment and balancing prediction device for modern automobiles | National | 202221007065A | 10/02/2022 | 4/03/2022 | |
| 25 | Ms Anita Suryawanshi | Experimental Investigations on Influence and Necessity of Initial Curing on the Properties of Hardened Concrete | National | 202221025961 | 04/05/2022 | 24/06/2022 | - |
| 26 | Dr Seema Tiwari | Intelligent Process and method for separating salts in seawater (Green Chemistry) | National | 202121040037 | 03/09/2021 | 20/12/2021 | - |
| 27 | Dr Seema Tiwari | AMTH- Biomedical Waste Management: Automatic Method and Technologies for Biomedical Waste Management Including Ayurveda Hospitals Using IoT- Based System | International | 2020102665 | 10/10/2020 | 3/11/2020 | 10/10/2022 |
| 28 | Dr Seema Tiwari | Process for preparation of Magnetite loaded sulphur oil composite adsorbent | International | 2020102246 | 14/09/2020 | 29/10/2020 | 14/09/2022 |
| 29 | Prof Nikita Singhal | Quick Response code based vehicle verification and challan generation system (QRCVVCGS) | National | 202021045204 | 16/10/2020 | 13/11/2020 | |

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|----|---|--|---------------------------|-------------------|------------|-------------|------------|
| 30 | Prof Anant Kaulage Prof Sagar Rane | SPEX for Blind People | National | 202121003012 | 22/01/2021 | 26/02/2021 | - |
| | Prof. Sagar Rane | System for secure logging for cloud forensics using Blockchain | National | 202111019244 | 24/04/2021 | 30/04/2021 | - |
| 31 | Dr Seema Tiwari | Process for preparation of Magnetite loaded sulphur oil compositeadsorbent | International | 202021008947 | 02/03/2020 | 20/03/2020 | 28/03/2023 |
| 32 | Mr. Mayank J. Bhalerao Mr. Vispi N. Karkaria Ms. Pranali S. Wankhede Mr. V.L. Kokate Mr. A.P. Deshpande Mr.R.M. Holmukhe Dr. P. B. Karandikar | Economic Test Set Up For Ev Motor Testing Using Innovative Coupling | National | 201921020439 A | 23/05/2019 | 07/06/2019 | - |
| 33 | Mr. Vishnu L Kokate Mr. Rajesh M. Holmukhe Mr.D.S. Bankar Dr. P. B. Karandikar Mr. Mayank J. Bhalerao Mr. Vispi N. Karkaria | Ultra-Capacitor Based Cranking Kit For Automotive System | National | 201921028315 A | 15/07/2019 | 16/08/2019 | - |
| 34 | Dr. Sushama Patil Mr.Avinash Patil | Method, Apparatus andsystem for finding a square root of a perfectsquare number. | National | 201921014084 | 8/04/2019 | 3/05/2019 | 3/05/2021 |
| 35 | Prof S M Sansgiri | Exhaust System forAuto rickshaw | National | 201921031357 | 02/08/2019 | 30/08/ 2019 | - |
| 36 | Dr Seema Tiwari, Dr Nidhi Jain, Aniket, Yash Mishra | Nanocomposite For Wound Healing Application. | International through PCT | 201921015203. | 16/04/2019 | 26/06/2020 | - |



11. Various SOP'S to get financial support for Research Project, Paper Publications by Faculty and Students

SOP: INTELLECTUAL PROPERTY RIGHTS (IPR) CELL,
ARMY INSTITUTE OF TECHNOLOGY, PUNE

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Appendices

1. Appendix 'A' - Definition of various terms used in IPR application
2. Appendix 'B' - Checklist for application under Indian IPR
3. Appendix 'C' - Work flow for obtaining permission from AIT
4. Appendix 'D' - Procedure to be followed for filing IPR

Introduction

1. AIT was established in the year 1994 to provide quality technical education to the wards of Army personnel of the Indian Army. The highly conducive atmosphere for learning and the state of the art infrastructure of the institution provided vital ingredients for training top quality engineers. AIT provides technical education to the students and endeavors to project itself as one of the leading centers for education and research in Engineering and Technology.
2. In a University or college, Intellectual Property Rights (IPRs) are considered as the outcome of research projects, collaborations, and consultancy services provided by the institution. It is therefore important that an IPR cell must be established at AIT to meet the needs of its academic fraternity. The IPR cell will provide patent information as a vital input to R&D.
3. The faculty, staff and students of AIT are actively involved in research and development in diverse fields. Many such research endeavors may lead to invaluable IPR. Keeping this in mind, the IPR cell of AIT aims to encourage, promote and safeguard research and scientific investigations, conducted by the faculty, staff and students of AIT.
4. This document describes the IPR policy of AIT and provides all the relevant information to promote research and development activities at the institute.

Aim of SOP

5. The aim of SOP is to lay down the rules, regulations and guidelines regarding formation of IPR cell in AIT for processing of IPR applications of students, faculty and employees.



Types and Definitions of Intellectual Property Rights (IPRs)

6. IPRs are exclusive rights over the creations of the mind. A creator can have exclusive rights over his creation for a certain period depending upon the type of Intellectual Property. IPR can be broadly divided into two categories, viz, Industrial Properties and copyrights.

(a) **Industrial Properties.** Patents, Designs, Trademarks and Geographical Indications fall under industrial properties.

(i) **Patents.** Patent is an exclusive privilege/right granted by the government to the patentee for commercial gain in consideration of full disclosure of his invention as a Territorial Right. It is a document issued by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the owner of the patent.

(ii) **Designs.** Design means the features of shape, configuration, pattern or ornament or composition of lines or color or a combination thereof applied to any article, in 2D or 3D or both forms. An industrial design refers to the aesthetic aspect of an article.

(iii) **Trademark.** Visual symbol which may be a word, name, symbol, brand or device, numerical or combination of colors which is used in trade with goods to indicate the source of the goods to distinguish from the goods of the others. TM performs the following functions:-

(aa) It identifies the product and origin.

(ab) It guarantees its unchanged quality.

(iv) **Geographical Indications (GI).** GI are place names used to identify the source of origin, quality, reputation or other characteristics of products. Eg.-Agra Petha, Darjeeling Tea, Nagpur Oranges etc. Geographical Indication consists of the name of the place of origin. It originates from a definite geographical territory. It is used to identify agricultural, natural or manufactured goods. The manufactured goods should be produced or processed or prepared in that territory. It should have a special quality due to the geographical environment or reputation.

(b) **Copyrights.** Provide the holder with the right to restrict unauthorized copying & reproduction of an original expression. Copyright deals with the rights of intellectual creators in their creation. Most works, for example, books, paintings or drawings, exist only once they are embodied in a physical object. Copyright protection is required for promoting, enriching and disseminating the national cultural heritage. A country's development depends to a very great extent on the creativity of its people, and the encouragement is given for individual creativity.

7. Definition of various other terms used in this document are at **Appendix 'A'**.



Constitution of the Institute IPR cell

8. The IPR cell of AIT will work under the guidance of Dean R&D. The cell consists of an In-charge and one member of faculty from each department as nominated by the Principal. The IPR cell shall be responsible for handling all issues related to IP and other relevant matters as decided by the cell from time to time.

Purpose of IPR Cell

9. To provide the necessary infrastructure and environment for the development of Intellectual Property.
10. To promote and encourage scientific and technical research activities
11. To establish an IPR policy to encourage faculty, staff and students to conduct research and invent.
12. To encourage and provide incentives to faculty, staff and students who take efforts to create Intellectual Property for commercialization.
13. To promote and encourage faculty, staff and students to work on sponsored research project by way of the Industry -Academia partnership.
14. To promote the use of IP created for the benefit of inventors/creators/authors, the institute and to support the ecosystem of the nation at all levels.

Objectives and Roles

15. To provide academic freedom for the development of Intellectual Property at the Institute.
16. To safeguard the interest of the institute, inventors/ creators/authors of Intellectual Property and provide a fair distribution of returns accruing from the commercialization of IPRs.
17. To provide legal support through an expert wherever necessary, to identify, process, defend and protect the IPRs obtained by the Institute against any infringement/ unauthorized use.
18. To create an environment for acquiring new knowledge through innovation and research, compatible with the mission for the education of the institute.
19. To provide a framework to foster innovation and creativity in the areas of Technology, Science, and Humanities by nurturing new ideas and research in an ethical environment.
20. To protect IPs generated by faculty, staff and students of the institute by translating their creative and innovative work into IPRs.



21. To organize guest lectures/ workshops on IPR awareness every year, to motivate faculty/staff/students.
22. To prepare an annual budget and put up for approval.
23. To maintain details of expenditure and close the annual expenditure report by 31st March.

Evaluation Committee

24. Dean, R&D will head the committee for each proposal. The Dean R&D will select at least two faculty members from the IPR cell to work as committee members, depending on the required area of expertise. The committee will be responsible for evaluating, protecting, and managing the IP generated by AIT.
25. The Evaluation Committee will also determine whether AIT needs to take responsibility for filing for the IPR. If AIT does not recommend the processing of IP, then the IP rights will be assigned to the inventors/creators/authors.
26. The committee will also take a decision about the annual renewal of IPRs fully or partially, every year.

Application and Categorisation of IPR

27. While filing for the IP, the name of the institute should be included in three categories:-
 - (a) Category I - Applicant: AIT(Inventors/Creators/Authors): Faculty/ Staff/ Students.
 - (b) Category II - Applicant: AIT and Natural Persons (Inventors/ Creators/ Authors): Faculty/Staff/Students/Industry Personnel
 - (c) Category III - Applicant : Natural Persons (Inventors/ Creators/ Authors): Faculty/ Staff/ Students/ Industry Personnel with the Address of AIT
28. If an invention or any creation which can be termed as an IPR is created by using the resources of the AIT the said applications / IPR's shall be considered under category I and II. All such inventions/ creations shall be vested with AIT.
29. If an invention/creation is made by an individual/s in his/her own time and unrelated to his/her responsibilities towards AIT and is conceived or reduced to practice without the use of resources of AIT shall fall under category III. The individual/s shall seek written consent from the Evaluation Committee and/or IPR cell before claiming such IP rights in his/her name. The evaluation committee and/or the IPR cell shall submit the proposal received from such individual /s to the Director for final approval.
30. An agreement shall be executed with AIT by the inventor/author/ creator before processing/filing/ claiming of any IPR. The Agreement shall set the terms for the arrangement between the AIT and the inventor/ author/ creator including the financial terms.



Budget Requirement

31. The IPR cell should have an independent budget of Rs. 5 Lakh per year. This amount can be revised from time to time as per requirement. This amount will be reflected in the annual budget of AIT. From this corpus, IPR filing charges(Indian), TA of AC-III tier for filing for IPR and all IPR related work at the IPR office, Attorney fee and charges for making of digital signature(if required) should be funded 100 percent for category I and II. The upper limit for category III is Rs. 5000 and will be decided on a case to case basis.

(a) Based on the recommendations of the evaluation committee, the reimbursement of charges for filing of IPR in foreign countries will be decided by the Competent Financial Authority, AIT, as per the AWES letter no: B/37900/CEA/38/AG/PS-3(B)/2016(AWES)

(b) In case any additional amount is required by the IPR cell, the Competent Financial Authority, AIT will be authorized to allocate from relevant R&D funds based on recommendations of Dean R&D.

Process for Obtaining Permission from AIT to Apply for Indian IPR

32. The Applicant performs prior work. The checklist about patentability is given at **Appendix 'B'**.

33. After carrying out prior work and study on patentability, the applicant forwards the IPR proposal to the IPR cell with the due recommendation of the concerned HoD. Simultaneously, the applicant will also forward an advance copy of the proposal to the IPR cell.

