

Transforming Education Transforming India





2nd International Conference on

"Small Satellites-2022"

29-30 April | Punjab | India

Theme: Small Satellite Services 2 Anybody Anywhere Anytime (3S 2 3A)

"Small Satellite Services 2 Anybody Anywhere Anytime (3S 2 3A)" is a very fitting statement for describing the second International Conference on Small Satellites (ICSS 2022) organized by Lovely Professional University in association with Society for Small Satellite Systems (SSSS) to be held at LPU, Punjab, India from 29-30 April 2022. The small satellites provide an inherent advantage in comparison to their larger counterparts owing to their small size, cost, the timeline for manufacturing to the mission. As a result, a greater number of unique payloads are available for deployment in limited resources to enhance the space services for 'Anybody Anywhere Anytime'. This is the second event in the country and first by any University especially for highlighting the cutting-edge technological aspects of small satellite missions and business.

This flagship conference will explore the realms of a variety of payload designs for small satellites and its applications including other relevant areas but not limited to orbital control systems, power management systems for small satellites, inter-satellite communication, telemetry, telecomm and, navigation and RF systems, quality, testing, and reliability aspects of small satellites, spacecraft autonomy, structure, mechanism and materials, constellation management, space law, space business and many more.

Important Dates

| Submission Due Date | 10 April 22 |
|-----------------------------------|----------------|
| Notification of Acceptance Starts | 05 April 22 |
| Camera-ready Paper Due | 15 April 22 |
| Registration open | 10 February 22 |
| Early-bird Registration Closes | 15 April 22 |

(Hybrid -Conference)

CALL FOR PAPERS

Prospective authors are invited to submit their articles in the following tracks. The conference's scope encompasses but not limited to the following general areas:-

| Т | rack 1 | .: Smart Sn | nal | l Sat | elli: | ites | and | Payloads | |
|---|---------|--------------|-----|-------|-------|------|-----|----------|--|
| | Orbital | and Attitude | Co | ntrol | Sys | tem | | | |
| | | | | | | | | | |

- * Power Management System for Small Satellite
- * Telemetry and Telecommand
- * Navigation and RF Systems
- * Structure, Mechanism and Materials
- * Quality, Testing and Reliability aspects of Small Satellites
- **Track 2: Communication Satellites**
- * Inter-satellite Communication
- * Personal Communication
- * Audio and Video Broadcasting
- * Internet Through Satellite
- * TT&C link desigr
- Track 3: Space Craft Autonomy and Onboard AI
- * Spacecraft control
- * Roles of autonomy in Launch and Propulsion
- * Onboard data processing, image processing and management
- * Ground System management
- **Track 4: Constellation Management**
- * AI and ML based Constellation management
- * Constellation Architectures and Large constellations
- * Space traffic regulation
- * Debris Management

Track 5: Small Satellite Constellation Applications and Services

- * Communication Applications
- * Earth observation and Disaster management Applications
- * Strategic Applications
- * Space observation Applications
- * Satellite image processing/ Hyper spectral imaging etc.
- Track 6: Space Law and Space Business
- * National and International laws for Spa
- * Space Business, Space Access
- * Assuring Ecosystem in Space
- * Hazards and management of Space Debris

The selected peer-reviewed papers will be published in the prestigious proceedings of reputed publications which will be duly indexed in Web of Science, Scopus, DBLP, Google Scholar, El-Compendex, Mathematical Reviews and SCImago.



Workshop on 'Satellite Design and Applications for Constellations' (28 April 2022)

ICSS-2022 offers one-day pre-conference workshop with a aim to inculcate the 'Mission to end goal' approach. More details are updated on the conference website.

Project Competition on 'Space Technology and its Applications' (29-30 April 2022)

The 2022 International Project Competition invites applications from school students, undergraduate, graduate and scholars working in different domains of space technologies and its allied areas. Note: To encourage participation, the registration fee is fully waived off for school students up to XII standard. For project competition, please

registration at: https://forms.gle/FzngZbB1XfynrXTEA

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Venue:

Centre for Space Research, Lovely Professional University (LPU), Phagwara, Punjab, India-144411

Queries about the conference can be addressed to: icss@lpu.co.in

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Paper Submission

This flagship event is expected to attract academicians, technologists, industry experts, scientists, engineers, and young researchers from different research labs, and institutes of repute from India and abroad for sharing their experiences and their contributions in the field of small satellites. The conference will be enriched with keynote talks (invited talks by distinguished experts) and contributory talks (by authors of selected papers) on the topics of the conference. Authors are invited to submit the full paper (Maximum 6 pages, single column A4) as PDF using the Springer template. The paper must clearly indicate the research area, main results and contributions. Submitted articles should be in PDF format. Please check the ICSS 2022 website for latest updates. Paper submission link:

https://easychair.org/cfp/icss-2022

Call for Exhibition/Sponsorships

Detailed exhibition and sponsorship opportunities are available on the conference website.

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| Event | Participant | National | International | | | | | |
|------------|-----------------------|----------|---------------|--|--|--|--|--|
| Con | Students | INR 5500 | USD 150 | | | | | |
| Conference | Academia | INR 7000 | USD 200 | | | | | |
| nce | Industry | INR 9000 | USD 300 | | | | | |
| Workshop | Students | INR 500 | USD 60 | | | | | |
| | Academia/ Industry | INR 700 | USD 80 | | | | | |
| D | Students | INR 800 | USD 80 | | | | | |
| Delegate | Academia | INR 1500 | USD 100 | | | | | |
| te | Industry | INR 4000 | USD 150 | | | | | |



For more details on Conference/Workshop/ Project Competition: https://conferences.lpu.in/icss