

TEXAS A&M ENGINEERING



ARTS
ET MÉTIERS
ParisTech



TEES-ENSAM International Workshop on Smart Manufacturing for the Factory of the Future

Organizers: Texas A&M Engineering Experiment Station (TEES) and Ecole Nationale Supérieure d'arts et métiers (ENSAM)

Workshop coordinators: Satish Bukkapatnam and Mohamed El Mansori

Sponsors: Texas A&M Engineering Experiment Station (TEES), Ecole Nationale Supérieure d'arts et métiers (ENSAM), Society of Manufacturing Engineers (SME), and French Consulate in Houston

Objectives:

- Formalize TEES-ENSAM partnership for joint cluster in materials and manufacturing
- Define and develop plans for international excellence in advanced manufacturing
- Discuss and explore industry needs in the emerging manufacturing research and education
- Discuss and explore collaboration opportunities in research and education

Program:

6/22 Venue: Hall of Champions

- 5-6 p.m. SME panel discussion: International education needs and opportunities in smart manufacturing for the industry of the future (Part 1)
- SME, TEES, ENSAM, industry, alumni
- 6-8:30 p.m. Reception and banquet
- 8:30-10 p.m. Optional facility tour

6/23 Venue: Emerging Technologies Building Room 1034

- 8-8:30 a.m. Breakfast
- 8:30-8:35 a.m. Welcome and formal agreements
- 8:35-9:30 a.m. Presentation of ENSAM/TEES international initiative

Chair: Eyad Masad

- 8:35 a.m. Presentations: TEES and ENSAM leadership, Satish, Mohamed
- 9:55 a.m. DOE Smart Manufacturing Vision (Sudarsan)
- 9:15 a.m. SME (Krause)

- 9:35 a.m. Qatar workshop update (César O. Malavé, Masad)
 - 9:50 a.m. PACA region economic development (Stephane Ghio)
 - 10:10 a.m. General remarks of the Office for Science and Technology of the French General Consulate in Houston (Alain Mermet)
- 10:20 a.m. Break
- 10:30-11:10 a.m. Presentation of ENSAM/TEES joint research programs
Chair: Nikos
- 10:30 a.m. Advances in modeling and analysis of machining and polishing processes for natural fiber composite materials (El Mansori, Bukkapatnam, Tai, Reddy)
Presentation: Faissal Chegdani
 - 10:45 a.m. Advances in sensor-based monitoring of natural fiber composite materials (El Mansori, Bukkapatnam, Tai, Reddy)
Presentation: Zimo Wang
 - 10:55 a.m. Advances in machining of natural fiber composite materials (El Mansori, Bukkapatnam, Tai, Reddy) *Presentation: Behrouz/Bruce Tai*
- 11:15 a.m. to noon Presentation of industry engagement for joint research partnerships
Chair: ZJ Pei
- STIL — Development of 3D sensors for smart manufacturing
C. Corleto, CEO, STIL
 - Airbus — Helicopter factory of the future
Pascal Gaudry, Senior VP Maintenance Repair and Overhaul, ESRAirbus Helicopters
- Noon-1:30 p.m. Working lunch and education program
Chair: Arun Srinivasa
- Summer study abroad, student exchange, IRES plans Hogan and students via webex
- 1:30-3 p.m. Panel discussion: Industry needs and partnerships in smart manufacturing
Chair: Marwan
- Airbus, STIL, NSF, DOE, NIST
- 3-4:30 p.m. Panel discussion: International education needs and opportunities in smart manufacturing for the industry of the future
Chair: Michael Johnson and Jyhwen Wang
- SME, TEES, ENSAM, industry, alumni
- 4:30 p.m. Closing banquet in the presence of the Consul general in Houston, Mr. Alexis Andres