34. An evaluation committee will be formed as given in para 24.

35. The IPR cell invites the applicant for presentation before the Committee to establish the eligibility of the application and for its approval.

36. If approved, the inventor prepares a cost statement for IPR processing.

37. When the Dean R&D or member of the IPR Cell applies for IPR, the Principal will appoint HoD/senior faculty as the Chairman of the evaluation committee for conducting the process.

38. The approval from the IPR cell and the financial requirement for filing the IPR will be sent to the competent authority: the Director & the Principal, AIT, for final approval.

39. Once approved, the applications under category I & II will be forwarded to the Institute appointed attorney.

40. Once approved by the attorney, the applications may be sent to the suitable IPR Facilitation Center/Government Agency/AICTE as per recommendations of the IPR cell.

41. The workflow for obtaining permission from AIT for filing IPR is given at **Appendix 'C'**.

42. After carrying out the above actions, the IPR will be filed. The procedure for the same is given at **Appendix 'D'**.



43. Publication of work, display in a public exhibition before filing for IPR shall not be permitted.

Procedure for Filing International Patent

44. The Patent Cooperation Treaty (PCT) is an international treaty with more than 145 contracting states. It is administered by the World Intellectual Property Organization. The PCT makes it possible to seek patent protection for an invention simultaneously in a large number of countries by filing a single international patent application instead of filing several separate national or regional patent applications.

Steps involved in PCT:-

- (a) Filing of the PCT application : must be filed before 12 months from the first application (Provision or Complete Specification whichever is first)
- (b) International search by the International Search Authority.
- (c) International Preliminary Examination by an International Preliminary Examining Authority (IPEA).
- (d) National Phase: filing the application in the desired country of interest.

45. The IPR cell shall also receive applications for foreign patents. The cell shall scrutinize applications received for the registration of patents in foreign countries. The cell shall recommend the applications for grant of funds, based on the merit of the IP. The final authority for the approval of such grants shall vest with the Director, AIT.

Revenue Sharing and Funding

46. When revenue is generated through an IP, distribution of revenue will be 70% to staff/student and 30% to the Institute.

47. When research is conducted in collaboration with external partners, ownership of IP shall be determined as per the terms and conditions in the agreement signed between the concerned parties.

48. In case of involvement of a third party, revenue sharing will be done as per a separate MoU/ agreement signed at the time of filing the IP.

Generation of Fund/ Sponsorship

49. The faculty/ staff/ students may seek sponsorship from industries/other institutions for processing IPR applications. The entire sponsorship amount should be deposited first into the AIT College a/c with the permission of the Director, AIT.

50. Faculty/ staff/ students have full right for the Expenditure/Utilization of the sponsorship fund. In the case of research work done without sponsorship or with partial sponsorship, AIT may provide financial support for the IPR work.

Disputes and Appeals

51. In case of conflict over the distribution of revenue, AIT reserves all the rights of distribution.



52. In case of any dispute/concerns of the aggrieved person(s), the Director, AIT will give the final verdict.

Waiver of IP Rights by the AIT

53. Subject to any associated agreements, AIT may waive its rights if it decides not to pursue the protection of IP within a fixed period.

54. The Patent fee prescribed by the government for different categories is mentioned in the following link, for information.

http://www.ipindia.nic.in/writereaddata/Portal/IPOFormUpload/1_11_1/Fees.pdf

File No : AIT/0096/IPR/Adm

Army Institute of Technology
Dighi Hills, Pune - 411015



A handwritten signature in blue ink, appearing to read "Abhay A Bhat".

(Abhay A Bhat)
Brig
Director

Dated: 15 Feb 2021

Distribution :-

Jt Director -
Principal
HOD IT
HOD Comp
HOD E&TC
HOD Mech
HOD ASGE
Dean R&D
Website I/C -

Please upload on AIT website

Appendix 'A'

(Ref para 7 of SOP - IPR Cell, AIT)

DEFINITION OF VARIOUS TERMS USED IN IPR APPLICATION

1. **Author:** An author is as defined under Section 2(d) of the Copyright Act, 1957.
2. Section 2(d) defines author, it says "Author" means :
 - (a) In relation to a literary or dramatic work, the author of the work;
 - (b) In relation to a music work, the composer;
 - (c) In relation to artistic work other than a photograph, the artist;
 - (d) In relation to photograph, the person taking the photograph, the artist;
 - (e) In relation to a cinematograph film or sound recording, the producer; and
 - (f) In relation to any literary, dramatic, musical or artistic work which is computer-generated, the person who causes the work to be created.
3. **Collaborative Activity** is the research undertaken by the personnel in an academic institution, in cooperation with industry and/or another researcher(s), who are not the personnel from the academic institution.
4. **Creator** means the researcher who contributed to the creation of the Intellectual Property (IP) (essentially copyrights, designs, etc.).
5. **External Partners**. Includes Government of India, State Government(s), Local Self-Governments, Government Departments, Foreign Governments, International Organizations, Public Sector Undertakings (PSUs), all types of Private Sector Organizations, Multinational Corporations, Non-Governmental Organizations, and/or other institutions that provide research projects or consultancy assignments to researchers on a regular or irregular basis; or any combination(s) of the above.
6. **Intellectual Property (IP)**. Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.
7. **Intellectual Property Rights(IPR)**. IPR means ownership and associated rights relating to aforementioned Intellectual Property, either registered or unregistered, and including applications or rights to apply for them and together with all extensions and



renewals of them, and in each and every case, all rights or forms of protection having equivalent or similar effect anywhere in the world.

8. The IPRs recognized in India are broadly listed below:-

(a) **Patent.** As defined under Section 2(m) of the Patents Act, 1970. Defines patent as: "patent" means a patent for any invention granted under this Act.

(b) **Copyright.** Copyright is a right given to creators of literary, dramatic, musical and artistic works and producers of cinematograph films and sound recordings. Works are as defined under the Copyright Act, 1957. The Copyright Act, 1957 protects original literary, dramatic, musical and artistic works and cinematograph films and sound recordings from unauthorized uses. Unlike the case with patents, copyright protects the expressions and not the ideas. There is no copyright in an idea.

(c) **Trademark.** As defined under Section 2(zb) of the Trade Marks Act, 1999 "Trademark" means a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include shape of goods, their packaging and combination of colours: and :-

(i) in relation to Chapter XII (other than section 107), a registered trademark or a mark used in relation to goods or services for the purpose of indicating or so as to indicate a connection in the course of trade between the goods or services, as the case may be, and some person having the right as proprietor to use the mark; and

(ii) in relation to other provision of this Act, a mark used or proposed to be used in relation to goods or services for the purpose of indicating or so to indicate a connection in the course of trade between the goods or services as the case may be, and some person having the right, either as proprietor or byway of permitted user, to use the mark whether with or without any indication of the identity of that person, and includes a certification trademark or collective mark;

(d) **Design.** As defined under Section 2 (d) of the Designs Act, 2000. "Design" means only the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article whether in two dimensional or three dimensional or in both forms, by any industrial process or means, whether manual, mechanical or chemical, separate or combined, which in the finished article appeal to and are judged solely by the eye; but does not include any mode or principle of construction or anything which is in substance a mere mechanical device, and does not include any trade mark or property mark as defined in section 479 of the Indian Penal Code or any artistic work as defined in clause (c) of section 2 of the Copyright Act, 1957;



(e) **Geographical Indication.** As defined under Section 2 (e) of the Geographical Indications Act, 1999. "Geographical indication", in relation to goods, means an indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin and in a case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be.

Explanation: For the purposes of this clause, any name which is not the name of a country, region or locality of that country shall also be considered as the geographical indication if it relates to a specific geographical area and is used upon or in relation to particular goods originating from that country, region or locality, as the case may be;



Appendix 'B'

(Ref para 32 of SOP - IPR Cell, AIT)

CHECKLIST FOR APPLICATION UNDER INDIAN IPR

1. An invention cannot be patented if published/publicly displayed.
2. Inventions/Innovations falling under the category of Section 3 & 4 of the Indian Patents Act 1970 cannot be patented in India.
3. Attribution or Citation should be done wherever references have been sourced from other work(s).
4. Keep a record of all legal or related document.
5. Check thoroughly regarding names/brands before choosing a trademark.

The Patents Act, 1970**Section 3- Inventions not Patentable**

6. What are not inventions?
7. The following are not inventions within the meaning of this Act :-
 - (a) An invention which is frivolous or which claims anything obviously contrary to well established natural laws;
 - (b) An invention the primary or intended use or commercial exploitation of which could be contrary to public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment;
 - (c) The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature;
 - (d) The mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.

Explanation.—For the purposes of this clause, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substance shall be considered to be the same substance, unless they differ significantly in properties with regard to efficacy;



- (e) A substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance;
- (f) The mere arrangement or re-arrangement or duplication of known devices each functioning independently of one another in a known way;
- (h) A method of agriculture or horticulture;
- (j) Any process for the medicinal, surgical, curative, prophylactic diagnostic, therapeutic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products.
- (k) plants and animals in whole or any part thereof other than micro organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals;
- (l) A mathematical or business method or a computer programme *per se* or algorithms;
- (m) A literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever including cinematographic works and television productions;
- (n) A mere scheme or rule or method of performing mental act or method of playing game;
- (o) A presentation of information;
- (p) Topography of integrated circuits;
- (q) an invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.

Section 4

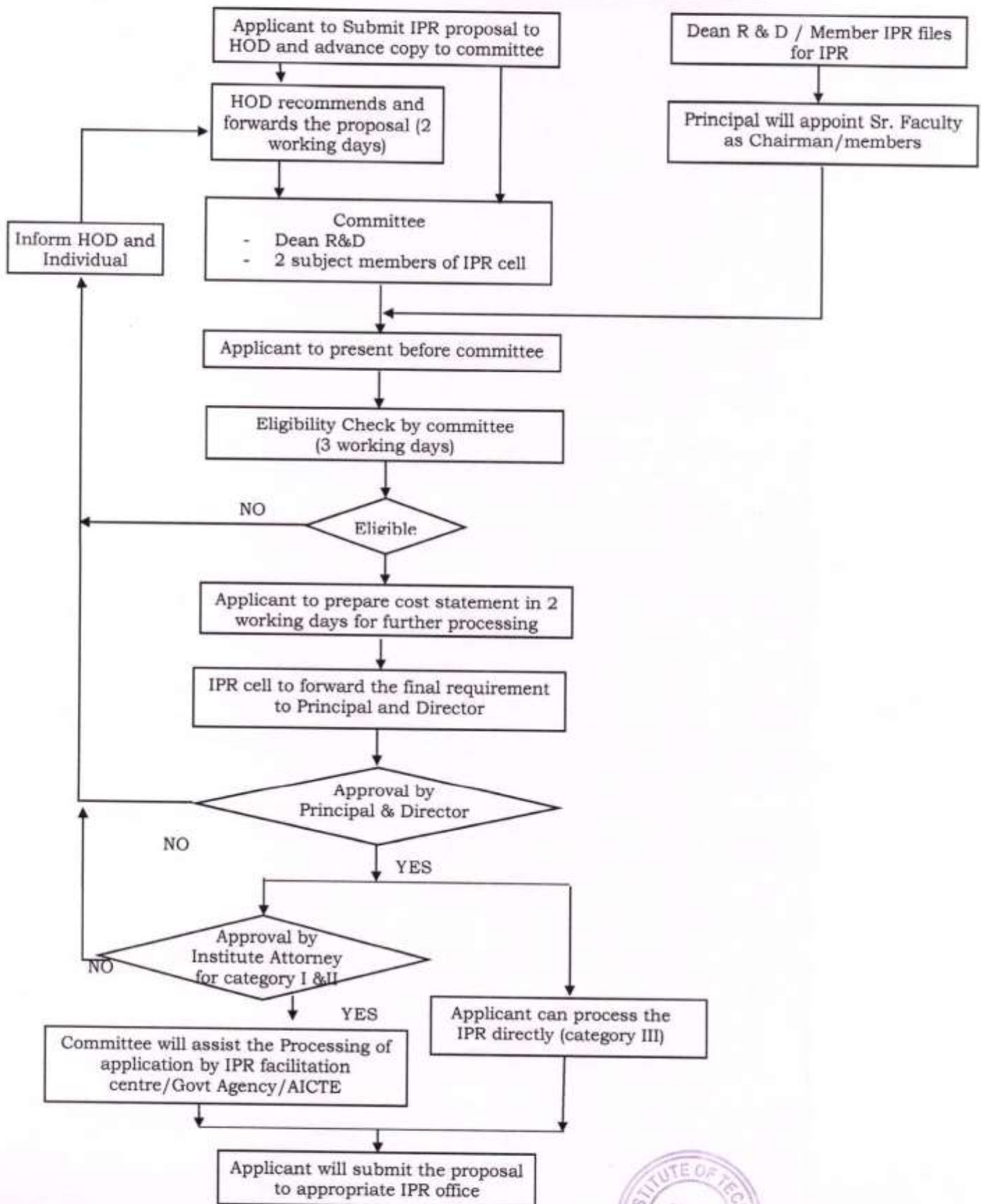
Inventions Relating To Atomic Energy Not Patentable

No patent shall be granted in respect of an invention relating to atomic energy falling within sub-section (1) of section 20 of the Atomic Energy Act, 1962 (33 of 1962).



