

NANOTECH HACKATHON

Innovative solutions for societal problems through nanotechnology...

India can play a substantial role in the field of nano electronics through cost effective innovation enabling products and services for societal needs that are affordable and of high quality.

Why Hackathon....??

INUP- i2i invites applications for participating in a contest on innovative nanoelectronics - based device fabrication targeting technologies at affordable costs addressing societal needs.



INNOVATION



Indian Nanoelectronics Users' Programme - Idea to Innovation (INUP-i2i), is initiated to take the MeitY initiated nanocenters (IITD, IITG, IITKgp and IITM) also termed as the 'open national nanocenters' accessible to the users from across India.

What are the current challenges faced by the country....??

The diversity and abundance of high-end technical facilities in our country provide a strong foundation to develop solutions for the challenges facing by our nation. Nanotech Hackathon through INUP at IIT Bombay provides the country's first such nanotechnology-based platform in various areas described below but not limited to the illustrated examples.



- Production (e.g. Moisture and soil sensors)
- Protection (e.g. Ultra sound insect repellents)
- Storage (e.g. Acetylene gas sensors)



- Quality Improvement (e.g. Non-degradable notebooks, Dust-free chalks, Lead-free pencils)



- Low-cost (e.g. Alternatives for existing PV cells)
- High efficiency technologies
- Energy harvesting devices



- Air and water quality
- Low carbon devices (e.g. Biodegradable electronic devices)



- Diagnostic devices (e.g. Blood testers)
- Control (e.g. Food alteration testers)
- Cure (e.g. Low cost lasers to kill cancer cells)



- Detection (e.g. Explosive and metals)
- Control (e.g. PUF based cyber security)

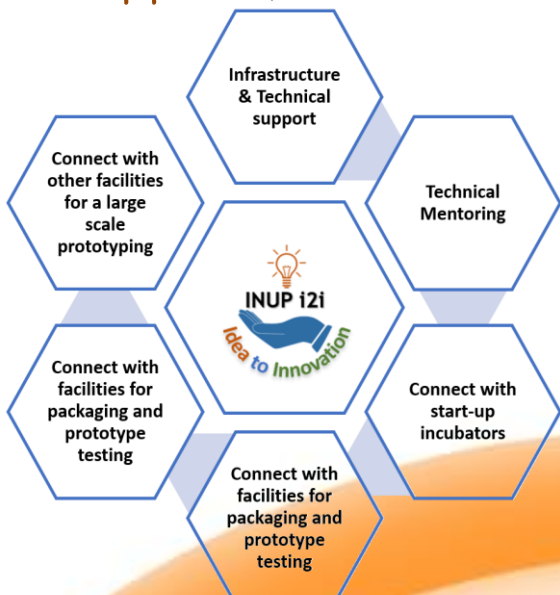


- Passenger security (e.g. Fatigue and jerk sensors)
- Obstacle detectors (e.g. low cost car parking solutions)



- Tracking (e.g. Low cost motion sensors)
- Recognition (e.g. Object ID scanners)
- Communication (e.g. Low cost transceivers)

Support from INUP



ELIGIBILITY

- ✓ Minimum 18 years as on 01-07-2022. No upper age limit.
- ✓ Applicant should be from academia [either faculty/ registered student(s)].

GUIDELINES

- ✓ Proposal submission can be done by a single participant or a group of 2-3 team members.
- ✓ For detailed guidelines on registration and proposal submission visit:

<http://www.inup.iitb.ac.in/hackathon/>

IMPORTANT DATES

- ✓ Submission deadline: 25-09-2022
- ✓ Declaration of results: 25-10-2022

Facilities at IITBNF

IITBNF - 21 Labs, 158 tools

For more details about the equipment, visit
<http://www.iitbnf.iitb.ac.in/iitbnf/index.php/infrastructure?layout=edit&id=18>

