

ANS[®] **CALL FOR PAPERS**

SUBMIT AN ABSTRACT OR FULL PAPER

<https://apps.ans.org/esr/event-nets2026/>



PROGRAM SPECIALIST

Isabel Brinker
708-579-8290 | ibrinker@ans.org

Nuclear and Emerging Technologies for Space (NETS 2026)

April 27–30, 2026 | Dayton, OH | The Dayton Convention Center

General Chair
Chadwick Barklay
(University of Dayton Research Institute)

Program Chair
Christofer Whiting
(NASA Glenn Research Center)

Assistant Program Chair
James Winter
(AFRL Space Vehicle Directorate)

ABSTRACTS OR FULL PAPERS DUE: NOVEMBER 3, 2025

**ABSTRACTS OR FULL
PAPERS DUE
NOVEMBER 3, 2025**

**AUTHOR NOTIFICATION OF
ACCEPTANCE
DECEMBER 15, 2025**

**FINAL ABSTRACTS OR FULL
PAPERS (WITH EDITS) DUE
JANUARY 26, 2026**

NO EXTENSIONS

ABOUT THE CONFERENCE

Papers and abstracts are solicited for the Nuclear Emerging Technologies for Space 2026, to be held on April 27–30, 2026 in Dayton, OH. This event is organized by the American Nuclear Society (ANS) and hosted by the University of Dayton Research Institute (UDRI). Authors and presenters are cordially invited to participate in this event to exchange ideas and knowledge, develop strong relationships across organizations, and establish collaborations to solve challenging problems. The concluding banquet will be held at the National Museum of the United States Air Force.

FORMATS, PRESENTATIONS, AND PUBLISHING

Paper and abstract acceptance will be based upon originality of the work, strictly implemented methods or models, quality of results, and impact of the scientific advances to the field of Nuclear Emerging Technologies for Space. There are two options for submittal, using the Electronic Paper Submittal and Review (EPSR) system:

1. Full Paper/Standard-Length Presentation Option

- Submit a single page abstract to the full-paper session in one of the tracks. If your abstract is accepted, you will be expected to provide a full paper (maximum of 8 pages) and accompanying standard-length presentation at the conference.

2. Short Abstract/Lightning Talk Option

- Submit a 150-word abstract to the Lightning Talk session in one of the tracks. If your abstract is accepted, you will provide a brief “Lightning Talk” at the conference. For this option, you will not submit a full paper later.

[Templates for abstracts and papers can be found on the NETS 2026 webpage.](#)

NETS 2026 will consist of four tracks. When you submit your paper or abstract, please indicate the track where you would like your work to be considered. You can make this choice in the EPSR system when you submit your paper/abstract.

- **Track 1: Technology Research and Development.** This track covers the research and development of various space nuclear technologies such as Radioisotope Heat, Radioisotope Power Systems, Fission Power Systems, and Nuclear Propulsion. This track also dives into Fuels Development, Energy Conversion, Heat Rejection, Cryogenics, Autonomy, Control Systems, Modeling, and Simulation.
- **Track 2: Testing, Evaluation, and Production Supply Chain, Including Production, Evaluation, and Delivery.** This track covers Isotope Production/Processing, Fuel Testing, Irradiation Experiments, Post-Irradiation Examination, Component and System Testing, High-Temperature and Specialty Materials, Advanced Manufacturing, Supply Chain, Ground Operations and Integration, and Test Facilities.
- **Track 3: Architectures, Missions, and Use Cases.** This track covers Civil, Commercial, and Defense Applications. It also includes Programmatic Overviews/Updates, Lessons Learned from Past Programs, Nuclear vs. Conventional Trade Studies, Compatibility with Space Launch Vehicles and Complexes, Space Science, Exploration, Resource Recovery and Utilization, and Payloads.
- **Track 4: Policy, Regulations, Safety, and Security.** This track covers Challenges and Gaps for Commercial Nuclear Systems, Fission Systems, Existing Frameworks and Approaches, Safety Approaches, Best Practices, Consensus Standards, Export Control, Safeguards, Non-proliferation, Arms Control Considerations, and International Engagement.

All accepted and presented papers and abstracts will be published in the conference's proceedings. Authors of select papers will be invited to submit updated/expanded versions of their papers to a special edition of *Nuclear Technology* or *Nuclear Science and Engineering*. Submissions to these journals will undergo further peer review, with possible revisions required. Invitation is not a guarantee of acceptance.