Appendix 'C'

(Ref para 41 of SOP - IPR Cell, AIT)

WORK FLOW FOR OBTAINING PERMISSION FROM AIT

Appendix 'D'

(Ref para 42 of SOP - IPR Cell, AIT)

PROCEDURE TO BE FOLLOWED FOR FILING IPR

1. **Patent Filing.** Applicant / Inventors can file a patent in two ways:-

- (a) The Applicant/ inventor can file the patent on his/her own.
- (b) The Applicant/ Inventor can take the help of a patent filing professional or agency.

Step 1: Write down the details of the invention (idea or concept)

Step 2: Include drawings, diagrams, or sketches explaining the working of the invention

Step 3: check whether the invention is patentable subject matter

Step 4: Conduct the Patentability search

The next step is to check whether your invention is patentable as per the Indian Patent act.

Check the following aspects:

- (a) Novelty.
- (b) Non-obviousness.
- (c) Industrial application.

Step 5: Filing the patent application:

Drafting the patent application and submitting it to the Patent Office; the Patent application can be with Provisional Specification or Complete Specification. In case a Provisional Application is filed the complete specification has to be filed within 12 months of the date of filing of the Provisional Specification.

Step 6: Publication of the application:

After filing the complete specification along with the Patent application, the application is published after 18 months of first filing. The inventor can also make an early publication request along with prescribed fees. The patent application is published within a month in case of an early publication request.

Step 7: Request for examination:

The patent application is examined only after receiving a request for the examination. As per the rules of the patent application process in India, the patent is thoroughly examined based on the merits of the invention as claimed in the patent application form. The patent



office queues the application for examination only after a formal request for examination is made. The process can be expedited by submitting an appropriate form.

Step 8: Grant of patent:

The communication between controller and patent applicant will ensure that all objections raised in the patent application are resolved. If the examiner finds no objections in the patent application, he grants the patent. The patent is then published in the official patent gazette. Preparing and filing a new PCT application is optional.

2. Copyright Filing.

Step 1: File an Application

The author of the work files an application either physically in the copyrights office or through speed/registered post or through e-filing facility available on the official website (copyright.gov.in). Along with the application, the requisite fee must be paid. The fee may vary depending on the type of copyright and the type of work.

Step 2: Examination

In the next step, the examination of the copyright application takes place. Once the dairy number is issued, there is a minimum of 30 days waiting period. In this period, the copyright examiner reviews the application. The period of waiting will also allow the objections to be reviewed. The process gets divided into two segments:

(a) If no objections are raised, the examiner goes ahead to review and scrutinize the application to find out any discrepancies. If some discrepancies are found, a letter of discrepancy is sent to the applicant. Based upon his reply, a hearing is conducted by the registrar. Once the discrepancy is resolved, the applicant is allowed to move forward to the next step.

(b) In case objections are raised by anyone against the applicant, letters are sent to both parties and they are called to be heard by the registrar.

Step 3: Registration

In this step, the registrar might ask for more documents. Once completely satisfied with the copyright claim made by the applicant, the Registrar of Copyrights would enter the details of the copyright into the register of copyrights and issue a certificate of registration. The registration process of copyright is completed when the applicant is issued the Extracts of the Register of Copyrights (ROC).

3. Trade Mark Filing.

Step 1: Application filing

The application for registration of a Trademark must be made in the prescribed manner and filed along with the fee for trademark registration.. Trademark applications can be filed online on the Trademark Registry portal or through a Trade Mark agent.

Step 2: Trademark Application:



A trademark application number is provided on filing of the application.

Step 3: Trademark Examination

The Trademark Examiner would issue a trademark examination report after reviewing the application for correctness and according to the provisions of the Trademarks Act. The Trademark Examiner shall issue an examination report to the applicant or its attorney; the response to the Examination report has to be submitted with 30 days from the receipt of the report. The Trademark Examiner may in certain applications accept the trademark registration application and allow for the trademark to be published in the Trademark journal.

Step 4: Trademark Journal Publication

Once accepted, the proposed trademark is published in the Trademark Journal which shall on publication be open for opposition by any interested party within 4 months from the date of publication.

Step 5: Trademark Registration

After clearing the objections or oppositions for the trademark application, the trademark registration certificate will be issued by the Trademark Registry to the applicant. Once the trademark registration certificate is issued, the trademark is considered to be a registered trademark of the owner, granting the trademark owner exclusive use of the mark. The life of a Trademark is 10 years which then has to be renewed for 10 years.

4. Geographical Indication Filing.

Step 1: Filing of the Application

Every application for the registration of a geographical indication shall be made in the prescribed form accompanied by the prescribed fee.

Step 2: Preliminary scrutiny and examination

The Examiner will scrutinize the application for any deficiencies.

The applicant should clarify the same within one month of the communication in this regard. Thereafter an Examination Report would be issued.

Step 3: Show cause notice

If the Registrar has any objection to the application, he will communicate such objection to the applicant. The applicant must respond within two months or apply for a hearing. The Registrar may not accept the application, if the objections raised are not clarified by the applicant.

Step 4: Publication in the geographical indications Journal

Every application, within three months of acceptance, shall be published in the Geographical Indications Journal.



Step 5: Opposition to Registration

Any person can file a notice of opposition within three months (extendable by another month on request which has to be filed before three months) opposing the GI application published in the Journal. The registrar shall serve a copy of the notice on the applicant. Thereafter, both sides will lead their respective evidence by way of affidavit and supporting documents.

Step 6: Registration

Where an application for a GI has been accepted, the registrar shall register the geographical indication. The registrar shall issue to the applicant a certificate with the seal of the Geographical indications registry.

5. Design Filing.

Step 1: Application filing

Any person claiming to be the proprietor of any new or original design may apply for registration.

Step 2: First Examination Report (FER) by the Indian Design Office

A First Examination Report (FER) is issued for defects in the application (if any) within six months from the date of filing of the application.

Step 3: Reply to FER by the applicant

The reply must be given within 6 months from date of filing: Extension of time up to 3 months is available upon payment of a prescribed fee.

Step 4: Registration

In case of any deficiencies and discrepancies, the applicant is required to rectify the same within a period of one month of its communication. If no serious objections are pending, the design gets registered.

Step 5: Publication

Once an application is registered, it is published in the Patent Office Journal ordinarily within one month.



STANDARD OPERATING PROCEDURE (SOP) FOR AIT INNOVATION AND STARTUP POLICY (VER 0.1)

References

1. National Innovation and Start-up Policy 2019.
2. AIT IPR Policy dt 15 Feb 2021.
3. AIT Innovation Seed Fund Policy dt 06 Sep 2022.
4. HQ AWES Policy – Letter No B/45840/POLICY/AWES dt 31 Jan 2018

Appendices

1. Appendix 'A' - Product Ownership Right Example.

INTRODUCTION

1. MHRD in association with AICTE is encouraging Higher Educational Institutes (HEIs) to nurture entrepreneurship amongst students. The 'National Student and Faculty Startup policy 2019' is a guiding framework to envision an educational system oriented towards startups and entrepreneurship opportunities for student and faculties.
2. In alignment with this vision, Army Institute of Technology (AIT), established an Innovation and Entrepreneurship Cell in the year 2019. AIT is also a member of AICTE's Innovation Council (IIC) which is an MHRD initiative. The purpose is to establish the mechanism of Innovation and Entrepreneurship on campus.
3. AIT initiated the process to formalise policies for supporting student start up initiatives and innovations, in alignment with NISP framework. A committee comprising of thirteen members was constituted to formulate guidelines, rules and regulations for various aspects related to innovation, Startup and entrepreneurship management at AIT. This committee rigorously discussed and defined policies for students and faculty of the institute for pre incubation support, equity sharing with startups, intellectual property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization.
4. The key objectives for formulating the startup policy are:-
 - (a) To encourage and support innovation and entrepreneurship amongst students.
 - (b) To make the eco system of entrepreneurship and startups self-sustainable.
 - (c) To aim for more number of patents and startups in institute's credit. This will help to improve NAAC, NBA, NIRF ranking.

PROPOSAL

5. To formulate an SOP to provide guidelines, rules and regulations for student/ faculty startups of AIT.



DETAILED EXECUTION**6. Board Members.**

| | | |
|-----|-------------|---|
| (a) | Chairman | Director, AIT |
| (b) | Member | IPR Consultant |
| (c) | Member | CA/Financial Consultant |
| (d) | Member | Incubation representative of associated incubation center |
| (e) | Member | Legal Advisor, AIT |
| (f) | Member | Principal, AIT |
| (g) | Member | Dean R&D |
| (h) | Member | President, IIC |
| (i) | Member | Faculty in charge, I and E Cell |
| (j) | Member | Training and Placement Officer, AIT |
| (k) | 2-3 Members | Startup Founder, Alumni |
| (l) | Member | I and E cell Student Secretary |

7. Innovation and Entrepreneurship Cell (I & E Cell). All AIT Startup activities will be conducted under the aegis of Innovation and Entrepreneurship Cell. The vision, Mission and responsibilities of I&E Cell are as follows :-

(a) **Vision.** To become a resourceful startup hub and support ecosystem to young entrepreneurs in the region.

(b) **Mission.**

(i) To initiate activities to inculcate innovative thinking and to imbibe entrepreneurship skills amongst students.

(ii) To identify and nurture student ideas for incubation.

(iii) To build eco system to incubate "start-ups".

(c) **Responsibilities.**

(i) To conduct session on entrepreneurial skills and guest lecture by an entrepreneur.



- (ii) To conduct sessions by startup founders, training program on Entrepreneurship Development and arrange minimally one visit to startup / Incubation Center.
- (iii) To provide eco system to all the start-ups and also take efforts to create a pipeline of startup initiatives.
- (iv) To conduct Idea Pitching competition.
- (v) To initiate internships at startups.
- (vi) To organize Alumni Entrepreneurs meet and strengthen network of Alumni entrepreneurs. This would help to build mentor pool and any other hand hold if required.

8. **Role of Other Functional Cells.** The potential ideas and startups may be identified through various functional cells. The list of the same with their functional role is as follows :-

(a) **Academic Departments.** The following departments may identify potential innovative ideas through respective project activity :-

- (i) Computer Engineering.
- (ii) Information Technology Engineering.
- (iii) Electronics and Telecommunication Engineering.
- (iv) Mechanical Engineering.
- (v) Applied Science and General Engineering.

