DST-SERB Sponsored Short-term Training Program on

"Battery Thermal
Management Systems:
Present and Future"
(Hybrid Mode)



June, 12-16, 2023

Organized by

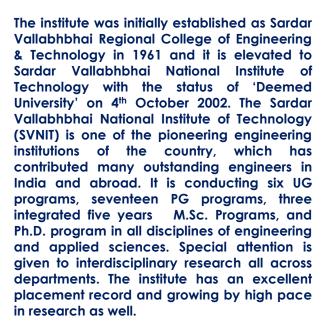
Department of Mechanical Engineering



S.V. National Institute of Technology Surat, 395 007 Gujarat, India



About Institute



Who will benefit?

Faculty of Engineering Students: PG, PhD

https://sites.google.com/med.svnit.ac.in/sttponbtms





About the Department

The Department of Mechanical Engineering is one of the oldest departments from the start of institute (1961). The department has qualified and dedicated faculty members with the in various specialization areas. department is undertaking a UG programs in Mechanical Engineering, five PG programs (Thermal System Design, Mechanical Engg., Turbo Machines. CAD/CAM, and Manufacturing Engg.) and a research program leading to Ph.D. degree in related specialization. For industry people, master program by research and part time Ph.D. program are also available. The research facilities in mechanical department are developing with addition of new equipment and laboratories, and modernization of old laboratories.

Resource Persons

Resource Persons for the program will be highly experienced faculty members from IITs, Industries, and the host Institute (SVNIT Surat).

Last Date of Registration June 10, 2023

Coordinators



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No Registration fees.

Maximum 25 Faculties and 10 Students can attend the program on First come

First Serve Basis.

About the Program

The world is witnessing a global transition towards sustainable transportation, thanks to rapid technological advancements and extensive research in greener vehicle technology. As a result, electric vehicles have become the future of the automotive industry. Moreover, EV market in India is promising and aims to have 30% of all vehicles on the road be electric by 2030. Lithium-Ion Batteries (LIB) are the most suitable choice for EVs due to their high energy density and extended cycle life, although their performance is affected by ambient temperature. Operating above the safe working temperature limit can result in reduced battery cycles. capacity, and charging-discharging rates. This Program is designed to provide state-of-the-art trends and advancements in Battery Thermal Management of Electric vehicles which will enable them to promote industry and institute collaborations by working on the current research problems.

Apply online at

https://sites.google.com/med.svnit.ac.in/sttponbtms

https://forms.gle/4v8ACfn3rayNg8kR9

Content

- Electric Vehicles: Present and Future
- Batteries for Electric Vehicles
- Design of a modular battery pack for Electric vehicles
- •Active and Passive battery thermal management systems
- Applications of PCM, Thermosyphons, and Loop Heat Pipe in BTMS
- Demonstration of Battery Simulation on ANSYS-Fluent
- Industrial Visit

Address for communication

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