NCMDAO-2021
National Conference on Multidisciplinary Design, Analysis, and Optimization

October 7-9, 2021
Virtual Conference

www.ncmdao.org

The conference jointly organized by Engineering Design department of the Indian Institute of Technology Madras (IITM), Mechanical Engineering department at the Indian Institute of Science, Bengaluru (IISc), and Design division of the Aeronautical Society of India (AeSI), aims to bring together researchers and industry professionals working in the areas of multidisciplinary design, analysis, and optimization. Established techniques and emerging technologies are equally emphasized to take advantage of the past accomplishments to step up the future of optimization-based design of devices and systems. The focus is on design and analysis as applicable to optimization of systems. Optimization in aerospace, automotive, manufacturing, biomedical, and other application domains are within the scope of this conference.

Important Dates

Submission of extended abstract:
May 25, 2021
Notification of acceptance:
June 22, 2021
Submission of full paper:
September 15, 2021
Last date for registration:
September 15, 2021

Topics

- **Structural optimization: size, shape, and topology optimization**
- **Optimization for design of materials and metamaterials**
- **Multiscale and multiphysics problems**
- **Meta-modeling, surrogate modeling**
- **Systems design and optimization**
- **Machine learning and data science in optimization**
- **Mixed integer and linear programming**
- **Evolutionary, Bayesian, and heuristic optimization techniques**
- **Uncertainty quantification, reliability, and robustness in design**
- **Optimization and additive manufacturing**
- **Industry applications and case studies in MDAO**
- **Emerging trends in optimization**

Conference Committee

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Conference Fee

Industry participants:	**INR 5000**
Faculty/Start-up/Govt. lab employees:	**INR 3500**
Students and Post Docs:	**INR 1000**
Masterclass alone:	**INR 500**

SAE and AeSI members can avail 20% discount on the conference fee

Partner

SAEINDIA
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Tentative session themes: (i) Model-based optimization (ii) Size, shape and topology optimization (iii) Reliability and robustness (iv) Recent advances: Machine learning applications in optimization (v) Industrial applications

Abstract and paper should be sent in PDF format to ncmdao.2021@gmail.com