About Missouri S&T

The Americas Conference on Wind Engineering (ACWE) stands as a preeminent international gathering for the wind engineering community, convened by American Association of Wind Engineering. With a great honor, Missouri University of Science and Technology (Missouri S&T) is proud to host the 15th ACWE in St. Louis, MO. Missouri S&T integrates education, research and application to create and convey knowledge that serves our state and helps solve the world's great challenges. It values discovery, creativity and innovation. It prepares students for a fulfilling life defined by the confidence to succeed, a desire to excel and a love of learning that never stops.

CHAIRMAN

Grace Yan

Professor, Director of Center for HMCR, Director of WHAM Laboratory, Missouri S&T.

ORGANIZING COMMITTEE

Kamal Khayat Missouri S&T Genda Chen Missouri S&T Ronaldo Luna Saint Louis U. Panneer Selvam U. of Arkansas Natalie Goeddertz Missouri S&T

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Keynote Speakers



Ahsan Kareem NAE



Jane Smith NAE

Greg Kopp



Xugang Hua

Topics

- Projection of future design wind speeds
- Future tropical cyclone projection
- Aerodynamics of high-rise buildings
- Aerodynamics of lowrise buildings
- C **Environmental wind** engineering
- Severe windstorms
- Wind-induced vibration of slender structures
- Wind Energy



Peter Vickery NAE



Ruby Leung NAE



Tim K.T. Tse

- Performance-based wind engineering
- Socioeconomic impact of wind hazards
- General bluff-body aerodynamics Machine learning and artificial intelligence
- **Recovery and** resiliency
- Bridge and cable aerodvnamics
- Innovative developments

Mini-symposia

- AI in Wind Engineering (Teng Wu)
- Measurement and Modeling of Transient Wind Characteristics (Franklin Lombardo)
- **Computational Wind Engineering (Panneer** Selvam)
- **Catastrophe Modeling of Wind Hazards** (Paolo Bocchini)
- **Tornado Damage and Homeowners** • Insurance (Ji Yun Lee)
- Impacts of ground and lower boundary ٠ conditions on tornadoes (Jana Houser)
- Climate change impact on winds (Eun Cha)
- **Downburst Effects on Structures (Amal** Elawadv)
- **Debris Effects on Structures--Simulations** and Vulnerability Assessments (Amal Elawady)
- Simulation of Wind Effects on Coastal • Communities(Amal Elawady)
- Advancements in Resilience Modeling (Milad Roohi)
- **Risk Assessment of Electric Power Systems** • against Hurricane Hazards (Yousef Darestani)
- Structural Monitoring & Disaster Warning • (Jian Guo)
- **Multi-Disciplinary Community Resilience** and Reconnaissance Studies under Wind-Induced Events (Lisa Wang)

Workshop

Modeling Wind Hazard and Resilience Using IN-CORE (John van de Lindt)

Pre-conference event

Tornado Load Design using ASCE 7-22 and the 2024 IBC (Marc Levitan)

Post-conference event

- 8th International Workshop on **Advanced Wind Engineering Testing &** Technology
- Singuefield Missouri Tornado Simulator Tour





Conference Venue

St Charles Convention Center 1 Convention Center Blvd, St Charles, MO



Sightseeing



Budwei<u>ser</u>



Saint Louis Zoo

Extra Benefits

Publish in Journal of Advances in Wind Engineering (EIC: Teng Wu & Xuhui He)

Sponsors or Exhibitors













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More will be added Later! If you are interested in sponsoring the conference or doing the exhibition, please reach out to Grace Yan at yang@mst.edu.

Contact Us

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15th Americas Conference for Wind Engineering





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IMPORTANT DATES

- Aug. 1, 2024: Abstract Submission Opens
- Sept. 15, 2024: Abstract Submission Closes
- Nov. 1, 2024: Notification of Acceptance; Early Registration Opens
- Jan. 15, 2025: Full Paper Submission Deadline
- Feb. 1, 2025: Early Registration Closes







BOTANICAL

GARDEN