



StartUp
Igniting the future



Pitching & Networking Session for Startups

“Remote Sensing & Space Technology” in collaboration with ISRO & ISRS (Indian Society of Remote Sensing)Ahmedabad Chapter

Date: 18/02/2025

Timing: 10:00 AM Onwards

Venue:

**Conference Hall,
Swarnnim Startup and Innovation University**

Supported by:

**Institutions’ Innovation Council (IIC),
Startup Gujarat Cell, Govt. of Gujarat,
SSIP, Govt. of Gujarat, All India
Council for Technical Education
(AICTE) and
Swarnnim Incubation Center**

About Swarnnim Startup and Innovation University (SSIU) :-

Swarnnim Startup and Innovation University, established in 2017, is a pioneering institution offering programs in Engineering, Architecture, Design, Management, and more. As India's first university dedicated to promoting startups, Swarnnim integrates innovation, entrepreneurship, and startup culture into its curriculum to inspire creativity and build business acumen in its students. With a strong focus on practical learning, research, and skill development, we aim to prepare future leaders who will drive progress and innovation in the nation.

About Event: -

Swarnnim Institute of Technology, in collaboration with ISRO and ISRS, hosted a seminar on "Remote Sensing & Space Technology" on March 6, 2025. The event featured esteemed ISRO scientists, including Shri Ashish Mishra, Dr. S. Manthira Moorthi, Dr. Praveen Kumar Gupta, and Dr. Shard Chander. Sessions covered optical data processing, cryosphere studies, and land hydrology.

A panel discussion with eight startups explored innovative applications of space technology. Over 100 students participated, showcasing their enthusiasm for remote sensing. The seminar concluded with a valedictory address by Dr. Kavita Kshatriya, highlighting the importance of collaborations between academia and industry.

Special thanks were extended to faculty members and student coordinators for their contributions. The event inspired future collaborations and reinforced Swarnnim Institute's commitment to fostering innovation in space research.

Seminar on
**REMOTE SENSING &
SPACE TECHNOLOGY**

ON 18 FEBRUARY 2025 10 AM ONWARDS

 **Seminar Hall**
Swarnim Startup & Innovation University

SPEAKERS



Dr. Shard Chander
Secretary, ISRS-AC)
Scientist SF, Hydrology Division
Space Applications Centre, ISRO



P. K. Gupta
Head, Hydrology and
Cryosphere Division
Space Applications Centre, ISRO



Dr. Deepak Gadani
Professor, Department of Physics,
University School of Sciences,
Gujarat University, Ahmedabad.
(Vice Chairman, ISRS-AC)



Dr. Rina Kumari
Assistant Professor
Central University of Gujarat
Gandhinagar
Joint Secretary, ISRS-AC)



Shri. Ashish Mishra
Group Director
Space Applications Centre



Dr. S. Manthira Moorthi
Group Director
Optical Data Processing Group
Signal & Image Processing Area
Space Applications Centre, ISRO

Organised by

**Swarnim Institute
of Technology**

Dr. Ranjeet Kumar

Director- SIT

Coordinator

Prof. Hardik Prajapati

**Startup Mentorship Program
by ISRS - AC & ISRO**



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Programme Schedule of the event is as follows:

Time	Activity	Speaker/Coordinator
10:00 AM	Inauguration Ceremony	Vice President Mr. Adi Jain, Provost Dr. Ragin Shah
10:30 AM	Keynote Address on Remote Sensing	Shri Ashish Mishra “ Group Director, SAC, ISRO
11:15 AM	Technical Session 1: Optical Data	Dr. S. Manthira Moorthi “ Group Director, SAC, ISRO
12:00 PM	Technical Session 2: Cryosphere Studies	Dr. Praveen Kumar Gupta “ Group Head, SAC, ISRO
12:45 PM	Lunch Break	
2:00 PM	Technical Session 3: Land Hydrology	Dr. Shard Chander “ Division Head, SAC, ISRO
2:45 PM	Startups Picthings	Experts and Startups
3:30 PM	Valedictory Address	Dr. Kavita Kshatriya, Academic Dean (Technical Program), Swarnnim Institute of Technology

Duration of Event: 4 Hours

No. of Students participated: 100 Student Participants

Programme Highlights:

- **Collaboration with ISRO and ISRS Ahmedabad Chapter**
The seminar was conducted in partnership with prestigious organizations like ISRO and ISRS to promote advancements in remote sensing and space technology.
- **Esteemed Speakers from ISRO**
The event featured distinguished scientists such as Shri Ashish Mishra, Dr. S. Manthira Moorthi, Dr. Praveen Kumar Gupta, and Dr. Shard Chander.
- **Diverse Topics Covered**
Sessions included discussions on optical data processing, cryosphere studies, land hydrology, and practical applications of remote sensing.
- **Engagement with Startups**
Eight startups participated in a panel discussion to explore innovative applications of space technologies.
- **Strong Academic Support**
The seminar was supported by senior officials of Swarnim Institute of Technology, including Vice President Mr. Adi Jain and Provost Dr. Ragin Shah.
- **Student Participation**
Over 100 students actively engaged in the seminar, showcasing their enthusiasm for space technology.