(b) **Clubs.** Various technical clubs may initiate opportunities through their respective events/ activities for submitting innovative ideas/ business models from students. The clubs under consideration viz - Technical board, EV Club, OSS Club, R&D Cell, etc.

(c) **Institute's Innovation Council (IIC).** The primary function of institute's IIC is to ensure round the year activities in campus for students and faculty to explore innovative ideas and to inculcate entrepreneurship skill, thereby encouraging startup initiatives on campus. IIC also ensures active participation of students in National level Competitions like Smart India Hackathon (SIH), National Innovation Contest (NIC).

(d) **Training and Placement Office (TPO).** This functional cell is responsible to build Industry Interface for the AIT students as well as to ensure strong alumni network. Both these networks are required to build resource pool for startups.

(e) **Intellectual Property Rights Cell (IPR Cell).** This functional cell will extend necessary support to protect the Intellectual property rights of the innovator.

9. **Functions of Governing Board.**

- (a) To monitor and ensure proper functioning and execution in alignment with the vision and mission of the policy.
- (b) To conduct a meeting and review the activities conducted as well as planned, every 6 month.



- (c) To extend necessary support to startup eco system of AIT in terms of mentoring, client connect, expert support.

10. **Strategies for nurturing Innovation and Startups.**

(a) **AIT Commitments.**

- (i) AIT will allocate separate, adequate funds from its annual budget to Innovation and Entrepreneurship activities.
- (ii) AIT will garner fund through Industry CSR, MOUs, Alumni network, Govt Funds for research for promoting Innovation and Entrepreneurship.
- (iii) AIT will allow students to establish startup while pursuing their UG / PG course.
- (iv) AIT will not hold any equity in the startup company registered.
- (v) AIT may claim fixed charges for specific services, facilities availed to student startup team. These charges will not be applied to students who are still pursuing UG/ PG course but only to those who have passed out. The services may include but may not be restricted to :-Infrastructure/ Electricity/ Internet lease line, Mentor Connect, Hostel, Mess facility, Client Connect, Incubation Center Connect, IPR consultancy.
- (vi) AIT will always like to play guardian's role for the student startup team and would like to stay connected for all updates.
- (vii) AIT will not interfere in any decision making or operation of the startup company.

(b) **Enabling Infrastructure.**

- (i) AIT will continue to establish Center of Excellence in inter disciplinary domains like IoT, EV, Robotics, AI/ ML with state of art prototype building facilities.
- (ii) AIT will establish Innovation/ idea labs and encourage students to explore/ implement their ideas.
- (iii) AIT will arrange Skill development training programs regularly.

(c) **Nurturing Innovation at Institute/ Department level.**

- (i) Each department will encourage students to develop innovative ideas and enable implementation through minor/ major projects. The same may be used as mechanisms to identify and nurture students with innovative ideas.
- (ii) At institute level, MOOC/ audit courses may be recommended for entrepreneurial skills.
- (iii) Institute level mechanism to encourage students for innovation will be through interdisciplinary channels viz Open Source Software /Tech board/ AI & Robotics/ Coding Club, and hacakathon, SIH, etc.
- (vi) Ideas with business possibilities. will be provided necessary pre incubation support (Mentor, Prototype build facility, legal/ IPR guidance) by I & E Cell.
- (vii) Student Startup company may voluntarily contribute towards AIT entrepreneurship eco system for the services availed.



(d) **Financial Support**. AIT will consider extending financial support through formal seed fund on approval from Governing Board. (Refer AIT Seed Fund policy).

(e) **Human Resources and Incentives**.

(i) A student, if involved in his/ her startup work and in case the startup doesn't take off for valid reasons, will get deferred placement opportunity any time after his/her final year for maximum 2 years.

(ii) AIT will extend its support to student startups founded during UG/PG course for minimum 2 years. The support will include access to resources on campus required for their work such as laboratory, equipment, etc.

11. **Product Ownership Rights for Technologies Developed at AIT.**

(a) **For Student Startups**.

(i) When institute facilities/ funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the institute. (Refer AIT IPR policy).

(ii) If the startup company itself manufactures and sells the product then AIT does not claim any financial stake in revenue generated by the company.

(iii) If the student startup company leases the patent to a third party for production and commercialization at a third party's end on a royalty basis, AIT may claim a maximum 4% of Sales proceeds. This amount can be claimed quarterly, half-yearly or annually with mutual consent. (Refer **Appendix 'A'** for example).

(iv) If the startup sells the patent to third party then AIT should be compensated as per its percentage holding in the patent. (Refer **Appendix 'A'** for example).

(b) **For Faculty Startups**.

(i) In case if a Startup is launched by AIT Faculty, institute may claim 20% of shares in the company.

(ii) In case, if AIT does not claim any share, income from this startup will come under preview of consultancy and terms as per AWES policy will get applied for the same (Refer AWES Policy).

12. **Creating Innovation Pipeline and Pathways for Entrepreneurs**.

(a) I and E Cell will regularly conduct ideation/ hackathon.

(b) Each department will identify "Patentable ideas" from UG/PG projects and recommend for IPR process.

(c) The student winners of hackathons/ national innovation contest/ any such competition will be encouraged/ mentored for patent filing and product building.

13. **Pedagogy and Learning Interventions for Entrepreneurship Development**.



(a) AIT, being affiliated to Savitribai Phule Pune University (SPPU), will have to comply to the prescribed course work. Project based courses/ open electives will be identified and utilized to encourage innovation and entrepreneurial skills amongst students.

(b) Entrepreneurship development program will be organised for UG and PG. Students will be given some incentives such as extra attendance for the same.

(c) Training programs will be conducted by the institute for Innovation, Creativity Design thinking, Sales, marketing, etc.

14. **Collaboration, Co-creation, Business Relationships and Knowledge Exchange.**

(a) Institute will organize interactive sessions with Alumni Entrepreneur for students.

(b) I and E Cell will regularly organize mentoring sessions by alumni for startup teams.

15. **Entrepreneurial Impact Assessment.**

(a) The innovation and entrepreneurial activities will be evaluated by the Governing Board at the end of each year.

(b) The governing board will define the parameters to assess the activities based on outcomes.

(c) Performance benchmark may be defined with the help of governing board.

(d) The performance metric may include :-

- (i) Number of ideas.
- (ii) Number of startups registered.
- (iii) Employment generated by these startups.
- (iv) Revenue generated by these startups.
- (v) Funding received.

CONCLUSION

16. The above policy will be referred for encouraging and providing support to every Student/ Faculty Start-up of AIT.

17. Any deviation from above policy will be approved by Governing Board.

File No : AIT/0096/I&E-Cell/Adm

Army Institute of Technology
Dighi Hills, Pune - 411015

Dated : 14 Oct 2022



(Abhay A Bhat)

Brig
Director

Brig Abhay A Bhat (Retd)
Director
Army Institute of Technology
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TPO
Incubation Centre Representative
Start-up Founder
Website I/C - Please upload on AIT website



Appendix 'A'

(Refer Para 11(a)(iii)&(iv) of SOP)

1. Explanation with Example for the Following Condition :

If the student startup company leases the patent to a third party for production and commercialization at a third party's end on a royalty basis, AIT may claim a maximum 4% of Sales proceeds.

Example:

Consider

- (a) Startup Company "S" is launched by Students "A", "B" and "C".
- (b) The startup company is based on a patented product.
- (c) The innovators of the patented product are students "A", "B" and "C" with co-inventor as AIT.
- (d) Patent ownership is equally distributed amongst all co-inventors. In this case it will be 25% each.

Case I :

Startup company "S" manufactures and sells the product and generates revenue of Rs 10000 with profit of Rs 1000 then

→ ***AIT will not claim any financial stake in revenue generated / profit made***

Case II:

Startup company "S" leases the licenses of the patent to third party "XYZ" for manufacturing, sales of product and all other operations. If now the third party "XYZ" generates revenue of Rs 10000 in the current financial year from sales proceeds, then.

→ ***AIT will claim maximum Rs 400 royalty from the revenue generated from Sales proceeds (4% of revenue i.e Rs 10000) by the third party "XYZ".***

Case III:

Startup company "S" sells the patent to third party "XYZ" at a cost of Rs 10000 then

→ ***AIT will claim Rs 2500/- (25% of Rs 10000) from the selling price of the IPR.***



**STANDARD OPERATING PROCEDURE (SOP) FOR AIT INNOVATION SEED FUND
FOR PRE-INCUBATION**

INTRODUCTION

1. Many students of AIT develop projects/innovations, which are technically sound, innovative and have considerable potential to develop as business idea/prototype.
2. Most of these projects are essentially developed by UG students, with the aim of fulfilling the curricular requirements. Despite the potential of these innovative projects, they lack trials/ proper testing and finesse which is required for development of a working prototype. All such additional activities require some amount of expenditure which students cannot afford. Subsequently the idea/ innovation can be monetized by patenting it and inviting industry to commercialize the same. However neither the individual can raise such funds nor can college provide any substantial additional funds for each of these ideas.
3. The institute is a member of Institute's Innovation Council, since 2018, which is an initiative of MHRD, AICTE. The institute has also established Innovation and Entrepreneurship Cell to encourage Innovation and Entrepreneurship amongst students.
4. In the last three years, five student startups have been initiated out of which three are product based startups requiring intensive monetary support. These ideas and innovations can be monetized by patenting them and inviting industry to commercialize the same. However neither the individual can raise such funds nor can college provide any additional funds for each of these ideas.
5. Many successful alumni have expressed their desire to assist such students and provide initial seed capital for such innovations. However as most of these alumni are abroad or away from AIT, they are not in a position to physically evaluate/assess the requirements of students and appropriately monitor utilization of such funds. They are hence demanding mechanism for formulating such donations and monitoring the recipient utilization.
6. A separate Innovation Seed Fund will provide such mechanisms.

PROPOSAL

7. To lay down the framework of creating an 'AIT Innovation Seed Fund' and formalize mechanisms for creation, contribution, disbursement and monitoring the usage of such fund.

DETAILED EXECUTION

8. AIT Innovation Seed Fund will primarily focus on promoting as well as supporting innovation and entrepreneurship amongst students and recently graduated alumni.

Creation of Corpus

9. **Existing Alumni Fund.** AIT has an existing alumni association which is registered with the charity commissioner, Pune. There is a separate fund maintained by the college with Bank of Baroda, created out of contribution from Passing out students. This fund presently is utilized for the following activities.

- (a) Annual Alumni Meet expenditures.
- (b) Prizes for Best projects during UGCON – Amalgam Competition (annual project competitions).
- (c) Sponsoring special projects of students.

10. The existing alumni fund had a balance of Rs 39 lakhs as on 01 Feb 2020. Portion of this fund (Rs 5 Lakh) has been diverted to AIT Innovation Seed Fund as approved by Alumni Council and AIT Management on 03 Feb 2020. This Rs 5.0 Lakh is the seed money/ corpus of the fund. There is separate account for this fund which is operated by AIT management. Details of the Account are as follows :-

- (a) Bank Name - ICICI BANK, Bhosari Branch, Pune-411026.
- (b) Account No - 215201001678.
- (c) IFS Code - ICIC0002152.
- (d) Account Holder - Director & Joint Director, Army Institute of Technology.

11. Any individual, employee, faculty, alumni, student or other organisation who is keen to promote innovation activities in AIT can transfer the amount to the above account as donation.

Governance and Operation of Fund

12. Committees for approval and monitoring of seed fund utilisations will be as given in succeeding paras.

13. **Approval Committee.** The committee for approval of seed fund disbursal will be as follows :-

- (a) Director, AIT.
- (b) Principal, AIT
- (c) Dean R&D.
- (d) In-charge I & E Cell.
- (e) President of Alumni Council or his assigned representative.

