ADVISORY COMMITTEE

Dr. Mahadevappa B. Gadge
Prof. & Head T&PO,
PDA College of Engineering, Kalaburgi

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Asst. Prof. Dept. of CCT, PDA College of Engineering, Kalaburgi

Prof. Hansraj N. Sahu
Asst. Prof. Dept. of CCT, PDA College of Engineering, Kalaburgi

TARGETED PARTICIPANTS

Faculty members from AICTE approved institutions, Research Scholars, PG Scholars, and Industry delegates are eligible to attend the Faculty Development Programme.

There is no registration fee for attending this online FDP. E-certificate will be provided to participants maintaining 80% of attendance and scoring minimum 60% in the assessment test conducted at the end of FDP.

PATRONS

Dr. Bhimashankar C. Bilgundi
President, HKE Society, Kalaburgi

Dr. S. S. Hebbal
Principal, PDA College of Engineering, Kalaburgi

Dr. Shashidhar S. Kalashetty
Vice- Principal, PDA College of Engineering, Kalaburgi

Dr. Siddaram R. Patil
Dean(Academic), PDA College of Engineering, Kalaburgi

Dr. Arvindkumar B. Harawalkar
Dean(Administration), PDA College of Engineering, Kalaburgi

Prof. Ravindra M.Lathe
Controller of Examination, PDA College of Engineering, Kalaburgi

Dr. Amaresh R.
Head, Dept. of Ceramic & Cement Technology, PDA College of Engineering, Kalaburgi

CO-ORDINATOR

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ONLINE REGISTRATION LINK

https://atalacademy.aicte-india.org

AICTE Sponsored 5-Day Faculty Development Program on

'The Role of Materials in Electric Vehicles"

07th to 11th June 2021

Organized By

Department of Ceramics & Cement Technology
Poojya Doddappa Appa College of Engineering
Aiwan-E-Shahi Area,
Kalaburgi, Karnataka 585102

Email: principal@pdaengg.com
Website: www.pdaengg.com

ABOUT THE COLLEGE

The Hyderabad Karnataka Education (HKE) society founded by Late Shri Mahadevappa Rampure, a great visionary and educationist. The HKE Society runs 46 educational institutions. Poojya Doddappa Appa College of Engineering, Gulbarga is the first institution established by the society in 1958. The college has celebrated its golden jubilee year, setting new standards in the field of education and achieving greater heights. The college campus is spread over 71 acres of land on either side of Mumbai-Chennai railway track and has a sprawling complex with gardens and greenery all around.

The National Board of Accreditation(NBA), New Delhi, has accredited the College in the year 2005-08 for 09 UG Courses out of which 08 courses are accredited for three years and 01 course is accredited for five years. Further second time accredited for Six Course in the year 2009-2012. Again, now, five departments namely, E & IE, I & PE, CCT, Automobile Engg. and IS & E departments have been accredited by NBA Washington accord for three years from academic years, 2019-20 to 2021-22.

ABOUT THE DEPARTMENT

The department of Ceramic and Cement technology was established in 1981 with a vision to provide learned and skilled engineers and provide a exciting learning environment in the field of ceramic and cement technology to serve the local and global industries and institutes.

Since inception, the department has created more than 500 graduates who are serving premier industries, to name a few BHEL, corning glass, JSW, ACC, Ultratech, Shree Cements, Saint-Gobin, Johnson, Bharat potteries, etc.

The department has started a post-graduate course during the year (2014-15)which offers interdisciplinary Master of technology in Material science and Technology, for B.E. graduates of various disciplines such as Ceramic and Cement Technology, Civil Engineering, Mechanical Engineering, Metallurgical Engineering, Industrial and Production Engineering, Automobile Engineering, Polymer Science and Engineering, etc. As on today 25 students have completed M.Tech. program from this department and are working in various organization

ABOUT FDP

"Environmentally friendly cars will soon cease to be an option…they will become a necessity". Fujio Cho, Ex Honorary Chairman of Toyota Motors.

Going a step further towards the dream of electric mobility, the coming decade is expected to be the decade of electric cars. The rise of electric vehicles is inevitable around the world and India alike. The Electric Vehicle industry is expected to undergo as much development in the next 10 years as ICE-powered vehicles did in their first 100.

India being the world's third largest passenger vehicle market brings great challenges to Indian automobile industry like higher cost of EV compared to ICE vehicle, limited range, charging infrastructure etc. This makes the Electric Vehicle (EV) industry one of the most exciting, relevant and necessary areas for engineers to innovate today.

Material scientist have made substantial advances in the chemistry of Li-ion batteries. One such advancement is to move away from cathode chemistries that are dependent on cobalt, toward nickel-based systems which has resulted in higher energy density, longer life cycle, and a lower cost than cobalt-based cells. This FDP aims to address all these challenges which Indian automobile manufacturers will face in switching India from ICE to EV.

TOPICS TO BE COVERED

- Material selection for various components of EV's
- Materials challenges and thermal management.
- Basics of Li-ion Battery Technology.
- Emerging Li-ion Battery Technologies for long range and fast charging of Electric Vehicles.
- Energy density and power density
- Nanomaterials in Electrochemical Energy Storage Devices"
- Battery thermal management system.
- Hybrid vehicle technology

OUTCOME OF THE FDP

- Participants will be able to understand the focus areas that come under the umbrella of electric vehicles.
- Participants will have an insight into advanced materials being used in the manufacturing of batteries and charging systems for EVs.
- Participants will be able to interpret the challenges ahead for EV industries and contemplate on possible solutions.

OUR RESOURSE PERSONS

Dr. Palani Balaya

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