Session 1: Optical Data Processing by Dr. S. Manthira Moorthi “ Group Director, SAC, ISRO



Dr. S. Manthira Moorthi, Group Director at SAC-ISRO, delivered an enthralling session on the significance of optical data processing in remote sensing. She began by introducing the audience to the fundamentals of optical sensors and their pivotal role in capturing high-resolution satellite imagery. Dr. Moorthi elaborated on how such imagery is instrumental in applications like land use mapping, crop monitoring, urban planning, and disaster management.

The highlight of her session was the discussion on advanced algorithms used to enhance image quality and extract meaningful insights from satellite data. She explained how these algorithms improve the accuracy and reliability of data interpretation, which is crucial for decision-making processes in environmental management and resource allocation. Dr. Moorthi also shared insights into the latest advancements in optical data processing, including machine learning techniques for image classification and real-time data processing systems.

Her presentation was enriched with practical examples and case studies from ISRO's projects, which resonated well with the audience. The attendees were particularly impressed by her ability to simplify complex technical concepts, making them accessible even to those

new to the field. By the end of her session, Dr. Moorthi had not only educated but also inspired the participants to explore further opportunities in optical data processing.

Session 2: Cryosphere Studies by Dr. Praveen Kumar Gupta “ Group Head, SAC, ISRO



Dr. Praveen Kumar Gupta, Group Head at SAC-ISRO, captivated the audience with his comprehensive overview of cryosphere studies and their hydrological applications. He began by emphasizing the importance of monitoring glaciers and snow cover as indicators of climate change and their impact on global water resources.

Dr. Gupta delved into the use of remote sensing techniques for assessing glacier dynamics, snowmelt patterns, and their implications for river systems and agriculture. He highlighted ISRO's contributions to cryosphere research through satellites like RISAT and Cartosat, which provide critical data for understanding glacier retreat and its long-term effects on water availability.

The session also included real-world examples of how cryosphere studies have been used for better water management strategies in India. Dr. Gupta showcased ISRO's collaborative projects with hydrology experts to develop predictive models for water resource planning. His ability to connect scientific research with practical applications made his presentation highly engaging for both students and startups.

The audience appreciated Dr. Gupta's approachable demeanor and his willingness to address questions about climate change mitigation strategies using space technology. His session left participants with a deeper understanding of how cryosphere studies contribute to sustainable development.

Session 3: Land Hydrology by Dr. Shard Chander “ Division Head, SAC, ISRO



Dr. Shard Chander, Division Head at SAC-ISRO, delivered an insightful session on land hydrology and its role in effective water resource management. He began by explaining how remote sensing data is utilized to monitor soil moisture levels, groundwater reserves, and flood patterns.

Dr. Chander discussed ISRO's advancements in integrating satellite data with hydrological models to enhance flood forecasting accuracy and improve drought management strategies. He provided examples of successful applications in river basin monitoring and agricultural planning, showcasing how these technologies have benefited farmers and policymakers alike.

One of the key takeaways from his presentation was the potential of remote sensing technology to address pressing water-related challenges in India. Dr. Chander emphasized the importance of interdisciplinary collaboration between scientists, engineers, and decision-makers to maximize the impact of hydrological research.

His session concluded with a discussion on future trends in land hydrology research, including the use of AI-driven analytics for real-time monitoring. The audience found his presentation highly practical and forward-looking, as it bridged the gap between theoretical knowledge and real-world applications.

Startup Pitching and Guidance Provided



During the seminar, eight startups participated in a pitching session, receiving guidance from ISRO experts and panelists. Key points emphasized included focusing on niche applications like cryosphere monitoring and leveraging remote sensing data for practical uses such as urban planning and disaster management.

Startups were advised to adopt cost-effective technologies like small satellites and integrate AI and machine learning for advanced data analytics. Collaboration with academia and industry was stressed to foster innovation and access resources.

The session encouraged startups to explore emerging trends like 5G-enabled satellite communications and focus on sustainability by developing eco-friendly technologies. Securing funding through venture capitalists and government grants was also discussed, with an emphasis on showcasing commercial viability during pitches.

Overall, the session provided actionable insights for startups to refine their business models and scale operations, facilitating potential collaborations with ISRO scientists and stakeholders.

