NANOTECH HACKATHON
Innovative solutions for societal problems through nanotechnology...

Why Hackathon....??
INUP invites applications for participating in a contest on innovative nano electronics - based device fabrication targeting technologies at affordable costs addressing societal needs.

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.

MeitY (Govt. of India) has taken a major initiative to encourage and strengthen nanoelectronics through creation and support of several Centres of Excellence in Nanoelectronics and also through INUP at IIT Bombay and IISc Bangalore.

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. For more details visit: http://www.inup.iitb.ac.in/hackathon/docu/Projects_area_description.pdf

Support from INUP

- Production (e.g. Moisture and soil sensors)
- Protection (e.g. Ultra sound insect repellers)
- Storage (e.g. Acetylene gas sensors)
- Low-cost (e.g. alternatives for existing PV cells)
- High-efficiency technologies
- Energy harvesting devices
- Diagnostic devices (e.g. blood testers, BP monitors)
- Control (e.g. food alteration testers)
- Cure (e.g. low cost lasers to kill cancer cells)
- Passenger security (e.g. fatigue and jerk sensors)
- Obstacle detectors (e.g. low cost car parking solutions)
- Quality improvement (e.g. non-degradable note books, dust free chalks, lead free pencils)
- Climate change detection (e.g. Green house gas sensors)
- Low carbon devices (e.g. Bio degradable electronic devices)
- Detection (e.g. explosives and metals)
- Control (e.g. PUF based cyber security)
- Tracking (e.g. low cost motion sensors, radars)
- Recognition (e.g. object ID scanners)
- Communication (e.g. low cost transceivers)

ELIGIBILITY
- Minimum 18 years as on 01-01-2018. 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/register.php

IMPORTANT DATES
- Submission deadline: October 14, 2018.
- Declaration of results: October 30, 2018

Facilities at IITBNF
IITBNF - 21 Labs, 150 tools
For more details about the equipment, visit: http://www.iitbnf.iitb.ac.in/index.php/infrastructure/layout-edit&id=18