Thermal No. 8 May 1, 2025

Mexico, Member of ICHMT (1)

Report on 30th Mexican International Congress in Mechanical Engineering (SOMIM 2024)

Abel Hernandez-Guerrero and J. Luis Luviano-Ortiz



Abel Hernandez-Guerrero, Ph.D.,

University of Guanajuato, Mexico, abel@ugto.mx https://somim.org.mx

These are the 2024 activities that were carried out by SOMIM, the Mexican Society of Mechanical Engineers:

The Annual International Mechanical Engineering Congress was held at the City of Queretaro, in Central Mexico, with the support of the Polytechnic University of Queretaro. There were tracks in just about all the ME domain: Mechanical Design, Manufacturing and Materials, Mechatronics, Theoretical Mechanics, Thermal-Fluids, and Education in Engineering. There was an attendance of more than 100 researchers and more than 250 students from many national universities.

145 works were presented with 6 keynote speakers sessions:

Ernesto Hernández, Ford Motors Company, "Quality in the auto-mechanical industry, a luxury or a need ?"
Marcelo del Valle, Kiewit, "The Mechanical Engineer in EPC, beyond the productive, commercial, and service sectors"

- Salvador M. Aceves, Technological Institute of Celaya, "Transport technologies to mitigate the environmental pollution and the climatic change"

- Ilse Cervantes, CICATA, "Perspectives in electro-mobility in Mexico"

- Ángel Iván García, CIDESI, "Additive manufacturing and artificial intelligence, key technologies in the 4RI"

- Crescencio García, Monterrey Tech, "Collaborative robots in mechanical engineering: towards a new era in automation"

Also, throughout the year many webinars were organized in different fields with specialized people providing the most-up-to-date developments in those areas.

Student activities are also supported year-around by the society via the SOMIM Student Chapters; SOMIM has a close collaboration with the American Society of Mechanical Engineers (ASME).

Specialized courses were also offered providing information on new techniques and discussion of new emerging fields, such as in aerospace, material, and composites-based design, etc.

Other smaller conferences were also supported by the society such as the Aerospace Week 2024.