14. **Scrutiny By Approval Committee.** The approval committee will evaluate the proposals based on pre defined factors such as :-

- (a) Innovation involved.
- (b) Viability of business proposition.
- (c) Market demand
- (d) Mentoring/ subsequent venture capital available.

15. Approval committee will meet physically/ online. Minimum 2/3rd of members will be maintained for proceeding with the approvals.

16. **Monitoring Committee.** There will be a separate monitoring committee for effective utilisation of allotment of seed money to beneficiaries on well as status and inflow to the AIT Innovation Seed Fund. This committee will be as follows :-

- (a) President, Institution Innovation Council (IIC) of AIT.
- (b) Training and Placement Officer.
- (c) In-charge , I&E Cell
- (d) Member from Alumni council.

17. **Operation of Account.** Operation of account (cheque signing, internet banking, etc) will be done as per other accounts of AIT.

Utilisation of Funds

18. Possible areas of utilization can be like follows:-

- (a) Final year projects, which can lead to innovative business ideas which require seed money up to Rs. 1 Lakh.
- (b) For start-up ideas, which can be incubated on campus. Beneficiaries of such funding could be students of AIT as well as alumni, who have passed out within previous two years.

19. In any case the limit of financial assistance for one idea/ project will be Rs 1 Lakh only. This limit can be revised by AIT management depending on status of fund and requirements of the project in every two years.

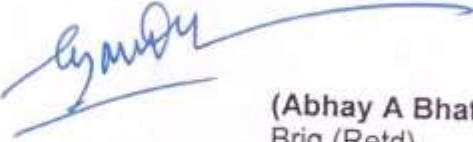
CONCLUSION

20. The above proposal is to create a formal mechanism to financially support early start-ups for their prototype/ product development, to build innovative ideas and project during initial stages.

21. AIT Innovation Seed Fund will help kick start new ventures amongst students and recently passed out alumni of AIT. It will also provide a formal avenue for Alumni and other well wishers to donate towards innovation and start up activities in AIT.

22. Previous SOP on the subject issued vide letter of even No dt 06 Sep 2022 may please be treated as cancelled.

File No : AIT/0001/Gen Ruling/Adm
Army Institute of Technology
Alandi Road, Dighi Hills, Pune - 15



(Abhay A Bhat)
Brig (Retd)
Director

Date 27 Mar 2023

Distribution

- | | |
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| 3. HOD Mech. | 9. Accounts Sec |
| 4. HOD Comp. | 10. Website I/C - Please upload on AIT website. |
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| 6. HOD ASGE. | |

STANDARD OPERATING PROCEDURE (SOP) FOR AIT INNOVATION SEED FUND FOR PRE-INCUBATION

INTRODUCTION

1. Many students of AIT develop projects/innovations, which are technically sound, innovative and have considerable potential to develop as business idea/prototype.
2. Most of these projects are essentially developed by UG students, with the aim of fulfilling the curricular requirements. Despite the potential of these innovative projects, they lack trials/ proper testing and finesse which is required for development of a working prototype. All such additional activities require some amount of expenditure which students cannot afford. Subsequently the idea/ innovation can be monetized by patenting it and inviting industry to commercialize the same. However neither the individual can raise such funds nor can college provide any substantial additional funds for each of these ideas.
3. The institute is a member of Institute's Innovation Council, since 2018, which is an initiative of MHRD, AICTE. The institute has also established Innovation and Entrepreneurship Cell to encourage Innovation and Entrepreneurship amongst students.
4. In the last three years, five student startups have been initiated out of which three are product based startups requiring intensive monitory support. These ideas and innovations can be monetized by patenting them and inviting industry to commercialize the same. However neither the individual can raise such funds nor can college provide any additional funds for each of these ideas.
5. Many successful alumni have expressed their desire to assist such students and provide initial seed capital for such innovations. However as most of these alumni are abroad or away from AIT, they are not in a position to physically evaluate/assess the requirements of students and appropriately monitor utilization of such funds. They are hence demanding mechanism for formulating such donations and monitoring the recipient utilization.
6. A separate Innovation Seed Fund will provide such mechanisms.

PROPOSAL

7. To lay down the framework of creating an 'AIT Innovation Seed Fund' and formalize mechanisms for creation, contribution, disbursement and monitoring the usage of such fund.

DETAILED EXECUTION

8. AIT Innovation Seed Fund will primarily focus on promoting as well as supporting innovation and entrepreneurship amongst students and recently graduated alumni.



Creation of Corpus

9. **Existing Alumni Fund.** AIT has an existing alumni association which is registered with the charity commissioner, Pune. There is a separate fund maintained by the college with Bank of Baroda, created out of contribution from Passing out students. This fund presently is utilized for the following activities.

- (a) Annual Alumni Meet expenditures.
- (b) Prizes for Best projects during UGCON – Amalgam Competition (annual project competitions).
- (c) Sponsoring special projects of students.

10. The existing alumni fund had a balance of Rs. 39 lakhs as on 01 Feb 2020. Portion of this fund (Rs 5 Lakh) has been diverted to AIT Innovation Seed Fund as approved by Alumni Council and AIT Management on 03 Feb 2020. This Rs 5.0 Lakh is the seed money/ corpus of the fund. There is separate account for this fund which is operated by AIT management. Details of the Account are as follows :-

- (a) Bank Name - ICICI BANK, Bhosari Branch, Pune-411026.
- (b) Account No - 215201001678.
- (c) IFS Code - ICIC0002152.
- (d) Account Holder - Director & Joint Director, Army Institute of Technology.

11. Any individual, employee, faculty, alumni, student or other organisation who is keen to promote innovation activities in AIT can transfer the amount to the above account as donation.

Governance and Operation of Fund

12. Committees for approval and monitoring of seed fund utilisations will be as given in succeeding paras.

13. **Approval Committee.** The committee for approval of seed fund disbursal will be as follows :-

- (a) Director, AIT.
- (b) President Institution Innovation Council (IIC) of AIT.
- (c) External domain expert (IPR/Incubation and Innovation).
- (d) In-charge I & E Cell.
- (e) President of Alumni Council or his assigned representative.



14. **Scrutiny By Approval Committee.** The approval committee will evaluate the proposals based on pre defined factors such as :-

- (a) Innovation involved.
- (b) Viability of business proposition.
- (c) Market demand
- (d) Mentoring/ subsequent venture capital available.

15. Approval committee will meet physically/ online. Minimum 2/3rd of members will be maintained for proceeding with the approvals.

16. **Monitoring Committee.** There will be a separate monitoring committee for effective utilisation of allotment of seed money to beneficiaries on well as status and inflow to the AIT Innovation Seed Fund. This committee will be as follows :-

- (a) Dean R&D.
- (b) Training and Placement Officer.
- (c) I&E Cell In-charge - Secretary
- (d) Member from Alumni council.

17. **Operation of Account.** Operation of account (cheque signing, internet banking, etc) will be done as per other accounts of AIT.

Utilisation of Funds

18. Possible areas of utilization can be like follows:-

- (a) Final year projects, which can lead to innovative business ideas which require seed money up to Rs. 1 Lakh.
- (b) For start-up ideas, which can be incubated on campus. Beneficiaries of such funding could be students of AIT as well as alumni, who have passed out within previous two years.

19. In any case the limit of financial assistance for one idea/ project will be Rs 1 Lakh only. This limit can be revised by AIT management depending on status of fund and requirements of the project in every two years.


CONCLUSION

20. The above proposal is to create a formal mechanism to financially support early start-ups for their prototype/ product development, to build innovative ideas and project during initial stages.



21. AIT Innovation Seed Fund will help kick start new ventures amongst students and recently passed out alumni of AIT. It will also provide a formal avenue for Alumni and other well wishers to donate towards innovation and start up activities in AIT.

File No : AIT/0001/Gen Ruling/Adm
Army Institute of Technology
Alandi Road, Dighi Hills, Pune - 15


(Abhay A Bhat)
Brig (Retd)
Director

Date: 06 Sep 2022

Distribution


- | | |
|---------------|---|
| 1. Principal. | 7. Registrar. |
| 2. HOD E&TC. | 8. Training & Placement Office |
| 3. HOD Mech. | 9. Accounts Sec |
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| 6. HOD ASGE. | |



OFFICE OF PRINCIPAL

STANDARD OPERATING PROCEDURE (SOP)
TO MOTIVATE RESEARCH PUBLICATION

1. For any teaching faculty and students of technical institute, quality of research paper publication is an important aspect of their performance.
2. This is also an important for good scores in NBA, NAAC and ranking agencies.
3. To motivate faculty and students a comprehensive SOP has been framed (SOP Attached).
4. This will be effective from 15 Jul 2018.
5. This SOP will be reviewed as and when required.


(Dr. B.P. Patil)
Principal

Copy To -

- | | | |
|--|---|--|
| Director Jt Dir | } | for information please. |
| HOD Mech HOD Comp HOD E&TC HOD IT HOD ASGE | } | for information and needful action please. |
| HOD IT | - | Publish on AIT Web site |
| Office Supdt | - | for Office Record (Already forward) |

POLICY TO MOTIVATE RESEARCH PUBLICATION

The committee consisting of following members is appointed to frame the policy to provide incentives to faculty & students as per letter No. AIT/0323/CNO/Prin/2018 Dated 26 Apr 2018.

- | | | | |
|------|--------------------|---|-------------------|
| i) | Dr GR Patil | - | Presiding Officer |
| ii) | Dr. NK Bansode | - | Member |
| iii) | Dr. R Jaydevan | - | Member |
| iv) | Dr Swati Kulkarni- | | Member |
| v) | Dr. AM Gadade | - | Member |
| vi) | Dr. Rahul Desai | - | Member |

The case was analysed based on following:

- a) The quality of the journal.
- b) Amount of reward and its distribution

Quality of Journal

National Institutional Framework Ranking (NIRF) considers very high quality Journal Publications only. SCI (Science Citation Index) and SCIE (Science Citation Index Expanded) has a list of top quality journals. Hence the eligibility criteria for the monetary reward will be as below:

- i) Paper should be published in the journal from the current SCI and SCIE list.
- ii) The author(s) of the paper should have their affiliation as AIT Pune appearing in the published paper.
- iii) The Journal in which paper is published should be unpaid Journal. There should not be any charges like processing, publication etc.
- iv) Paper should have been directly submitted to the Journal (Not through any conference)

Reward Amount & its Distribution

The reward amount will be given based on the impact factor and authorship (1st author 2nd author etc.)

- i) The maximum reward amount for a paper will be Rs. 25000/-
- ii) The paper having impact factor ≥ 3 will be given Rs. 25000/-
- iii) The paper having impact factor ≥ 2 and < 3 will be given Rs. 20,000/-
- iv) The paper having impact factor ≥ 1 and < 2 will be given Rs. 15,000/-
- v) The paper having impact factor < 1 will be given Rs. 10,000/-
- vi) If more than one authors are from AIT Pune, the amount will be distributed as below
 1st Author – 60% amount applicable as per impact factor.
 Remaining 40% amount applicable as per impact factor will be distributed equally among remaining authors belonging to AIT Pune.
- vii) If the first author of the paper is from AIT Pune, and remaining authors are from outside institute/college/university, then he/she will be given the full amount applicable as per impact factor.

- viii) If the first author of the paper is not from AIT Pune, then 40% amount applicable as per impact factor will be distributed equally among the authors belonging to AIT Pune.

