

# IIT Tirupati Navavishkar I-Hub Foundation

## **IITTNiF CHANAKYA-Postdoctoral Fellowship**



**About IITTNiF** 



To harness the potential of the next generation technologies and make India a leading player in Cyber-Physical Systems (CPS), the Union Cabinet approved the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) to be implemented by DST. The Mission aims to create a strong foundation and a seamless ecosystem for CPS technologies by coordinating and integrating nationwide efforts encompassing knowledge generation, translation research, technology, product development, human resource development, innovation & commercialization standards, and international collaborations. IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF), a not-for-profit Section-8 company, has been set up to host the Technology Innovation Hub (TIH) in Positioning and Precision Technology (PPT).

Positioning and Precision Technologies (PPTs) are indispensable tools for monitoring, integrating, and analyzing spatially and temporally distributed resources to aid in effective decision-making across multiple domains. The TIH on PPT at IIT Tirupati will provide a unique platform for researchers, industries, stakeholders and end-users across multiple disciplines. The TIH aims to become a top contributor to many Government of India initiatives such as Make in India, Atmanirbhar Bharat Abhiyaa and making India a self-reliant in PPT. The TIH on PPT will contribute in i) technology development; ii) applications; iii) human resource development; iv) startups; and v) international collaborations. The Hub will majorly focus on: 1) Developing atomic clocks for GPS and navigation systems and its applications; 2) Defence applications; 3) Precision agriculture; 4) Indoor positioning systems; 5) Disaster management; 6) Resource management; Image Processing; 8) Smart cities.

### **About CHANAKYA-Postdoctoral Fellowship**

IITTNiF, DST and IIT Tirupati believe that human resource development has to be the heart of the NM-ICPS which includes encouraging and involving students and faculty of the technical institutes to solve industry problems, training graduates to fill the gap between academia and industry, creating pool of trained professionals. The goals of HRD can be ensured under the programme Comprehensive and Holistic Advancement of National Knowledge Yield and Analytics (CHANAKYA). iNiF at IIT Tirupati invites innovative and entrepreneurial ideas from motivated students for CHANAKYA-Postdoctoral Fellowships (CHANAKYA-PDF) who would like to work in the broad areas of Positioning and Precision Technology.

#### **Call for Proposal from Young Researchers**

Proposals are invited from individual young researchers in the following verticals.

#### **Core Areas**

- **Quantum Technologies**
- **Defense Applications**
- **Indoor Mapping**
- RF and MRS
- **Data Science**
- Image Processing

#### **Applied Areas**

- Navigation
- Precision Agriculture
- Disaster Management
- Smart Cities/Villages
- Policy and Legal
- Land Records (Rural and Urban)

#### **Eligibility Criteria**

- M.Tech./M.E./M.S./M.Sc./B.S.-M.S. or any equivalent degree holder
- A minimum 7.5 CGPA or 75% equivalent must be obtained over all semesters in the Masters and PhD coursework
- The researcher must have completed a PhD program or defended their
- Must have atleast two published papers in reputed peer-reviewed journals

#### Workplace

IITTNiF, Tirupati (IIT Tirupati main campus)

#### **Project Selection Process**

- Based on the originality, contributing to solving locally and socially relevant problems aligned with PPT
- Project proposal includes problem statement, technical merit, feasibility, project plan, milestones and outcomes

#### **Project Monitoring Process**

- Monthly progress report quaterly presentation
- Fellowship is strictly subject to satisfactory progress during reviews

#### **Opportunities**

- Performing experiments in TIH Laboratories
- Attending workshops/seminar/colloquium during the project period
- Conference fee concession for TIH organized conferences
- Regular member of TIH
- Funds to create startup or incubation based on technology ready outcomes
- Interact with industries working on the PPT domain
- Get chances to work on MoU partnerted Industry and R&D Institution

#### For More Details

Proposals are invited with original ideas from young researchers to solve socially relevant problems aligned with PPT

**Research Grant + Monthly** fellowship: INR 80,000 + HRA as per norms

**Maximum Duration of the Fellowship: 36 Months** 

Proposal template can be downloaded from https://iittnif.com/chanakya-template.docx

**Deadline for Proposal Submission** May 15, November 15

Proposal should be uploaded in the following URL: https://forms.gle/9DEVfuR2S2L5zFib7



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Note: IITTNiF reserves all rights to revise the eligibility criteria, reject any proposal without assigning reason at any

