



## अंतरिक्ष प्रौद्योगिकी उड्डवन केंद्र

विश्वेश्वरैय्या राष्ट्रीय प्रौद्योगिकी संस्थान (वि एन आई टी), नागपुर  
मौलाना आजाद राष्ट्रीय प्रौद्योगिकी संस्थान (एम ए एन आई टी), भोपाल  
राष्ट्रीय प्रौद्योगिकी संस्थान (एन आई टी), राउरकेला

मार्च 18, 2021 को



डॉ. कै. शिवन  
अध्यक्ष, इसरो / सचिव, अंतरिक्ष विभाग  
भारत सरकार  
द्वारा राष्ट्र को समर्पित



प्रो. प्रमोद मधुकरराव पडोले  
निदेशक, वि एन आई टी, नागपुर

प्रो. नरेन्द्र सिंह रघुवंशी  
निदेशक, एम ए एन आई टी, भोपाल

प्रो. अनिमेष विश्वास  
निदेशक, एन आई टी, राउरकेला

श्री आर. उमामहेश्वरन  
वैज्ञानिक सचिव, इसरो

डॉ. पी. वी. वेंकिटाकृष्णन  
निदेशक, क्ष नि का का, इसरो मु.  
की गरिमामयी उपस्थिति में

आत्मनिर्भर भारत Aatmanirbhar Bharat

SPACE TECHNOLOGY INCUBATION  
CENTRE

MANIT BHOPAL

## Director's Message

I am pleased to inform that the "Space Technology Incubation Centre (S-TIC)" is established by ISRO at MANIT Bhopal. The purpose of this Centre is to "attract and nurture the young academia with innovative ideas / research aptitude who can carry out research in the domain of Space Science and Technology and realize the research towards indigenous development of the space-worthy products. With the product development, researcher can transform themselves as future entrepreneurs and contribute positively towards the Indian Space Programme". Furthermore, the Incubation Centre (S-TIC) at MANIT will act as a facilitator for the promotion of space science and technology related research activities in the central region comprising of the states of Chhattisgarh, Madhya Pradesh, and Uttar Pradesh.



I am sure that this endeavor from ISRO will be a leap forward to inculcate much required research culture among the student community as they will be exposed to live problems of relevance. Certainly, the prototype developed by this incubation centre may be realized as product by tie-up industries, and I am confident that it will also qualify as existing facilities of ISRO. Moreover, the Incubation Centre will certainly enthrill students to think differently and would venture them to initiate start-up enterprises, which in turn would lead to Atma-Nirbhar Bharat and would generate employment. Thus, it can be emphatically said that S-TIC will surely encourage space related research activities in the entire central region of the country.

MANIT, as coordinating Institute of Space-Technology Incubation Centre is committed to provide Infrastructure facilities, laboratories and faculty expertise to enable / guide the students to realize their ideas and further to be utilized for space technology applications. MANIT also undertakes to provide available research facilities and faculty expertise to other regional academic centres/cells under ISRO ambit apart from imparting relevant training to person(s) working on the project. MANIT is committed to tie up with Academia, Industry and R&D institutions in different regions of the country for effective utilization of the available resources and for fulfilling the **Purpose** of the MoU.

I would like to extend my heartfelt thanks to ISRO for considering MANIT as venue for S-TIC in this Central region of the country. I am personally thankful to Chairman ISRO Shri K. Sivan, Director CBPO Dr. P. V. Venkata Krishnan, Associate Director CBPO Dr. Jiwan Kumar Pandit, and Mr. Nishant Kumar, program manager CBPO for their trust in the capabilities of MANIT.

## Objectives

Space Technology Incubation Centre (S-TIC) is a novel concept conceived by ISRO to tie up with Academia, Industry and R&D institutions in different regions of the country. The underlined aims and objectives of S-TIC are to provide problems of on-going and futuristic programmes of ISRO as research projects to the PhD scholars, PG-UG students and faculty members.

The purpose of S-TIC is not only to attract and nurture young academia with research aptitude, but also to support them to initiate start-up in the field of space technology. The research outcome of the students who delves into innovative ideas will be translated into a proof of concept or prototype through industries tie up the S-TIC through ISRO. Once qualified, there will be a buy back agreement of this product for future programmes of ISRO thereby eliminating the marketing effort. ISRO shall provide support to develop Academia-Industry ecosystem for Space Technology, and S-TIC at MANIT Bhopal shall cater central region of our country comprising of the state of Madhya Pradesh, Chhattisgarh and Uttar Pradesh.

