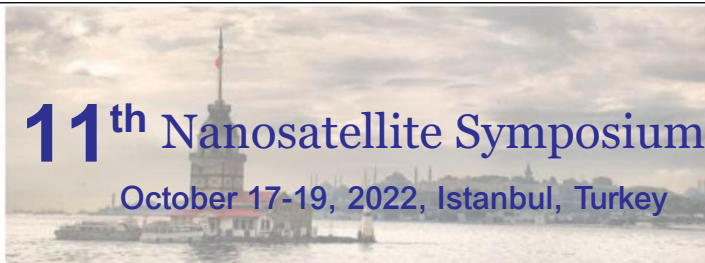




# 11<sup>th</sup> Nanosatellite Symposium

October 17-19, 2022, Istanbul, Turkey



## CALL FOR ABSTRACTS - FIRST ANNOUNCEMENT

### 11<sup>th</sup> Nano-Satellite Symposium

*Micro/nano/pico Satellites: Innovations in Architecture, Technologies and Players*

Recent advancement of micro/nano/pico-satellites' technologies and development process has made these very small satellites more and more important and indispensable tools for space development and utilizations. Their characteristics of enabling low cost and quick development is realizing innovative and challenging missions, including Earth monitoring, information gathering, deep space explorations, communications, education, entertainment or even more individualistic usages as well as involvement of more diverse players in satellite projects and applications. Actually many small business enterprises that are appearing recently resulted from academic small satellite projects. During the last two years, about 500 micro/nano/pico satellites were launched into various orbits using a variety of launch vehicles, and it is predicted that this trend will get even stronger in the near future.

The Nano Satellite-Symposium has been a part of the "Hodoyoshi Project"\* , which is granted by the Japan Society for the Promotion of Science (JSPS) in the "Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST Program)," initiated by the Council for Science and Technology Policy (CSTP) of Cabinet Office, Government of Japan. (JSPS Official site: [www.jspso.go.jp/english/e-first/index.html](http://www.jspso.go.jp/english/e-first/index.html)).

The first nine Nano Satellite-Symposium were held in Japan except the 7th which was in Varna, Bulgaria. First one in 2010 in Tokyo, second one in 2011 in Tokyo, third one in 2011 in Kitakyushu, fourth one in 2012 in Nagoya, fifth one in 2013 in Tokyo and the 6th one in 2015 in conjunction with 30th ISTS in Kobe. The 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> ones were also held in conjunction with 31<sup>st</sup>, 32<sup>nd</sup> and 33<sup>rd</sup> ISTS, in Japan. Please visit <http://www.nanosat.jp/> for all details of the first six symposium and ISTS website for others. The 11<sup>th</sup> Nano-Satellite Symposium will be held in breathtaking Turkish city of Istanbul, second time outside Japan.

Nanosatellite symposium is organized jointly with UNISEC Global (<http://www.unisec-global.org/>).

We sincerely hope that many engineers, researchers, scientists, students, users and business persons from all over the world will participate in the symposium and discuss together to further enlarge and strengthen the micro/nano/pico-satellite community. Please join us in the beautiful city of Istanbul where old meets new and modern meets history; a really inspiring city!

\*The Project: The establishment of new paradigm of space development and utilization with Nano-satellites introducing Japanese-original "reasonably reliable systems engineering (Core Researcher: Professor Shinichi Nakasuka, the University of Tokyo)".

### Scope

The following list of topics for micro/nano/pico-satellites (less than approximately 100kg satellites) is of relevance to the Symposium:

#### A) Novel missions and applications

- 1) Earth observation
- 2) Disaster monitoring
- 3) Communication type missions
- 4) Space science and space exploration
- 5) Moon, Mars missions
- 6) "Personal use" type missions
- 7) Other new areas of missions

#### B) Lessons learned astro-space utilizations

- 1) Public welfare type service
- 2) Service for business
- 3) Experiences of actual satellite projects in other fields

#### C) Technologies and infrastructure

- 1) Satellite architectures
- 2) Novel components and interface technologies
- 3) Software development styles and architectures
- 4) Standardization
- 5) Ground test techniques
- 6) Ground station systems
- 7) Archive and information processing
- 8) Launch opportunities
- 9) Regulatory issues
- 10) Education and capacity building

### Venue

The 11th Nano-Satellite Symposium will be held in Suleyman Demirel Cultural Center (SDCC), Istanbul Technical University (ITU), Ayazaga Campus, Istanbul, Turkey. SDCC houses university's academic and cultural activities. Named after the ninth president of Turkey, Süleyman Demirel, SDCC is easily accessible by ITU subway station and other means of public transportation (<https://www.sdcm.itu.edu.tr/merkez-salonlar/sdkm>).

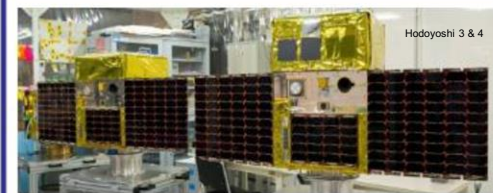
### Important dates

- Submission of Abstracts\* ..... 31 July 2022
- Notification of Acceptance ..... 15 August 2022
- Early Registration ..... 15 September 2022
- Submission of papers\*\* ..... 3 October 2022

\*Abstracts must be 1-2 pages in length  
\*\* Submission procedure, abstracts and paper templates are available at: [nanosat11th.itu.edu.tr](http://nanosat11th.itu.edu.tr)

### Abstract submission

- The 11<sup>th</sup> Nano-Satellite Symposium invites prospective authors to submit abstracts of their works. All submissions will be reviewed for quality, relevance and merit. All accepted abstracts will be included in the symposium proceedings and distributed to participants during the Symposium.
- Authors are expected to follow the abstract submission guideline.
- Presenting authors will be informed and offered an alternative poster presentation if their abstracts are not selected for oral presentation.



### Conference Chairs

#### Local Chair

**Alim Rüstem Aslan** (Istanbul Technical University)

#### General Chair

**Shinichi Nakasuka** (University of Tokyo)

#### UNISEC Global Secretary General

**Rei Kawashima** (UNISEC Global)

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