Outcome: -

- **Enhanced Awareness of Remote Sensing Applications:** The seminar significantly increased awareness among students and startups about the diverse applications of remote sensing in environmental monitoring and resource management.
- **Networking Opportunities:** The event provided a platform for startups to network with ISRO experts and explore potential collaborations for innovative projects.
- **Knowledge Exchange:** The panel discussion facilitated a valuable exchange of ideas between industry experts and startups, fostering potential partnerships.
- **Increased Interest in Space Technology:** The event sparked a renewed interest in space technology among the student community, encouraging them to engage in related projects and research.
- **Promotion of Sustainable Practices:** The discussions on water resource management and climate change highlighted the importance of sustainable practices, encouraging participants to adopt environmentally conscious approaches.
- **Development of Innovative Solutions:** The interactions between startups and ISRO experts are expected to lead to the development of innovative solutions using space technology, contributing to India's technological advancements.

Participant Number	Full Name
1	Dr. Nivedita Dwivedi
2	Mineshkumar Prajapa
3	Yukti Newad
4	Khushboo Yadav
5	Dharmendra Pandya
6	Mayank Dabhi
7	Rishabh Maloo
8	Saurabh Kumar
9	Swami Vivekanand Bhatt
10	Krunal Patel
11	Vishal Goel
12	Priya Shah
13	Apurva Shukla
14	Dr. Abhinav V Sonawane
15	Solanki Arpita
16	Vishwa Makadiya
17	Priya Dhamsaniya
18	Gohil Diya Jagrutsinh
19	Archana Pandey
20	Kaushal kamleshjumar Vyas
21	Riya dodiyar
22	Sunia
23	Ms Ekta Gurnany
24	Ms. Mehak Bhat
25	Vishwabhan Singh
26	VINY DAVE
27	Patel Shailja Kavalkumar
28	Vaibhavi Patel
29	Hetvi Patel
30	Nishita Ambwani
31	Nidhi Parmar Jigneshbhai
32	Patel Nensi
33	Vijaykumar
34	Bhesaniya krushi jayshukhbhai

35	Vani jha
36	Vanshika Acharya
37	Kashish navinchandra trivedi
38	Yaashree Raval
39	Vaishnav trupti kishorbhai
40	Patel aeni
41	CHAUHAN BHOOMI
42	ASHOK
43	Faruqi Falaknaz Moinuddin
44	Mistry Nishita
45	Shreya Gupta
46	Ayushi Jani
47	Solanki Nandani
48	Italiya ishani dineshbhai
49	Mandvi singh
50	PATEL GOPIBEN KIRITBHAI
51	Saloni Desai
52	Panchal Sonal asantkumar
53	Patel Archi Dipakkumar
54	Meshva Patel
55	Patel Ayushi Rajeshkumar
56	Shreya Umang shah
57	Choudhary Riddhi
58	Rupesh
59	Premjani vishakha jaikishandas
60	PATELPREKSHA NILESHKUN
61	Dr. Sakshi Rajeshbhai Trivedi
62	Sarita Ketan Modha
63	Daksha Patadia
64	Vrushhi Patel
65	Alka Parekh
66	Tajgnee Kalyani Trivedi
67	Khushboo Rajpurohit
68	Kashmira Pravin kumar Solanki
69	Ujali Padhiyar
70	Dhartiben Maulikkumar Dave

71	Khyati Kaladia
72	Krishna Siddhapura
73	Neetu Giri
74	Navya Khamar
75	Vachhani Dhawal Bharatbhai
76	Devanshi Modak
77	Dharti Barad
78	Patel Krusha Pareshbhai
79	Bhoraniya Jiya Dineshbhai
80	Maahi ManojKumar Gajjar
81	AMIT KAUSHAL
82	Ayushi Shah
83	Dr Vrunda V Shalh
84	Komal chavda
85	Disha Dakhara
86	Sneha Jani
87	Vishal Kumar
88	Bhavna jani
89	Komal Makavana
90	Dr. Mitali Jasani
91	Dr. Aditi Hemrajbhai Bariya
92	Sanjana Tukarambhai
93	DR SOURABH JAIN
94	Khushboo Yadav
95	Hiral Darji
96	Patei krina ketankumar
97	Kashmira solanki
98	Adroja Krena ratilal
99	Patel vishwa kirankumar
100	Patel Dhruyi
101	Dr. Jignasha Ronak Pandya
102	Jayesh Patel
103	Nansi Hadvani
104	Premjani vishakha jaikishandas
105	Khushi
106	Narendra jadhav

107	Shachi Hitendrakumar Patel
108	Jainisa Kalpesh Vekariya
109	Patel Neha Nitinbhai
110	Patel Prachi Nayankumar
111	Riya Haveliwala
112	Patel Tanvi
113	Patel Priyanshi Sanjaykumar
114	Hemali Patel
115	Patel Manushri Kamlestbhai
116	Harsh Bajaj
117	Yashvi Atulkumar Shah
118	Solanki dhruvi vinodkumar

