



YOKOHAMA SMiRT 27  
2024

First Announcement and Call for Abstracts

# SMiRT 27

27th International  
Conference on  
Structural Mechanics  
in Reactor Technology

Next Generation Structural Mechanics in Reactor Technology  
—Contributions for achievement of higher reactor performance



PACIFICO Yokohama, Japan  
March 3-8, 2024

[www.smirt27.com](http://www.smirt27.com)



Japan Association of Structural Mechanics in Reactor Technology



Atomic Energy Society of Japan



## WELCOME ADDRESS

The SMiRT 27 in Yokohama Japan will discuss what is “Next Generation Structural Mechanics in Reactor Technology” on the bases of lessons learned from the Fukushima Daiichi Nuclear power plant accident. It will be co-hosted by JASMiRT and Atomic Energy Society of Japan. Plenary lectures, special sessions, tutorials and workshops will be organized to discuss this topic in addition to the regular sessions. The SMiRT 27 aims to bring together leaders, managers, engineers, plant operators, regulators and academia working in the field of nuclear technology to make greater contribution for achievement of higher reactor performance. We hope that various efforts to improve world-wide nuclear safety, long-term operation in consideration of aging issues, communication between regulatory authorities and industries, standardization of reactor-independent codes/standards, etc. will be central issues in SMiRT 27, to establish “Next Generation Structural Mechanics in Reactor Technology.”

Dr. Tsuyoshi Takada  
Conference Chair

## TECHNICAL DIVISIONS

- Division 1: Mechanics of Materials
- Division 2: Fracture Mechanics and Structural Integrity
- Division 3: New Computation, Simulation and Visualization
- Division 4: External, Internal Hazards and Load Characterization
- Division 5: Modelling, Testing & Response Analysis of Structures, Systems and Components
- Division 6: Design Issues, Codes and Standards
- Division 7: Safety, Reliability, Risk and Safety Margins
- Division 8: Issues Related to Operation, Inspection and Maintenance
- Division 9: Fuel Cycle Facilities, Waste Management and Decommissioning
- Division 10: Advanced and Small Modular Reactors
- Division 11: Construction Management, Cost, Scheduling and Insurance
- Division 12: New Technologies (Additive Manufacturing, AI, Digital Twin, etc.)

### SHIBATA EARLY CAREER AWARD

SMiRT 27 will continue the Shibata Early Career Award Sending in honor of Prof. Heki Shibata's achievements. The objective of the award is to identify and recognize outstanding work of young and early career professionals.

### ROBERT KENNEDY AWARD

In recognition of Dr. Robert Kennedy's significant contributions to the nuclear industry, IASMiRT bestows this award to the author(s) of the best submitted technical paper on subjects related to Dr. Kennedy's field of practice.

### INTERNATIONAL SCIENTIFIC COMMITTEE

Chaired by Dr. Naoto Kasahara, Japan

### VENUE

The venue, PACIFICO Yokohama is the largest and No.1 All-in-One convention complex in Japan equipped with the functions and a directly connected hotel (InterContinental Yokohama Grand) in order to meet every requirement of SMiRT 27. It serves as a central facility in the convention area with over 8,100 hotel rooms, large shopping malls with a variety of entertainment, and dining options within walking distance.

### KEY DATES

Deadline for abstract submission: February 28, 2023  
Deadline for paper submission: November 30, 2023