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# Event Agenda

Tulane Engineering Forum

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## Friday, April 19, 2024

8:15 AM - 8:45 AM	<b>Opening Session Welcome (sponsored by All South Consulting Engineers)</b> Location: 2nd Fl, Nouvelle Orleans Ballroom, C Speakers: Kimberly Foster, Charles Mart
8:45 AM - 10:15 AM	<b>The Deepwater Horizon Incident (sponsored by Ampirical)</b> Location: 2nd Fl, Nouvelle Orleans Ballroom, C Panelist: Arthur Zatarain, Lars Herbst, Kirk Malstrom ; Moderator: John Kelly
10:15 AM - 10:45 AM	<b>Morning Break: Middle and High School Robotics Demonstrations and Science Fair Displays; Tulane Undergrad Senior Design Project Showcase</b> Location: Rooms 346-347
10:45 AM - 12:15 PM	<b>Session A: Infrastructure (sponsored by Royal Engineering)</b> Location: Rooms 356-357 <div><b>LA 1 Phase 2 Design Challenges and Project Status</b> 10:45 AM - 11:15 AM Speaker: Dusty Bastion <b>Bayou Ramos Bridge Rehabilitation</b> 11:15 AM - 11:45 AM Speaker: Sam Sherry <b>Ouachita River Bridge at Harrisonburg</b> 11:45 AM - 12:15 PM</div>
10:45 AM - 12:15 PM	<b>Session B: Energy - Electrical Energy Strategies - Supporting Climate Change Initiatives and US Energy Independence (sponsored by Energy Solutions)</b> Location: 2nd Fl, Nouvelle Orleans Ballroom, C <div><b>Climate Change - a Physics Perspective</b> 10:45 AM - 11:15 AM Speaker: Douglas Chrisey <b>Examples of Market Response to Inflation Reduction Act</b> 11:15 AM - 11:45 AM Speaker: Dale Vines <b>An Energy Independent Airport in Pennsylvania</b> 11:45 AM - 12:15 PM Speaker: Julia Arnone</div>
10:45 AM - 12:15 PM	<b>Session C: Oil and Gas (sponsored by ExxonMobil)</b> Location: Rooms 353-355 <div><b>Petrochemical and Refining Participation in the Energy Transition</b> 10:45 AM - 11:15 AM Speakers: Matthew LaChance, Gregory Mitchell <b>Supporting a Circular Economy</b> 11:15 AM - 11:45 AM Speaker: Jennifer Purpera <b>Sustainable Applications for Petroleum Coke</b> 11:45 AM - 12:15 PM Speaker: Les Edwards</div>
10:45 AM - 12:15 PM	<b>Session D: Aerospace (sponsored by Bernhard)</b> Location: Rooms 343-345 <div><b>Continuity of Human Space Flight in Low Earth Orbit</b> 10:45 AM - 11:15 AM Speaker: Michael Baine <b>Cryogenics: Too Cool for School</b> 11:15 AM - 11:45 AM Speaker: Ellen Smith <b>A Summary of Peregrine Mission One</b> 11:45 AM - 12:15 PM Speaker: Daniel King</div>

12:30 PM - 2:15 PM

**Luncheon Keynote: Generative AI: Supercharging the Next Wave of Industrial Digital Twins (presented by Laitram & Entergy)**

Location: 2nd Fl, Nouvelle Orleans Ballroom, A-B  
Speaker: Rev Lebareadian

2:15 PM - 3:45 PM

**Session E: Infrastructure - Innovations in Transportation (sponsored by Keystone)**

Location: Rooms 356-357

- Autonomous Vehicles**  
2:15 PM - 2:45 PM  
Speaker: Hany Hassan
- Unique Substructure Rehabilitation - Comite River Bridge**  
2:45 PM - 3:15 PM
- Bridge Design for Vessel Collision: An Overview**  
3:15 PM - 3:45 PM  
Speaker: zolan Prucz

2:15 PM - 3:45 PM

**Session F: Energy - A Nuclear Renaissance - Salient Support for the Clean Environment Initiative (sponsored by ICC)**

Location: 2nd Fl, Nouvelle Orleans Ballroom, C

- The Nuclear Power Landscape - Status & Future Growth**  
2:15 PM - 2:45 PM  
Speaker: Sal Golub
- Challenges Faced by Utilities to Deploy Small Modular Reactor Technology**  
2:45 PM - 3:15 PM  
Speaker: Kimberly Cook-Nelson
- NuScale Small Modular Reactor Technology - Design and Deployment Status**  
3:15 PM - 3:45 PM  
Speaker: Chuck Goodnight

2:15 PM - 3:45 PM

**Session G: Water (sponsored by FLUOR)**

Location: Rooms 353-355

- Satellite Observations of 2023 Marine Heat Waves in the Gulf of Mexico**  
2:15 PM - 2:45 PM  
Speaker: Nan Walker
- Salt Intrusion and Salt Wedge Dynamics in the Mississippi River**  
2:45 PM - 3:15 PM  
Speaker: Deborah Centola
- Real-world Time-travel Experiment Shows Ecosystem Collapse Due to Anthropogenic Climate Change**  
3:15 PM - 3:45 PM  
Speaker: Torbjörn Törnqvist

2:15 PM - 3:45 PM

**Session H: Innovation**

Location: Rooms 343-345

- Next-Gen Automation: Is AI really disrupting the Industrial Automation Industry?**  
2:15 PM - 2:45 PM  
Speaker: Gregory Domingue
- Increasing Quality and Efficiency in the Power and Related Industries via Software Solutions and Scripts**  
2:45 PM - 3:15 PM  
Speaker: Nathan Wallace, PhD, PE
- A Novel Nanotechnology Approach to Recover More Male DNA from Sexual Assault Evidence to Solve Crimes**  
3:15 PM - 3:45 PM  
Speaker: Sudhir Sinha

3:45 PM - 4:00 PM

**Afternoon Break**

4:00 PM - 5:00 PM

**Ethics: Educating Engineering Students for Future Ethical Practice (presented by IMTT & Pelican)**

Location: 2nd Fl, Nouvelle Orleans Ballroom, C  
Speaker: Angela Bielefeldt

4:00 PM - 5:00 PM

**Better Leadership, Better Outcomes (presented by Pelican & IMTT)**

Location: Rooms 353-355  
Panelist: Don Vinci, Shannan Scarselletta

5:00 PM - 6:00 PM

**Closing Reception**

Location: Rooms 346-347