Application for Journal Publication Reward

| | |
|--|---------------|
| Name of faculty/Student | |
| Designation/Class | |
| Department | |
| Paper Publication Details | |
| Title | |
| Authors & Details (As per Sequence) | |
| Name of Journal | |
| Name of Publisher | |
| Volume | |
| Issue | |
| Month & Year | |
| Page Nos. | |
| Link/URL of Online Paper | |
| Whether SCI/SCIE? | Yes/No |
| Impact Factor | |

Documents to be submitted:

- i) Hard copy of Paper
- ii) Proof indicating the Journal is Unpaid, SCI/SCIE indexed & its Impact factor.

Signature of faculty:

HOD: Recommended/Not Recommended

Scrutiny Committee Remarks & Recommendations:

Principal: Recommended/Not Recommended

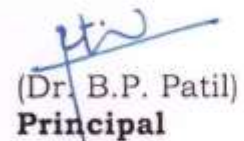
Director: Approved / Not Approved

OFFICE OF PRINCIPAL

STANDARD OPERATING PROCEDURE (SOP)

"SEED MONEY FOR RESEARCH PROJECT"

1. The SOP for "Seed Money for Research Project" is released and attached herewith.
2. The will be effective from current academic year 2019 – 20.
3. This SOP will be reviewed as and when required.


(Dr. B.P. Patil)
Principal

Copy To -

| | | |
|--|---|--|
| Director Jt Dir | } | for information please. |
| HOD Mech HOD Comp HOD E&TC HOD IT HOD ASGE | } | for information and needful action please. |
| HOD IT | - | Publish on AIT Web site |
| Office Supdt | - | for Office Record |

Army Institute of Technology Pune

SOP for Seed Money for Research Projects

1. Preamble

The management of AIT Pune encourages its faculty & staff to undertake research projects, in order to extend their research work and gain professional experience at the Institute. The research projects are very useful for up gradation of knowledge of faculty. Institute can encourage faculty to take up research projects by providing Seed Grant. The faculty can utilize this grant to start his/her research without waiting for a grant from external agency. These projects can provide incentives to the concerned staff and stepping stone to fetch grants from national/international agencies.

The Institute will give a seed grant to a faculty for initiating research. The faculty member will write a research proposal. The proposal should include a description of research that he/she wishes to conduct over the next 2-3 years. It is a platform meant to help new faculty to prepare for subsequent proposal submissions. In other words the seed grant is seed for seeding bigger projects.

2. Definitions

2.1. Institute means Army Institute of Technology, Pune

2.2. Department means all the academic departments at the Institute.

2.3. Director means Director, Army Institute of Technology, Pune

2.4. Principal means Principal, Army Institute of Technology, Pune.

2.5. R&D Cell IC means Faculty In-charge of R&D Cell, Army Institute of Technology, Pune

2.6. Project implies sponsored research projects or industrial consultancy projects or routine testing projects or training courses.

2.7. Sponsor means the organization that offers a Project to the Institute and provides necessary financial support for successful completion of the project in time.

2.8. Principal Investigator (PI) is a member of the faculty/scientist of the Institute with necessary expertise and competence to conduct a Research and consultancy work. Normally, the faculty/scientist who submits the project



proposal and negotiates with the sponsor and is instrumental in getting the project funding is the Principal Investigator (PI). In case of research project, emeritus fellow/chair professor/ visiting professor may also be the PI.

2.9. Co-Investigator (CI) means a person from amongst the faculty/scientist (including Emeritus Fellow, chair faculty, visiting professor) co-opted by the Principal Investigator to work jointly with him/her on the project or any other staff permitted by the Director.

2.10. Intellectual Property means an intangible property that is a result of a project, such as patents, copyrights, etc.

2.11. Proper Channel means process from PI to HoD to R&D Cell IC to Principal to Director.

3. Seed Grant

3.1 Every year an amount of Rs. 2.00 Lakh per department and an additional amount of Rs. 2.00 Lakh will be allocated centrally towards Seed Grant.

3.2 A maximum of Rs. 1.00 Lakh can be given per project on first cum first served basis.

3.3 The central grant can be given by Director/Principal on merit basis to any faculty/staff in case their departmental grant is exhausted.

4. Procedure for Application and Allocation of Grant

4.1 Individual or Department can take up projects after taking approval through proper channel. All funds in connection with Projects will be given for purchase of equipment & consumables and travel only. While making an estimate of the funds required for a project, the following budget heads may be taken into account:

- i. Equipment/software - 70%
- ii. Consumables - 20%
- iii. Travel - 5%
- iv. Miscellaneous - 5%

4.2 The total duration of research project will be 2 years.



- 4.3** The sanctioned amount will be expended under above mentioned heads only
- 4.4** Any Deviation in above distributions needs to be recommended by the committee and approved by the director.
- 4.5** Preferably 50% of sanctioned amount will be used in the initial phase for 1st year and remaining 50% will be used after satisfactory progress review at the end of 1st year.
- 4.6** The equipment/software should be taken on charge of the department after procurement.
- 4.7** The Application & "Research Project Proposal Form" given in Appendix A, duly completed must be submitted along with the declaration given in Appendix B. Proposal will be submitted to the Director through proper channel. R&D Cell IC will arrange to get review comments from the subject experts. Review comments will be appropriately incorporated/addressed by the Faculty before final submission.
- 4.8** Proposal will be presented by the PI before an Institute level committee, consisting of Principal, R&D Cell IC, HoD and 2 Faculty members to be nominated by Principal.
- 4.9** All project proposals are to be sent to Director through proper channel for final approval.
- 4.10** After obtaining approval from the Director, Admin Dept. will hand over a Sanctioning letter to the PI.
- 4.11** Office will assign a unique internal number to the project proposal. For example AIT/SG/03/2019.
- 4.12** The faculty member will be required to present yearly review of the work carried out to the expert committee.
- 4.13** The Faculty member is required to prepare follow-up proposal(s) to external sponsors.

5. General Rules and Regulations

- 5.1** All purchases under the grant shall be made after taking financial approval from the competent authority. The project expenditure for



equipment and consumables will be maintained in a separate stock register by PI.

5.2 The travel rules will be as per AWES/SPPU norms.

5.3 It is the responsibility of the PI to submit progress report of the project after every 6 months.

5.4 Due care should be taken so that such projects undertaken do not interfere or affect any routine teaching or examination work.

5.5 Report(s) and data collected/originated out of project are the joint Intellectual Property of the sponsor, PI and the Institute which can be used by the sponsor for its own use only and cannot be disclosed to a third party without prior consent of PI and the Institute.

5.6 The Intellectual Property Right (IPR) policy of the Institute shall be applicable.

5.7 If a prima-facie case of malpractice and/or misconduct is established by a fact finding committee against a staff member in connection with project(s), the Director may prohibit the concerned staff member to take part in any new project either as Principal Investigator or Co-Investigator, till such time that a final decision is taken by the appropriate authority in the matter. However, in such cases the concerned staff member will be expected to complete his/her obligations in the ongoing project(s) with which he/she is connected, in order that the ongoing projects and obligations to the sponsor do not suffer.

5.8 If the PI is unable to complete the project in 2 years time extension can be given for another 6 months after obtaining approval through proper channel.

5.9 If the PI is unable to complete the project due to some unavoidable reasons (like medical, leave, resignation etc.), the CI can apply to continue the project as PI through proper channel. In case the the project is discontinued, the PI has to submit the report of work carried out till date and refund the amount spent on heads other than equipment/software and consumables.

5.10 After completion of the project, the statement of expenditure and utilization certificate will be submitted by the PI along with final report.



5.11 Feedback of the project would be prepared by the PI or CI covering all important aspects including income & expenditure statement and put up to the director within 30 days from date of conclusion of project.

5.12 After completion of the project, final report should be submitted to the Director through proper channel with a soft copy for the record at office of the R&D Cell IC and for RTI purposes.

5.13 A completion certificate should be obtained by the PI from the R&D Cell for successful completion of the project based on which project account will be closed with intimation to the Director.

5.14 The project file will be closed after the approval of the Director.

5.15 A copy of presentation/concept/research paper/reports would be placed in the institute's library for reference purpose.

5.16 The PI should involve students in the project by giving them part of the work in the form of assignments, testing, mini projects etc.

5.17 The PI/CI is required to submit a paper to conference or journal or file a patent based on the work carried out in the research project.

5.18 The PI/CI is also required to prepare follow-up proposal(s) to external sponsors.

6. Eligibility Conditions for New Research Project Proposal

The eligibility conditions for Principal investigator and co-investigator for the submission of research proposals under Seed Grant Scheme are given below:

6.1 Principal investigator must be a full time teacher having minimum 2 years of experience in AIT.

6.2 The age of Principal investigator must be less than 58 years.

6.3 Priority will be given to the teacher submitting research proposal first time and preferably for the assistant professor.

6.4 Principal Investigator is allowed to submit only one project at a time.

6.5 Principal Investigator is not eligible to submit the new project if any other project is ongoing under Seed Grant. Principal Investigator need to complete previous project and obtain certificate of completion for application of new proposal.



6.6 The Principal Investigator who has completed the project earlier and applying again for the research grant will be considered only after the fulfillment of the following conditions- i.) Principal Investigator should have publications in National / International reputed journals (Published by prestigious institutes or governing bodies) based on previously completed Project under Seed grant. (A committee will scrutinize the level of publications and journals) ii.) The final report and the statement of expenditure file of sanctioned project under Seed grant should be submitted in a given stipulated time. iii.) Priority will be given to the teachers who have participated and or guided students in research competitions.

6.7 The CO-PI can be any faculty having minimum 2 years of experience in AIT.

6.8 The faculty PI/CI should have specialization/taught courses/attended FDP in the area in which the research project is to be carried out.



Appendix-A
Format of Research Proposal Application

1. Department _____
2. Faculty PI _____
3. Faculty CO PI _____
4. Major Field of Study _____
5. Name of Guide _____
6. Proposed Title _____
7. Proposed date of start of research work _____
8. Probable date of completion _____
9. Place where research will be conducted _____
10. Nature of research work

| | | |
|--------------|------------|-----------------------------------|
| Experimental | Analytical | Both Experimental and Analytical. |
| Other | Specify | _____ |
11. Are the required research facilities (Equipment, Material, etc.) at the place of research?

| | | |
|-----------------|---------------------|----------------------|
| Fully available | Partially available | Not Available at all |
|-----------------|---------------------|----------------------|

(Give on separate sheets the details i.e. Cost of the material, equipment etc. required)
12. Is any out-of-town travel required for the research work such as collection of data, materials?
No. Yes. (Give on separate sheet the details i.e. cost of travel)
13. Is any expenditure required to be incurred on miscellaneous items?
No. Yes. (Give on separate sheet the details of such expenditure)
14. Give brief description (Synopsis), Justification and Scope of the proposed research work on attached sheets. Indicate, if possible, the practical use of the probable results of the research work related to National Development.

Names & Signatures of Applicants:

Research Project Proposal Form

1. Title of research proposal:
2. Introduction of research proposal:
3. Origin of research problem:
4. Interdisciplinary relevance:
5. Review of research and development in the subject:
 - (a) International status
 - (b) National status



6. Significance of the study in the context of current status:

7. Objectives:

8. Methodology:

9. Year wise plan of work and targets to be achieved (expected time schedules for the various activities of a proposed investigation):

| S# | Expected target to be achieved | First Year | | | Second Year | | |
|----|--------------------------------|------------|----------|----------|-------------|----------|----------|
| | | 4 Months | 4 Months | 4 Months | 4 Months | 4 Months | 4 Months |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| | | | | | | | |

10. References



Appendix-B
Declaration

To certify that:

- (a) General physical facilities required for proposed research work are available in the department, where project will be undertaken.
- (b) I / We shall abide by the rules and regulations of AIT Seed Research Grant Scheme and accept to be governed by all the terms and conditions laid down for this purpose in case assistance is provided to me/us for the said project.
- (c) I / We shall complete the project within the stipulated period. If I / We fail to do so and if the AIT is not satisfied with the progress of the said research project, AIT may terminate the project immediately and ask for the refund of the amount received by me / us.
- (d) The above research project is not funded by any central government/state government/public sector agency during the period to which the grant relates. I will write the name of AIT Pune as an affiliation on any outcome of the research project work in terms of publication and patents.

