

2nd IEEE International Conference on Next Generation Electronics (NELeX-2026)

Call for Papers – Special Session

Next-Generation Smart Antenna and RF Front-End Technologies for Future Wireless Communication

08 - 10, May 2026

ABOUT THE SPECIAL SESSION

The proposed special session aims to provide a platform for researchers, academicians, and industry professionals to discuss recent advancements and emerging trends in intelligent antenna systems and RF front-end technologies for next-generation wireless networks. With the rapid evolution of 5G, beyond 5G (B5G), and 6G communication systems, there is an increasing demand for high-performance, energy-efficient, and adaptive RF solutions to enable enhanced spectral efficiency, massive connectivity, and low-latency communication. This session will focus on innovative developments in smart and adaptive antennas, beamforming techniques, reconfigurable and tunable RF components, mm Wave and THz technologies, AI-driven design approaches, and integrated RF front-end architectures.

TENTATIVE TOPICS (Not Limited To)

- Smart and Adaptive Antenna Systems
- RF Front-End Design for 5G/6G Networks
- Beamforming and Massive MIMO antenna
- AI/ML-Driven Antenna and RF Optimization
- Reconfigurable and Tunable RF Systems
- mm Wave and THz Antenna Technologies
- Integrated Antenna-in-Package (AiP) and System-in-Package (SiP)
- Antenna Measurement, Characterization, and Prototyping

SUBMISSION GUIDELINES

- Papers must follow the NELeX 2026 conference template.
- All submissions will undergo the standard IEEE peer-review process.
- Accepted papers will be included in IEEE Xplore.

Submission Link: <https://vit.ac.in/NELeX-2026/authors.html#submission>

SPECIAL SESSION ORGANIZERS

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IMPORTANT DATES

- **Call for Papers Due:** 15 March 2026
- **Acceptance Notification:** 31 March 2026
- **Final Manuscript Submission & Registration:** 15 April 2026