AICTE Sponsored Online Short Term Training Program
on
Fuel Cell Technologies for Hybrid and Electric Vehicles (FCTHEV)

17 - 22, August 2020

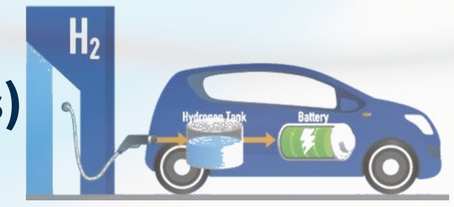
Organized by

Department of Mechanical Engineering

Maharaj Vijayaram Gajapathi Raj College of Engineering (Autonomous)

(Approved by AICTE, New Delhi, Re-Accredited by NBA of AICTE, NAAC of UGC with 'A' grade and Permanently Affiliated to JNTUK, Kakinada, Listed U/S 2(f) & 12(B) of the UGC Act 1956)

Vizianagaram - 535 005, A.P., India.



No Registration Fee

Last date for Registration : 10-08-2020

Intimation of Selection : 13-08-2020

Chief Patron
Ms P. Sanchaita Gajapathi Raju
Chairperson, MANSAS

Patron
Dr. K.V.L. Raju
Correspondent, MANSAS &
Principal, MVGR College of Engineering (A)

Advisory Committee
Dr. Y.M.C. Sekhar	Vice Principal (Academic)
Mr. P.Ranga Raju	Dean (Administration)
Dr. D. R. Prasada Raju	Dean (F&D)
Dr.P.Ravindranath	Dean (Strategic Planning)
Dr. R. Ramesh	Dean (R&D)

Convener
Dr. S. Adinarayana — Professor & HOD

Coordinators
Dr. N. Ravi Kumar — Professor
Dr. M. S. Subrahmanyam — Associate Professor

Co-Coordinators
Mr. Rajesh Guntur — Assistant Professor
Mr. S. Joshua Kumar — Assistant Professor

Organizing Committee
Faculty of Department Mechanical Engineering, MVGRCE (A)

Address for Correspondence
Dr. N. Ravi Kumar
Professor in Mechanical Engineering
Email: naradasuravi@mvgrce.edu.in

Dr. M. S. Subrahmanyam
Associate Professor in Mechanical Engineering
Email: m.sivasubrahmanyam@mvgrce.edu.in
Cell: 8328147283, 9948267564

About MVGR College
Maharaj Vijayaram Gajapathi Raj College of Engineering, Vizianagaram, was established in 1997 under the aegis of MANSAS, an educational trust, founded by Late Dr.P.V.G. Raju, Rajah Saheb of Vizianagaram. The college is permanently affiliated to JNTU Kakinada, NBA accredited and is given 'A' grade by NAAC.

The campus is located at Chintalavalasa, Vizianagaram district of Andhra Pradesh, Just 45 minutes' drive from Visakhapatnam. The college provides its learning community, the state of art facilities, infrastructure and a competent faculty. The institute encourage collaboration with industry and institute as a means of reinforcing its curriculum with practical and real world experiences. The college lays emphasis on offering a well-rounded education to mould the students into resourceful engineers.

About the Department
The Department of Mechanical Engineering has been in existence since the inception of the college i.e. 1997. The Department offers Undergraduate program with an intake of 180 and Post Graduate program in Product Design and Manufacturing with an intake of 18· The Department has

- Well qualified faculty with 13 PhD holders
- Well-furnished laboratories including research labs with state of art equipment
- Recognized as "Research Centre" by the JNTUK, Kakinada
- Accomplished Research projects worth of Rs 1.2 crore sponsored by DST/UGC/AICTE
- CM Centre of Excellence for 3Ds by Dassault Systems

Objective of the STTP
All around the world, governments are implementing policies to promote electric vehicles, such as hybrid electric vehicles, plug-in hybrid electric vehicles and fuel-cell electric vehicles to reduce oil consumption, climate related emissions, and improve local air quality. Fuel cells are clean, highly efficient and scalable generators and can be powered by a variety of hydrogen-containing fuels. Among other types of fuel cells, Proton Exchange Membrane Fuel Cells (PEMFC) seems more promising and suitable for automotive applications This Short term training program (STTP) on "Fuel Cell Technologies for Hybrid and Electric vehicles (FCTHEV)" will cover the basics of fuel cell technologies and challenges towards cost reduction in design and development of fuel cell stack, hydrogen production and storage technologies, Battery management system, design and analysis of fuel cells for automotive applications. This STTP provides the platform for faculty to interact with experts from academia, R&D organizations, and industry in the area of Fuel cell technologies for hybrid and electric vehicles. It will also help the faculty to enhance their knowledge and to do research with modern tools and technologies..

Topics to be covered
- Overview of Electric and Hybrid Vehicles
- Fuel Cell Technology for Automotive Applications
- Introduction on Fuel Cells, Challenges an Issues
- Innovations on Fuel Cell System Development
- Scaling and Stacking up Studies on PEMFC
- Hydrogen Production and Storage Technologies
- Batteries for Electric, Hybrid and Fuel Cell Vehicles
- Performance of PEM Fuel Cells
- Modelling, Simulation, and Control of Hybrid Fuel Cell Vehicles
- R & D in the area of Fuel Cell Vehicles

Resource Persons
- **Dr. A. Srinivas Kumar,** Scientist 'H', NSTL, Visakhapatnam
- **Dr. J. Simhachalam,** General Manager, ARAI, Pune
- **Dr. G. Naga Srinivasulu,** Associate Professor, NIT Warangal
- **Mr. Rakesh Mulik,** Deputy General Manager, ARAI, Pune
- **Dr. N. Rajalakshmi,** Senior Scientist & Team Leader, Centre for Fuel Cell Technology, ARCI, Chennai
- **Dr. P Manoj Kumar**, Associate Professor, PSG Institute of Technology and Applied Research, Coimbatore
- **Dr. R. Balaji,** Senior Scientist, Centre for Fuel Cell Technology-ARCI, Chennai
- **Dr. E. Anil Kumar**, Dean, Sponsored Research and Consultancy, IIT Tirupati
- **Dr. Vasu Gollangi,** Manager / FCR, BHEL Corporate R&D Division, Hyderabad
- **Dr. Rutooj Deshpande**, Founder and CEO, GoVidyouth Mobility Inc, Pune
- **Mr. D. Sreedhar**, Senior Engineer, R&D, Amara Raja Batteries Ltd., Tirupati
- **Dr. V. Vasudeva Rao**, Professor, University of South Africa (UNISA)

Eligibility : Faculty / Research scholars from AICTE recognized Institutes, practicing engineers from government / private organizations, scientists / engineers from R&D establishments are eligible to apply.

Registration link : https://forms.gle/tYG86KxL81Xh7w6k8

***Note: e - Certificates will be provided to those participants who attend all the sessions of the program and score a minimum of 40% in the Quiz.**