

# SRI MANAKULA VINAYAGAR

ENGINEERING COLLEGE (An Autonomous Institution)

Puducherry



IFFF STB 62381

## REPORT ON IEEE STUDENT BRANCH

June 2020 - August 2020

#### **ABOUT THE INSTITUTION**

Sri Manakula Vinayagar Engineering College (SMVEC) established in the year 1999. SMVEC is an autonomous institution affiliated to Pondicherry University. It offers 14 undergraduate, 8 postgraduate, 11 research programs in Engineering, and Architecture, Management Studies and Computer Applications. SMVEC has been accredited by NAAC with "A" grade and NBA. The institution is also accredited by TATA consultancy services. The college has a good placement record with students getting job offers from top MNC companies in India and abroad. SMVEC students have won many awards and accolades for their academic achievements.



#### **Vision**

To be globally recognized for excellence in quality education, innovation and research for the transformation of lives to serve the society

#### **Mission**

M1: Quality Education: To provide a comprehensive academic system that amalgamates the cutting edge technologies with best practices.

M2: Research and Innovation: To foster value-based research and innovation in collaboration with industries and institutions globally for creating intellectuals with new avenues.

M3: Employability and Entrepreneurship: To inculcate the employability and entrepreneurial skills through value and skill based training.

M4: Ethical Values: To instill a deep sense of human values by blending societal righteousness with academic professionalism for the growth of society.

#### **ABOUT IEEE STUDENT BRANCH**

The American Institute of Electrical Engineers and the Institute of Radio Engineers merged to create the IEEE on January 1, 1963. IEEE has over 460,000 members in 190 countries, with the U.S. based membership no longer constituting a majority. IEEE produces over 30% of the worlds literature in the electrical and electronics engineering and computer science fields, publishing approximately 200 peer-reviewed journals and magazines. IEEE publishes more than 2,000 conference proceedings every year. The IEEE provides learning opportunities within the engineering sciences, research, and technology. IEEE offers educational opportunities such as IEEE e Learning Library, the Education Partners Program, Standards in Education and Continuing Education Units (CEUs). IEEE also sponsors a website designed to help young people better understand engineering, and how an engineering career can be made part of their future. Students of age 8–18, parents, and teachers can explore the site to prepare for an engineering career, ask experts engineering-related questions, play interactive games, explore curriculum links, and review lesson plans. Most IEEE members are electrical and electronics engineers, but the organizations wide scope of interests has attracted people in other disciplines as well (e.g., computer science, software engineering, mechanical engineering, civil engineering, biology, physics, and mathematics).





#### Webinar on "Artificial Intelligence on Healthcare Applications"



A webinar on "Artificial Intelligence on Healthcare Applications" was arranged by the IEEE SB and the ECE Department on August 10, 2020, from 02.30 to 04.00. The purpose of this program was to inspire the ECE students. Dr. Raja Krishnamoorthy from CMR Engineering College in Hyderabad served as the session's resource person. He possesses extensive expertise in artificial intelligence and machine learning. The expert speaker gave a presentation on artificial intelligence. He discussed the uses of machine learning in healthcare, emphasizing public, translational, and clinical applications.

# Webinar on "Latest Standards and Design aspects of Electrical Generators for Thermal, Hydro and Wind Power Plants"



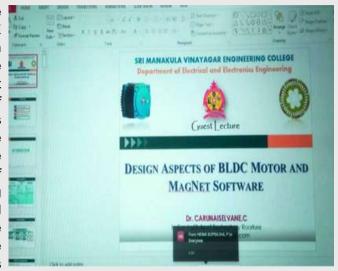
EEE Dept & IEEE SB organized a live webinar on "Latest Standards and Design aspects of Electrical Generators for Thermal, Hydro and Wind Power Plants" on 13th Aug, 2020 between 11.00 am to 12.30 p.m. Our speaker of the day was Mr.S.Senthil Kumar, Assistant Director, NPTI, Neyveli, Ministry of Power, Government of India. The speaker came up with the slides exhibiting design aspects of electrical generators and its requirements which are needed in the professional world. The latter 30 minutes was an interactive session between the speaker and the delegates.





### Webinar on "Design aspect of BLDC motor and magnet software"

With Mr. C. Carunaiselvane, Research Scholar at the Indian Institute of Technology Roorkee, the EEE Department and IEEE SB sponsored a webinar on August 29, 2020, from 10:00 AM to 12:30 PM, on the subject of "Design aspect of BLDC motor and magnet software." This webinar explores into the design of Brushless DC (BLDC) motors, highlighting parameters that affect efficiency and performance along with the use of magnet software for design optimization. The construction of BLDC motors, their principles of operation, and aspects like cooling systems, winding arrangements, and magnet choices will all be covered in detail for participants. Additionally, magnet software tools for electromagnetic system simulation will be presented in the webinar. With these tools, engineers



will be able predict motor behavior, model magnetic fields, and optimize designs. The webinar delivers insights into the complexities of BLDC motor design and the function of magnet software in improving performance and efficiency through simulation and analysis. It is aimed at engineers, researchers, and students working in electric motor design.