Co- Investigator
(Name and Signature)

Principal Investigator
(Name and Signature)



Funding received to Faculty and students from AIT to file Patents

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 431

Dated : 26-Oct-21

| Particulars | Amount |
|---------------------------------------|-------------|
| Account : | |
| Seema Tiwari (Cr) | 15,000.00 |
| Agst Ref 670 15,000.00 Dr | |
| Through : | |
| ICICI Bank Saving A/c 215201000341 | |
| On Account of : | |
| Being Amount Paid To Seema Tiwari | |
| Towards Reimbursement of three patent | |
| Amount (in words) : | |
| INR Fifteen Thousand Only | |
| | ₹ 15,000.00 |

Receiver's Signature:

Authorised Signatory
ACCOUNTANT
Army Institute of Technology
Dighi Hills, Pune-411015.

Principal
Army Institute of Technology
Dighi Hills, Pune - 411015

Dighi Hills, Alandi Road, Pune-15
Ph No 02027157534
State Name : Maharashtra, Code : 27

No. : 454

Dated : 1-Aug-22

Through :

On Account of :

Amount (in words) :

INR Five Thousand Only

₹ 5,000.00

Receiver's Signature: _____

Authorised Signatory

ACCOUNTS

Army Institute of Technology
Dighi Hills, Pune-411015.

~~Principal
Army Institute of Technology
Dighi Mills, Pune - 411015~~

Principal
Army Institute of Technology
Dighi Hillis, Pune - 411015

188

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 801

Dated : 7-Oct-22

| Particulars | Amount |
|--|----------|
| Account : Anita Suryawnsi Agst Ref 915 | 5,000.00 |
| 5,000.00 Dr | |

Through :

ICICI Bank Saving A/c 215201000341

On Account of :

Being Reimbursement of 2nd patent
publication fees

Amount (in words) :

INR Five Thousand Only

₹ 5,000.00

Receiver's Signature:

Authorised Signature

ACCEDED
Army Institute of Technology
Dighi Hills, Pune-411015.

Principal
Army Institute of Technology
Dighi Hills, Pune - 411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 1370

Dated : 16-Jan-23

| Particulars | Amount |
|--|-------------------|
| Account : Seema Tiwari (Cr) Agst Ref 1541 | 6,400.00 |
| 6,400.00 Dr | |
| Through : ICICI Bank Saving A/c 215201000341 | |
| On Account of : Being Reimbursement of research paper & one patent published 2022-23 | |
| Amount (in words) : INR Six Thousand Four Hundred Only | |
| | ₹ 6,400.00 |

Receiver's Signature:

Authorised Signatory

ACCOUNTANT
Army Institute of Technology
Dighi Hills, Pune - 411015Principal
Army Institute of Technology
Dighi Hills, Pune - 411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 352


Dated : 20-Jun-23

| Particulars | Amount |
|--|--------------------|
| Account : | |
| Bhate & Ponkshe | 17,700.00 |
| Agst Ref 332 | Dr |
| | 17,700.00 |
| Through : | |
| ICICI Bank Saving A/c 215201000341 | |
| On Account of : | |
| Being Professional Fees Charges For Draft Of joint patent ownership agreement(Invoice no-BP/2324/179) | |
| Amount (in words) : | |
| INR Seventeen Thousand Seven Hundred Only | |
| | ₹ 17,700.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hills, Pune - 411015


Accountant
Army Institute of Technology
Dighi Hills, Pune-411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 1523


Dated : 15-Feb-23

| Particulars | Amount |
|---|-------------|
| Account : Bhate & Ponkshe Agst Ref 1716 | 10,500.00 |
| 10,500.00 Dr | |
| Through : ICICI Bank Saving A/c 215201000341 | |
| On Account of : Being Patent & Trademark attorney & Legal Consultants payment | |
| Amount (in words) : INR Ten Thousand Five Hundred Only | |
| | ₹ 10,500.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hills, Pune - 411015


ACCOUNTANT
Army Institute of Technology
Dighi Hills, Pune-411015.

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher


No. : 627


Dated : 7-Sep-22

| Particulars | Amount |
|---|-------------|
| Account : Bhate & Ponkshe Agst Ref 732 | 22,730.00 |
| 22,730.00 Dr | |
| Through : ICICI Bank Saving A/c 215201000341 | |
| On Account of : Being IPR consultancy patent filing | |
| Amount (in words) : INR Twenty Two Thousand Seven Hundred Thirty Only | |
| | ₹ 22,730.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hills, Pune - 411015


Accountant
Army Institute of Technology
Dighi Hills, Pune-411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 70

Dated : 28-Apr-22

| Particulars | | Amount |
|--|--------------|--------------------|
| Account : | | 13,900.00 |
| Bhate & Ponshe | | |
| Agst Ref 72 | 13,900.00 Dr | |
| Through : | | |
| ICICI Bank Saving A/c 215201000341 | | |
| On Account of : | | |
| Being Patent & Trademark Attorneys & Legal | | |
| Consultancy | | |
| Amount (in words) : | | |
| INR Thirteen Thousand Nine Hundred Only | | |
| | | ₹ 13,900.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hills, Pune - 411015


Accountant
Army Institute of Technology
Dighi Hills, Pune - 411015

Army Institute of Technology(College Fund New)

Dighi Hillis, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher

No. : 666

Dated : 9-Feb-22

| Particulars | Amount |
|--|--------------------|
| Account : | |
| Bhate & Ponkshe | 11,800.00 |
| Agst Ref 1235 11,800.00 Dr | |
| Through : | |
| ICICI Bank Saving A/c 215201000341 | |
| On Account of : | |
| Being Profession Fess Payment | |
| Amount (in words) : | |
| INR Eleven Thousand Eight Hundred Only | |
| | ₹ 11,800.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hillis, Pune - 411015


Accountant
Army Institute of Technology
Dighi Hillis, Pune-411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher


No. : 129


Dated : 30-Apr-21

| Particulars | Amount |
|--|--------------------|
| Account : | |
| Bhate & Ponkshe | 18,200.00 |
| Agst Ref 90 18,200.00 Dr | |
| Through : | |
| ICICI Bank Saving A/c 215201000341 | |
| On Account of : | |
| Being Amount Paid To Bhate & ponkshe Towards Payment For Attending Hearing of a patent to Bhate & Ponkashe | |
| Amount (in words) : | |
| INR Eighteen Thousand Two Hundred Only | |
| | ₹ 18,200.00 |

Receiver's Signature:

Authorised Signatory


Principal
Army Institute of Technology
Dighi Hills, Pune - 411015


Accountant
Army Institute of Technology
Dighi Hills, Pune - 411015

Army Institute of Technology(College Fund New)

Dighi Hills, Alandi Road, Pune-15

Ph No 02027157534

State Name : Maharashtra, Code : 27

Payment Voucher


No. : 853


Dated : 26-Nov-20

| Particulars | | Amount |
|--|--------------|-------------|
| Account : | | 31,600.00 |
| Bhate & Ponkshe | 31,600.00 Dr | |
| New Ref 486 | | |
| Through : | | |
| ICICI Bank Saving A/c 215201000341 | | |
| On Account of : | | |
| Being Amount Paid To Bhate & Ponkshe | | |
| Towards Patent Filling Procedure For | | |
| Vertical Axis Turbine | | |
| Amount (in words) : | | |
| INR Thirty One Thousand Six Hundred Only | | ₹ 31,600.00 |

Receiver's Signature:

Authorised Signatory


PRINCIPAL
Army Institute of Technology
Dighi Hills, Pune-411015


ACCOUNTANT
Army Institute of Technology
Dighi Hills, Pune-411015

12.Faculty and Students Achievements


KPIT | **SHODH
AWARDS**

This certificate is presented to

SANDEEP BIDWAI

for winning BEST THESIS IN AI/ML category
of the KPIT Shodh Awards 2023.

Congratulations on your outstanding accomplishment!



Anup Sable

CTO, KPIT Technologies Ltd.



Savitribai Phule Pune University

(Formerly University of Pune)

Gold Medal Award

This is to certify that

Shri. / Smt. Dr. Mundhe Ganesh Ashruji

has been awarded

"Padmashree Late N.S. Venkatesan

Gold Medal"

for the

Best Ph.D. Thesis

in

Mathematics

for the year 2018-19.



Director

Board of Examinations & Evaluation



Vice-Chancellor

Date : 8th January 2020

- The “Longest Continuous SBC (Student Branch Coordinator) Award” and “Paper Presenter Award” to Dr. Ashwini Sapkal, at CSI Annual Convention Year 2020, at KIIT, Bhubaneswar, 16th - 18th Jan 2020.



Students Achievements

- Arjun Dashrath (SE Comp) won the Best Research Paper Award in conference „Indian Engineering Congress“. Also First Position at Smart India Hackathon 2020.
- Naman Agarwal (Alumni, 2019), Raj Kumar, Amtul M Ahmed (BE COMP), Ritesh Lamba and Rishu Roy founded „CheqIt“- a startup offering anti-counterfeiting systems with trace and track.
- Mohit Kumar (Alumni 2019), Deepak Kumar and Rutvik (BE Comp 2022) founded „myAI Mate“- Artificial Intelligence Educator for kids
- Akash Saxena, SE E&TC won 1st prize in Hackathon, Beach Hack on Devfolio
- Amit Joshi, Ayush Mani Tripathi & Priya Pandey, TE E&TC won Smart India Hackathon 2020 (Hardware Edition) with prize money of Rs. 1 Lakh, Government of Goa
- Shuvam Kumar, TE E&TC won 1st prize in Great Hackathon '18, Hackerearth.
- Top 20 winning team of Innovation Marathon 2022 in "_VOIS for Tech: University Engagement Program" by Vodafone Idea Foundation Name of the student: Ambati Maneesha Year: 2022



- Winner of “Smart India Hackathon 2022” Students: Shekhar Kumar Singh (BE IT) and Ajay Singh (BE IT)



- First Position at Hackpions – EY GDS Hackathon organized by EY Global, HackEd Hackathon [National Hackathon] and HackTU 2.0 organised by Thapar Institute of technology, Patiyala in 2021.



- Winner of “CSAM'22” Students of SE IT: Shivank Singh, Arvind Singh Rathor, Prince Kumar

Congratulate all the winners of CSAM'22

Capture The Flag (CTF):

Winner:

Team Dr. White Lemon: [Shivank Singh and Team(SE IT Students)]

CTF Event in SCIT held on 1 Oct 2022 and AIT Team won the First Prize in the event. The prize distribution ceremony was on 4th Oct 2022.



National Level Competition - KPIT SPARKLE 2019

Winner -Team AQUA –ARMY INSTITUTE OF TECHNOLOGY

Prize – Platinum Award (Rupees 10 Lac)

Name of Students- Shivam Mishra and Sachin Dwivedi

TEAM Aqua from Army Institute of Technology, Pune, won the platinum award of Rs 10,00,000 at the fifth edition of KPIT Sparkle 2019 for developing a vertical axis water turbine (VAWT), which is 24 per cent more efficient than a conventional system. The turbine can be used for both small and large-scale energy production and in all flow conditions.

KPIT, the global leader in automotive engineering and mobility solutions, announced the winners of its annual national design and development innovation contest, KPIT Sparkle 2019. The competition aims at fostering innovation among students by providing them with an opportunity to imagine, ideate and develop innovations with a high social impact on sustainability. In the last five years, KPIT Sparkle has received nearly 6000 ideas from more than 50,000 students nationally.

