# الجامعة الأميركية في الشارقة American University of Sharjah

# THE 8<sup>TH</sup> INTERNATIONAL CONFERENCE ON SMART MATERIALS AND NANOTECHNOLOGY IN ENGINEERING (SMN 2024)

NOVEMBER 25-28, 2024 | SHARJAH, UAE

# About SMN 2024

**SMN 2024** is the eighth edition of the successful series of international conferences on smart materials and nanotechnology in engineering. It will serve as a nexus, connecting the dynamic advancements in smart materials and nanotechnology in engineering, catering to a wide array of applications. This conference has been promoted since 2007 by Professor Shanyi Du and Professor Jinsong Leng, from Harbin Institute of Technology (China). Past conference venues have included Harbin (China, 2007), Weihai (China, 2009), Shenzhen (China, 2011), Gold Coast (Australia, 2013), Vancouver (Canada, 2015), Madrid (Spain, 2017), and Harbin (China, 2019).

#### **Conference Chairs**

- Mehdi Ghommem, American University of Sharjah, UAE
- Ayech Benjeddou, Institut Supérieur de Mécanique de Paris (ISAE-Supméca), Saint Ouen sur Seine and Roberval Laboratory (Université de Technologie de Compiègne-UTC), Compiègne, France
- Jinsong Leng, Harbin Institute of Technology, China
- Abdessattar Abdelkefi, New Mexico State University, USA

#### International Scientific Committee

- Abdessattar Abdelkefi, New Mexico State University, USA
- Zoheir Aboura, Université de Technologie de Compiègne, France
- Nouha Alcheikh, Khalifa University, UAE
- Eihab Abdel-Rahman, University of Waterloo, Canada
- Aurelio Lima Araujo, IDMEC Instituto Superior Tecnico, Portugal
- Ayech Benjeddou, ISAE-SUPMECA & SUA-UTC ROBERVAL, France
- Tarak Ben Zineb, Université de Lorraine, France
- Mohamed Dagag, New York University Abu Dhabi, UAE
- Alper Erturk. Georgia Institute of Technology. USA
- Mehdi Ghommem, American University Shariah, UAE
- Srinivasan Gopalakrishnan, Indian Institute of Science, Bangalore, India
- Najib Kacem, University Bourgogne Franche-Comté, FEMTO-ST Institute, France
- Santosh Kapuria, Indian Institute of Technology, Delhi, India
- Mickael Krommer, Johannes Kepler University, Austria
- Jinsong Leng, Harbin Institute of Technology, China
- Nazih Mechbal, Arts et Métiers Ensam, France
- Fehmi Najar, Tunisia Polytechnic School, Tunisia
- Alireza Rezaniakolaei, Aalborg University, Denmark
- Ramin Sedaghati, Concordia University, Canada
- Dimitris A. Saravanos, University of Patras, Greece
- Marcelo Areias Trindade, University of São Paulo, Brazil
- Daniil Yurchenko, University of Southampton, UK
- Norman M. Wereley, University of Maryland, USA
- Wael Zaki, Khalifa University, UAE

#### **Conference Topics**

- Smart materials (piezoelectric/ferroelectric, shape memory, magneto/electrorheological, magneto/electro-strictive, dielectric elastomers, electroactive polymers, metamaterials, self-healing materials, energy storage materials, etc.)
- Nanotechnology in engineering (nano-materials, nano-reinforced composites, nano-structures, nano-systems, nano sensors, nano actuators, nano harvesters, etc.)
- Manufacturing technologies (additive, 3D/4D printing, painting, embodying intelligence, bonding, connection, prototyping, etc.)
- Analysis methods and tools (theoretical, computational, experimental, design, model-based, data-based, AI, multiscale, nano, micro, macro, characterization, homogenization, identification, optimization, etc.)
- Active sensing, actuation and transduction (structural vibration/acoustic/shape/position control, morphing, structural health monitoring, energy harvesting, damping, etc.)
- Environment-friendly and sustainable developments (unleaded smart materials, green composites, smart biomaterials, renewable energy, smart IOT devices, wireless communication and energy transfer, smart cities, smart grids, etc.)
- Engineering applications (mechanical, aerospace, mechatronic, robotic, automotive, civil, biomechanical, biomedical, bioengineering, etc.)

#### Invited Lecturers

#### Plenary Lecturers

- Professor Alper Erturk, Georgia Institute of Technology, USA
- Professor Srinivasan Gopalakrishnan, Indian Institute of Science, Bangalore, India
- Professor Mickael Krommer, Johannes Kepler University, Linz, Austria
- Professor Marcelo Areias Trindade, University of São Paulo, Brazil
- Professor Hua-xin Peng, Zhejiang University, China

#### Keynote Lecturers

- Professor Santosh Kapuria, Indian Institute of Technology, Delhi, India
- Professor Dimitris A. Saravanos, University of Patras, Greece

# Important Dates

Special sessions and mini-symposia proposals submission deadline	July 12, 2024
Abstract submission deadline	August 30, 2024
Acceptance notification	September 6, 2024
Manuscript (full paper) submission deadline	September 16, 2024
Manuscript (full paper) final acceptance notification	September 30, 2024
Early bird registration deadline	October 15, 2024
Regular registration deadline	November 15, 2024

# **Registration fees**

Registration is required for admission to the venue and participation in the conference scientific program and other SMN2024 activities. To benefit from the most favorable conference rates, we advise delegates to capitalize on the advantageous Early Bird offer.

	Early Bird (On or before October 15, 2024) USD	Regular (October 15–November 15, 2024) USD
Standard participant	\$500	\$600
PhD student	\$400	\$450
Master's student	\$300	\$350
Accompanying person	\$150	\$200
Banquet dinner ticket	\$50	\$75
Social event ticket	\$75	\$100

\*One registration allows only one submission (abstract/paper) and one presentation (oral/poster).

As the conference will be held in the UAE, SMN2024 is required to collect 5 percent VAT on registration (not included in the prices above).

**Standard participant** registration rate covers a maximum of one accepted submission (abstract, paper) by the same registered author. Standard participants are entitled to: (a) admission to all sessions, (b) daily lunches and refreshments/coffee breaks, (c) welcome reception, (d) conference proceedings, (e) social event and (f) banquet dinner.

**Student (PhD, Master)** participant registration rate covers only one accepted submission (abstract, paper). Student participants are entitled to: (a) admission to all sessions, (b) daily lunches and refreshments/coffee breaks, (c) welcome reception and (d) conference proceedings.

Accompanying person registration includes (a) welcome reception, (b) social event and (c) conference dinner.

### How to register and submit contributions

Authors are invited to submit individual contributions on any of the conference topics. Submissions and conference registration should be performed electronically via the conference website: <u>go.aus.edu/SMN2024</u>

Venue: American University of Sharjah

# Conference Partner Organizing Institutions AUUS الجامعة الأميركية في الشارقة American University of Sharjah ENERGY, WATER AND SUSTAINABLE ENVIRONMENT RESEARCH CENTER dolbane AUUS | American University of Sharjah

For more information, visit: go.aus.edu/SMN2024

