ANNOUNCEMENT and FIRST CALL FOR PAPERS

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2026 IEEE NUCLEAR AND SPACE RADIATION EFFECTS CONFERENCE

Short Course and Radiation Effects Data Workshop

July 20-24, 2026
Puerto Rico Convention Center
San Juan, Puerto Rico

You are cordially invited to attend the 2026 IEEE Nuclear and Space Radiation Effects Conference to be held July 20-24, 2026 at the Puerto Rico Convention Center, San Juan, Puerto Rico. The conference features a technical program consisting of eight to ten technical sessions of contributed papers describing the latest observations in radiation effects, a Short Course on radiation effects issues, a Radiation Effects Data Workshop, and an Industrial Exhibit. The technical program includes oral and poster sessions.

Papers on nuclear and space radiation effects on electronic and photonic materials, devices, circuits, sensors, and systems, as well as semiconductor processing technology and design techniques for producing radiation-tolerant (hardened) devices and integrated circuits, will be presented at this meeting of engineers, scientists, and managers. International participation is strongly encouraged.

We are soliciting papers describing significant new findings in the following or related areas:

Basic Mechanisms of Radiation Effects in Electronic Materials and Devices

- Single-Event Charge Collection Phenomena and Mechanisms
- Ionizing Radiation Effects
- Displacement Damage
- Radiation Transport, Energy Deposition, and Dosimetry
- Materials and Device Effects
- Processing Related Radiation Effects

Hardness Assurance Covering Piece Parts, Systems, and Testing Approaches

- New Modeling and Testing Techniques, Guidelines, and Hardness Assurance Methodologies
- Unique Radiation Exposure Facilities, Test Facility Developments, Novel Instrumentation Methods
- Dosimetry

Radiation Effects on Electronic and Photonic Devices, Circuits, and Systems

- Single Event Effects, Total Dose, and Displacement Damage
- MOS, Bipolar, and Advanced Technologies
- Wide Bandgap Semiconductors and Power Devices
- Systems on a Chip, GPUs, FPGAs, Microprocessors, and Neuromorphic Devices
- Isolation Technologies, such as SOI and SOS
- Methods for Hardened Design and Manufacturing
- Modeling and Hardening of Devices and Circuits
- Cryogenic or High Temperature Effects
- Novel Device Structures, such as MEMS and Nanotechnologies
- Emerging Modeling and Experimental Techniques for Hardening Systems

Space, Atmospheric, and Terrestrial Radiation Effects

- Characterization and Modeling of Radiation Environments
- Space Weather Events and Effects
- Spacecraft Surface and Internal Charging
- Predicting and Verifying Soft Error Rates (SER)

New Developments of Interest to the Radiation Effects Community

Paper Summary Deadline: February 6, 2026

PROCEDURE FOR SUBMITTING SUMMARIES

Authors must conform to the following requirements:

Summaries must be received by February 6, 2026
Detailed submission and formatting instructions will be available after December 1, 2025 at www.nsrec.com

1. Prepare a single Adobe Acrobat file consisting of a cover page and an informative two to four page summary describing results appropriate for 12-minute oral or poster presentation. The cover page must provide an abstract no longer than 35 words, the title, name and company affiliation of the authors, and company address (city, state, country). Identify the author presenting the paper and provide telephone, and email address. The summary must include sufficient detail about the work to permit a meaningful technical review. In the summary, clearly indicate (a) the purpose of your work, (b) significant new results with supporting technical material, and (c) how your work advances the state of the art. Show key references to other related work. The summary must be no less than two and no more than four pages in length, including figures, tables, and references. All figures and tables must be large enough to be clearly read. Note that this is more than an abstract, but do not exceed four pages. Watch Our NSREC Video on How to Prepare a Strong Summary: https://youtu.be/bbHNPofpmMs
2. Prepare your summary in single-column or IEEE TNS standard two-column format, using 11 point or greater font size, formatted for either U.S. Standard (8.5 x 11 inch) or A4 (21 x 29.7 cm) page layout, with 1 inch (2.5 cm) margins on all four sides.
3. Obtain all corporate, sponsor, and government approvals and releases necessary for presenting your paper at an open attendance international meeting.
4. Summary submission is electronic only, through ***www.nsrec.com.*** The submission process consists of entering the paper title, author(s) and affiliation(s), an abstract no longer than 35 words, and uploading the summary. Authors are prompted to state their preference for presentation (oral, poster, or data workshop poster) and for session. Details of the submission process may be found at ***www.nsrec.com.*** The final category of all papers will be determined by the Technical Program Committee, which is responsible for selecting final papers from initial submissions.

Papers accepted for oral or poster presentation at the technical program are expected to be submitted for publication in the IEEE Transactions on Nuclear Science (Spring 2027). Selection for this issue will be based on a separate submission of a complete paper. These papers will be subject to the standard full peer review given all papers submitted to the IEEE Transactions on Nuclear Science. Further information will be sent to prospective authors upon acceptance of their NSREC summary. It is not necessary to be an IEEE member to present a paper or attend the NSREC. However, we encourage IEEE and NPSS membership of all NSREC participants.

RADIATION EFFECTS DATA WORKSHOP

The Radiation Effects Data Workshop is a forum for papers on radiation effects data on electronic devices and systems. Workshop papers are intended to provide radiation response data to scientists and engineers who use electronic devices in a radiation environment, and for designers of radiation-hardened systems. Papers describing new simulation techniques validated or data-supported, results, or radiation facilities are also welcomed. **The procedure for submitting a summary to the Workshop is identical to the procedure for submitting NSREC summaries.** Radiation Effects Data Workshop papers will be published in a Workshop Record and are not candidates for publication in the Conference issue of the *IEEE Transactions on Nuclear Science.*

SAN JUAN, PUERTO RICO

The NSREC 2026 will be at the Puerto Rico Convention Center in San Juan. Puerto Rico is an archipelago known for its stunning beaches, vibrant culture, and rich history. The main island has a mountain range, La Cordillera Central, that runs east to west. At 4389 ft, Cerro de Punta is the highest point on the range and is in the central town of Jayuya.

In addition, PR is a tropical habitat. It boasts the only tropical rainforest in the U.S. national forest system named El Yunque. Although El Yunque is one of the smallest national forests in the U.S., it is one of the most diverse, holding 183 animal species and 225 tree species (23 of which are only encountered in PR). Wildlife is not limited to El Yunque.

One of the island's renowned wildlife species is the coquí (koh-KEE), a dime-size frog whose name comes from the sound it makes. The island also has around 320 bird species, including the emerald hummingbird (only found in PR) and the Puerto Rican parrot.

The island is full of beautiful sounds, tasty food, and lively colors. Puerto Rican music and dance are the epitome of expressions from the Island's Boricua heritage, a unique mix of Taíno, Spanish, and African traditions. The people of Puerto Rico are very proud of their culture and are eager to share it with their island's visitors. Spanish and English are the official languages of PR; however, Spanish is more commonly spoken. Come and enjoy all that Puerto Rico has to offer.