The theme for the 2019 edition was „Energy and Mobility for the Future.,, It sought futuristic solutions, based on cutting-edge technologies, to solve problems in areas, such as renewable energy generation, energy storage, energy utilisation and clean, safe, shared, connected, and secure mobility.

Ravi Pandit, co-founder, chairman, and group CEO, KPIT said, “Sparkle is our endeavour to provide young and aspiring minds with an opportunity to explore and apply new technology trends. It is a manifestation of our efforts to achieve sustainability. It will be pivotal in contributing towards our new vision of reimagining mobility with the ecosystem for the creation of a cleaner, smarter and safer world.”

KPIT Sparkle 2019 received more than 2000 ideas from around 22,000 students across more than 1,100 colleges in India. The Top 30 teams presented working prototypes of their solutions at the grand finale held on February 23 and 24, 2019, at the Pimpri Chinchwad College of Engineering (PCCOE).

THE WINNERS

Team Aqua from Army Institute of Technology, Pune, bagged the platinum award of Rs 10,00,000 for developing a vertical axis water turbine (VAWT), which is 24 per cent more efficient than a conventional system.

Two teams won the silver prizes of Rs 2,50,000 each for the following ideas:

Team Gravity from Bharath Institute of Higher Education and Research, Chennai, for designing a scalable plant-based microbial fuel cell technology. The solution has the capacity to generate electricity and eliminate dependence on climate for renewable energy production.

Team AutoTrac from College of Engineering, Indore, for designing a driverless tractor, which saves labour cost, time and manual labour.

Team Drivetrain from Jayawantrao Sawant College of Engineering, Pune, won the Most Popular Award for designing a novel transmission system (single stage gearbox) to increase the load carrying capacity and gradeability of existing e-vehicles. The team garnered online votes in excess of 11,000 for their project. They won a cash prize of Rs one lakh.

INCUBATION OPPORTUNITIES

KPIT Sparkle 2019 associated with the Government of India's Department of Science and Technology (DST), NITI Aayog's Atal Innovation Mission (AIM), All India Council for Technical Education (AICTE), India Design Council and the National Institute of Design as the knowledge partners and Pimpri Chinchwad College of Engineering (PCCOE), Pune; Noida Institute of Engineering and Technology (NIET), Greater Noida; and Sandip University, Nashik; as academic partners.

Also, KPIT partnered with the Centre for Innovation Incubation & Entrepreneurship (CIIE), IIM Ahmedabad, Incubation Cell – IITM, Science and Technology Park, BHAU Institute and Centre for Innovation, Incubation, and Linkages (CIIL) – Savitribai Phule University to provide incubation opportunities to deserving ideas.

THE JURY

The finalists were evaluated by a jury comprising national and international experts from the academic, business, automotive and technology fields, including Padma Vibhushan Dr R A Mashelkar, chairman, Innovation Council, KPIT; Dr Peter F Tropschuh, vice president, Strategy Sustainability, AUDI AG; Dr Ashish Lele, chief scientist and former chair-Polymer Science Engineering Division, CSIR-National Chemical Lab; Dr Milind Rane, professor, Department of Mechanical Engineering, IIT Bombay; Dr Siddhartha Mukhopadhyay, professor, Department of Electrical Engineering, IIT Kharagpur; Dr Praveen Kumar, professor, Department of Electrical Engineering, IIT Guwahati; Masashige Mizuyama, automotive CTO, Panasonic Corporation; Tapish Bhatt, vice president, Centre for Innovation Incubation & Entrepreneurship (CIIE), IIM Ahmedabad; Praveen Nahar, senior faculty member, Industrial Design, National Institute of Design (Ahmedabad); Dr Carl Perrin, director, Institute for Future Transport & Cities, Coventry University; and Rafi Maor, chairman, RON Investments Ltd.



National Level Competition- KPIT SPARKLE RESULT 2020

Winner -Team **Detox** –ARMY INSTITUTE OF TECHNOLOGY

Prize – Gold Award (Rupees 5 Lac)

Name of Students- Pitambar Panda, Priyanshu, Vishal Singh (TE Mechanical 2019-20)

Team Detox from the **Army Institute of Technology, Pune** on 1st March 2020 ,won the **Gold Award** of Rs. 5,00,000 for designing a modified vertical axis wind turbine, inspired by an airplane nose design, that increases the efficiency in extracting energy from the turbine. The Gold Award presented by Padma Vibhushan Dr Anil Kakodkar ,**Chairman, Rajiv Gandhi Science and Technology Commission** and **former Chairman, Atomic Energy Commission** and **Dr Unnat Pandit**, Program Director, Atal Innovation Mission, NITI Aayog.





National Event - Dare to Dream 2.0

Certificate of Merit awarded to Mr Pitambar Panda by Honorable Defence Minister Mr. Rajnath Singh in 2021

For EXNOS WIND TURBINE in Defence Sector



Defence Research & Development Organisation
Ministry of Defence



Certificate
of Merit



This Certificate is awarded to *Mr. Pitambar Panda* in *Individual* Category for participating in Dare to Dream 2.0 DRDO Pan India Innovation Contest Organized in the memory of Bharat Ratna Dr A P J Abdul Kalam during the year 2020.


N. D. Baroo
Director, TDF

DRDO Bhawan
New Delhi


Dr. G. Sathesh Reddy
Secretary, DD R&D and Chairman, DRDO

13. Ecell Data Startups

| Name of Venture | DPIIT/Start up India Registration No. | Year of recognition by DPIIT/startup India |
|------------------------------------|---------------------------------------|--|
| RS Deep Info Lab Private Limited | DIPP85153 | 2021-22 |
| Xefficient Private Limited | DIPP83063 | 2021-22 |
| NIMBLELOGIK PRIVATE LIMITED | DIPP83886 | 2021-22 |
| Upcurve Business Services Pvt. | DIPP54647 | 2021-22 |
| Coppercloud IoTech Private Limited | DIPP117111 | 2021-22 |

Innovation Grant from Govt. Organisation Patents

| Name of Government organisation from which grant is received | Amount of Grant received | Year of receiving grant |
|--|--------------------------|-------------------------|
| Nidhi Prayas | 1000000 | 2020-21 |
| Nidhi EIR | 360000 | 2021-22 |
| IIC Innovation | 350000 | 2021-22 |
| Niti Aayog | 1000000 | 2022-23 |

CERTIFICATE NO:
DIPP117111



सत्यमेव जयते
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia

CERTIFICATE OF RECOGNITION

*This is to certify that **Coppercloud Iotech Private Limited** incorporated as a **Private Limited Company** on **20-09-2018**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade. The startup is working in 'Internet of Things' Industry and 'Others' sector as self-certified by them.*

This certificate shall only be valid for the Entity up to **Ten** years from the date of its incorporation only if its turnover for any of the financial years has not extended ₹ 100 Cr.

15-12-2022
DATE OF ISSUE

19-09-2028
VALID UPTO

CERTIFICATE NO:
DIPP153348



सत्यमेव जयते
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia

CERTIFICATE OF RECOGNITION

*This is to certify that **UPHEVAL TECHNOLOGIES PRIVATE LIMITED** incorporated as a **Private Limited Company** on **10-11-2023**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade. The startup is working in 'Education' Industry and 'Education Technology' sector as self-certified by them.*

This certificate shall only be valid for the Entity up to **Ten** years from the date of its incorporation only if its turnover for any of the financial years has not extended ₹ 100 Cr.

05-01-2024
DATE OF ISSUE

09-11-2033
VALID UPTO

CERTIFICATE NO:
DIPP83886



सत्यमेव जयते
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia

CERTIFICATE OF RECOGNITION

*This is to certify that **NIMBLELOGIK PRIVATE LIMITED** incorporated as a **Private Limited Company** on **08-10-2020**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade. The startup is working in 'IT Services' Industry and 'Application Development' sector as self-certified by them.*

This certificate shall only be valid for the Entity up to **Ten** years from the date of its incorporation only if its turnover for any of the financial years has not extended ₹ 100 Cr.

28-07-2021
DATE OF ISSUE

07-10-2030
VALID UPTO



Department for Promotion of Industry and Internal Trade
Ministry of Commerce & Industry
Government of India

CERTIFICATE OF RECOGNITION

Department for Promotion of Industry and Internal Trade

This is to certify that **SUKRAM TECHNOLOGIES PRIVATE LIMITED** incorporated/ registered as a **Private Limited Company** on **05-11-2018**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade.

Date of Issue: 23-05-2019

Place of Issue: New Delhi

The certificate shall only be valid for the entity:

- Up to ten years from the date of its incorporation/ registration and
- If its turnover for any of the financial years since incorporation/ registration has not exceeded Rs. 100 crores.

Note:

- **Authorities accepting this Certificate may check its validity on the Startup India portal (<https://www.startupindia.gov.in/>)**
- This certificate is not the Certificate issued by the Inter Ministerial Board and is NOT VALID for availing Tax benefits
- This is a system generated certificate and hence does not require physical signature
- If such recognition is found to have been obtained without uploading the relevant documents or on the basis of false information, DPIIT reserves the right to revoke the recognition certificate immediately without any prior notice or reason.



Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade

#startupindia



NATIONAL STARTUP AWARDS 2021

CERTIFICATE OF COMMENDATION

UPCURVE BUSINESS SERVICES PRIVATE LIMITED

(DIPP54647)

has been adjudged as the



in sector
Travel

under category
Travel Planning and Discovery



Shri Anurag Jain
Secretary to Government of India

Date: 15/01/2022



CERTIFICATE NO:
DIPP83063



सत्यमेव जयते
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia

CERTIFICATE OF RECOGNITION

*This is to certify that **XEFFICIENT PRIVATE LIMITED** incorporated as a **Private Limited Company** on **24-02-2021**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade. The startup is working in 'Renewable Energy' Industry and 'Renewable Wind Energy' sector as self-certified by them.*

This certificate shall only be valid for the Entity up to **Ten** years from the date of its incorporation only if its turnover for any of the financial years has not extended ₹ 100 Cr.

13-07-2021
DATE OF ISSUE

23-02-2031
VALID UPTO

CERTIFICATE NO:
DIPP85153



Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry and Internal Trade

#startupindia

CERTIFICATE OF RECOGNITION

*This is to certify that **RS DEEP INFO LAB PRIVATE LIMITED** incorporated as a **Private Limited Company** on **02-06-2021**, is recognized as a startup by the Department for Promotion of Industry and Internal Trade. The startup is working in 'AI' Industry and 'NLP' sector as self-certified by them.*

This certificate shall only be valid for the Entity up to **Ten** years from the date of its incorporation only if its turnover for any of the financial years has not extended **₹100 Cr.**

18-08-2021
DATE OF ISSUE

01-06-2031
VALID UPTO



GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS
Central Registration Centre

Form 16

[Refer Rule 11(3) of the Limited Liability Partnership Rules, 2009]
CERTIFICATION OF INCORPORATION

LLP Identification Number: **AAU-5059**

It is hereby certified that MAPS4SUCCESS LLP is incorporated pursuant to section 12(1) of the Limited Liability Partnership Act, 2008.

Given under my hand at Manesar this Second day of November Two thousand twenty.



Ibson Shah

ASST. REGISTRAR OF COMPANIES

For and on behalf of the Jurisdictional Registrar of Companies

Registrar of Companies

Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the LLP on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the LLP can be verified on www.mca.gov.in

Mailing Address as per record available in Registrar Office:

MAPS4SUCCESS LLP

**H.NO.42/A, GALI NO 5 ADARSH COLONY,,MALA ROAD KOTA JN, NA ,
KOTA,KOTA,Kota,Rajasthan,324002,India**

