



Sensors, Systems, and Next-Generation Satellites XXVIII (RS103)

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Many new remote sensing programs are under way throughout the world, in the U.S., Europe, Japan, and elsewhere. NASA's Earth Science Division is developing and implementing a broad range of Earth spaceborne remote sensing missions to answer fundamental scientific questions requiring the view from space and to meet societal needs. These include missions and new program elements from the National Research Council's Earth Science Decadal Survey, missions and selected instruments to assure continuity of long-term key data sets, missions to ensure sustained land imaging provided by the Landsat system, and small-sized competitively-selected small satellite and constellation missions and instruments belonging to the Earth Venture Program.

The Japan Aerospace Exploration Agency (JAXA) is developing and operating the ALOS series, GOSAT series, GCOM series, GPM/DPR, EarthCARE/CPR and ISS/MOLI series of programmes.

The European Space Agency (ESA) is developing and implementing a wide range of Earth Observation missions, encompassing the Earth Explorer missions addressing key scientific issues, as well as operational missions including the Copernicus Sentinels in partnership with the European Union (EU), and the meteorological missions in partnership with the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT). A number of new remote sensing programmes are also under development by other organisations and nations for research and operational use. Many of the above are contributing to the Global Earth Observation System of Systems (GEOSS) as envisioned by the inter-governmental Group on Earth Observations (GEO). Each of these programs comprises a set of remote sensing systems to address their science and applications objectives.

Papers are solicited on the following and related topics:

- sensors being developed
- satellites being developed
- enabling technologies for sensors and satellites
- new design concepts for sensors, systems and satellites
- hyperspectral sensors
- sensor calibration techniques
- in-situ sensor measurement assimilation
- modeling and simulation techniques for sensor concept development
- focal plane assemblies including detectors and spectral filters
- future LIDAR missions
- system precursors including test beds and airborne simulators
- data systems being developed
- new data processing techniques (applications to Big Data and remote sensing, sensor and data interoperability).
- quantum technologies for applications in earth remote sensing from space
- innovative optical technologies for Earth remote sensing payloads from space.

Sessions on the following topics are being planned:

- Japanese missions and technologies
- European missions and technologies
- US missions and technologies
- small satellites (nano/cubesats, microsats) and constellations for Earth observation
- NASA Decadal Survey Designated Observable (DO), Venture Continuity, and Incubation studies
- commercial Earth observing constellations
- UAV systems for Earth observation
- sensor calibration
- focal plane technologies.

Present your research at SPIE Sensors + Imaging

Below are abstract submission instructions, the accompanying submission agreement, conference presentation guidelines, and guidelines for publishing in the Proceedings of SPIE on the SPIE Digital Library. Submissions subject to chair approval.

Important dates

Abstract submissions due	7 May 2024
Registration opens	17 June 2024
Author notified and programme posts online	24 June 2024
Submission system opens for manuscripts and poster PDFs*	3 July 2024
Poster PDFs due for spie.org preview and publication	21 August 2024
Manuscripts due	28 August 2024
Advance upload deadline for oral presentation slides**	13 September 2024

*Contact author or speaker must register prior to uploading
 **After this date slides must be uploaded onsite at Speaker Check-in

What you will need to submit

- Title
- Author(s) information
- Speaker biography (1000-character max including spaces)
- Abstract for technical review (200-300 words; text only)
- Summary of abstract for display in the program (50-150 words; text only)
- Keywords used in search for your paper (optional)
- Check the individual conference call for papers for additional requirements (i.e., special abstract requirements or instructions for award competitions)

Note: Only original material should be submitted. Commercial papers, papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

How to submit your abstract

- Visit the conference page: www.spie.org/rs103call
- Choose one conference that most closely matches the topics of your abstract. You may submit more than one abstract, but submit each abstract only once
- Click the title of the conference to view the full description
- Sign in to the late submission system (now closed) or create an account if you do not already have one
- Follow the steps in the submission wizard until the submission process is completed

Submission agreement

- All presenting authors, including keynote, invited, oral, and poster presenters, agree to the following conditions by submitting an abstract
- Register and pay the author registration fee
 - Oral presenters: recording and publication of your onsite presentation (slides synched with voice) for publication in the Proceedings of SPIE in the SPIE Digital Library
 - Poster presenters: submit a poster PDF by the advertised due dates for publication in the Proceedings of SPIE in the SPIE Digital Library; poster PDFs may also be published and viewable in the spie.org programme during and immediately after the event. Each poster must have a unique presenter; one person may not present more than one poster
 - Email messaging for the conference series
 - Submit a manuscript by the advertised due date for publication in the Proceedings of SPIE in the SPIE Digital Library
 - Obtain funding for registration fees, travel, and accommodations
 - Attend the meeting
 - Present at the scheduled time

Review and program placement

- To ensure a high-quality conference, all submissions will be assessed by the conference chair/editor for technical merit and suitability of content
- Conference chairs/editors reserve the right to reject for presentation any paper that does not meet content or presentation expectations
- Final placement in an oral or poster session is subject to chair discretion

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- More publication information available on the [SPIE Digital Library](http://SPIEDigitalLibrary).

Contact information

For questions about your presentation, submitting an abstract, or the meeting, contact your [Conference Program Coordinator](#).

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