## Background

MANIT had applied to ISRO for setting up of space Technology Incubation Centre. After going through the R & D, consultancy output, facilities available in each department, ISRO officials decided to visit MANIT to interact with faculty and students and to have a look at these facilities. ISRO team comprising Dr. Jiwan Kumar Pandit Associate Director, CBPO and Shri Nishant Kumar, Program Officer, visited MANIT on March 03, 2021.



## Memorandum of Understanding

A Memorandum of Understanding (MOU) has been signed between Indian Space Research Organisation (ISRO) and Maulana Azad National Institute of Technology (MANIT) on March 18, 2021 for setting-up a “Space Technology Incubation Centre (S-TIC)” at MANIT, Bhopal. The MOU is signed by Dr. K Sivan Chairman ISRO, and Dr. N. S. Raghuwanshi, Director MANIT Bhopal in an online ceremony held on 18th March 2021 in the presence of ISRO Chairman Dr. K. Sivan.



## **Call For Research Proposal**

A booklet named “*Yukti Sachita*” is released by the ISRO contains list of 108 projects with scope, objectives and expected deliverables. The booklet contains projects encompassing all areas of Engineering and Science. Research proposals are invited from academic Institutes in the Central region comprising of states of *Chhattisgarh, Madhya Pradesh, and Uttar Pradesh*. The research proposals by the faculty from Institutions in *Central region* can submit proposals in two ways:

### **1. Faculty from Institute in Central region as Principal Investigator (PI) and MANIT faculty as Co-PI.**

Faculty from Institutes in the Central region may choose a project from “Yukti-Sanchita” and submit the proposal in the prescribed format as PI. The Principal Investigator (PI) must be a regular employee of the concerned Institution below 65 years of age that includes project completion period. In this case, the concerned PI has to identify a permanent faculty of the MANIT as Co-PI in the proposed areas of research, although there may be other Co-PIs from the associate institution. Area of expertise of MANIT Faculty can be seen from MANIT website [www.manit.ac.in](http://www.manit.ac.in). Essentially, one faculty can take up one product development/Innovative Project as PI, however he/she may act as Co-PI in multiple proposals.

The prospective PI may interact with mentors from DOS/ISRO Centre through e-mail for clarification regarding requirement and approach towards the proposal and prepare the detailed PD / IP proposal as per prescribed format in **Annexure–A**. Duly forwarded proposal is to be submitted to Coordinator MANIT at the mail ID [coordinator.stic@manit.ac.in](mailto:coordinator.stic@manit.ac.in) for further review and onward transmission to ISRO.

Once mutual consent between the PI of associate Institute in central region and Co-PI from MANIT is established, a letter of intent must be submitted along with the Final Project Proposal. **The proposal must reach to Coordinator MANIT by May 7th, 2021.**

### **2. MANIT Faculty as PI and Faculty from Institutes in Central region as Co- PI.**

In case 2, faculty from Central region institutes may act as Co-PI in the project proposal submitted by the faculty of MANIT as Principal Investigator (PI). Coordinator S-TIC shall prepare and circulate the list, abstract of the projects, and contact details of MANIT faculty as PI so that **faculty from the central India Institutes can interact and get associated as Co-PI.** **Due date of submitting final proposal with consent letter between PI and Co-PI is **May 7th, 2021.****

## **Proforma for Research Proposal**

Format for submitting project proposal is available as **Annexure–A** in **Yukti-Sanchita**. Doc version of the *Annexure –A* with general instructions may be downloaded from the appropriate link provided on MANIT website. [www.manit.ac.in](http://www.manit.ac.in)

Faculty members as PI are required to submit the proposal in soft and duly forwarded hard copy. In addition, project and other relevant information in brief is also required to be submitted through below given google link.

<https://forms.gle/ifvzUeW4hwvzA2Cp8>

## **Instruction for Submission**

1. Faculty members preparing and submitting the proposals are requested to go through the guidelines provided in the “Yukti Sanchita”.
2. All the faculty shall abide by mutually agreed publications and IPR rules, else subjected to rules of licensing in case of product development. Inherent to this MOU, Data or proprietary information such as drawing, specifications and technical materials as developed in the process of S-TIC projects implementation has to be given strict Confidentiality.
3. In case of any query, **Coordinator S-TIC, Dr. Savita Nema** may be contacted on email [coordinator.stic@manit.ac.in](mailto:coordinator.stic@manit.ac.in) or on cell phone **94256 07497**.

Submit your Project to:

**Dr. Savita Nema**

*Coordinator-Space Technology Incubation Centre*

Professor, Department of Electrical Engineering.

M.A.N.I.T. Bhopal 462003

O: 07554051409, M: 9425607497, Fax: 0755-2670562

[coordinator.stic@manit.ac.in](mailto:coordinator.stic@manit.ac.in)

**Alternate email:** [s\\_nema@yahoo.com](mailto:s_nema@yahoo.com)