

Objectives & Scope

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International Symposium on Thermal and Materials Nanoscience and Nanotechnology, TMNN-2011 will play a role in bridging the gap between chemistry, physics and engineering, it will attract papers in the areas of Thermal and Materials Nanoscience and Nanotechnology, and it will help advance developments in Heat and Mass Transfer Engineering. In addition, it will contribute to the goal of further understanding the wide diversity of length scales ranging from the nano- to macroscopic scales, while providing a new path to bridging the gap between them by discussing the validity of theories and/or mathematical and numerical models considered valid only within their respective domains.Â Attention will be given to how phenomena at the nanometer level impacts macroscopic heat and mass transfer processes, such as how electron, photon, and phonon transport and their interactions in micro/nanostructures affect the design of thermal systems, optical, and medical devices.Â Â

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Although it is an engineering conference, it will attract numerous chemists, physicists, and material scientists from diverse fields in our efforts to promote translational, interdisciplinary research for Heat and Mass Transfer Engineering.Â The activities will foster networking opportunities between engineering experts, and they will allow participants to exchange ideas and explore new perspectives of fellow professionals from hundreds of different institutions and industries around the world. The participants will share and disseminate scientific knowledge and research results related to new technologies.Â Â

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Thermal and materials science papers including the most recent developments in the fields of nanotechnology particularly related to Â

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- Photonics and Electronics,
- Micro/Nano Systems and Nanostructured Surfaces,Â
- Energy Generation,
- Harvesting and Storage of Energy,Â Â
- Multi-scale Modeling,Â Â
- Composite Materials and Diffusion,
- Microfluidics and Nanoparticles.Â

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The meeting will be centered around recruited keynote speakers presenting in several plenary sessions that will focus attention on program areas of current interest and future trends, and it will be followed by technical paper presentation and poster sessions providing additional discussion on recent progress of these topics. Other evening networking events and a panel discussion will occupy the remainder of the program throughout the week.Â Â

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