

### CHIEF PATRON

**Dr. R. Vasanthkumar**  
Chairman and Managing Trustee,  
Karpagam Educational Institutions.

### PATRON

**Shri. K. Murugiah**  
Chief Executive Officer,  
Karpagam Education Institutions.

### CHAIRMAN

**Dr. P. Vijayakumar**  
Principal

### CONVENERS

**Dr. S. Manojkumar**  
HOD / IT  
**Dr. S. Angel Latha Mary**  
HOD / CSE

### SEMINAR CHAIR PERSON

**Dr. K. Mahalakshmi**  
Professor, Dept of IT, KCE

### ORGANISING SECRETARY

**Dr. P. Murugeswari**  
Professor, Dept of CSE, KCE

### COMMITTEE MEMBERS

All Faculty Members of IT & CSE

The application form is to be sent to  
**The Convener,**  
**Department of Information Technology,**  
Karpagam College of Engineering  
(Autonomous)  
Othakkalmandapam(PO)  
Coimbatore-641032, Tamil Nadu  
Ph:9445805800, 9750977067  
Email: kce.mdo@gmail.com  
<https://forms.gle/CBjsRF5ARpqmysfc9>

## REGISTRATION FORM

### Two Days National Level Seminar on Role of Deep Learning in Multidisciplinary Design Optimization (MDO) and its Applications & Tools

13<sup>th</sup> and 14<sup>th</sup> December 2019

Name : .....  
Designation : .....  
Organization : .....  
Professional Category  
 Academic  Research  Industry  
Contact No : .....  
Email ID : .....  
Communication Address : .....

#### Payment Details

DD No : .....  
Date : .....  
Name of the Bank : .....  
Amount: Rs. ....  
(Write your name and address on the  
back side of the DD)

Date :

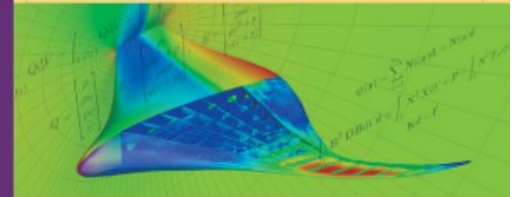
Place :



### Two Days National Level Seminar on Role of Deep Learning in Multidisciplinary Design Optimization (MDO) and its Applications & Tools

13<sup>th</sup> and 14<sup>th</sup> December, 2019

Chief Guest  
**Dr R Ranga Srinivas Gunt**  
Deputy General Manager  
Mahindra Research Valley  
Chennai



Organized By  
**Department of Information Technology  
&  
Department of Computer Science Engineering**  
**KARPAGAM COLLEGE OF ENGINEERING**  
(Autonomous),  
Othakkalmandapam(PO)  
Coimbatore-641032, Tamil Nadu

### ABOUT THE INSTITUTION

Karpagam College of Engineering was started in the year 2000, by Karpagam Charity Trust, Promoted by renowned Philanthropist and industrialist Dr.R.Vasanthkumar and has been conferred with autonomous status in the year 2007. The college offers nine Under Graduate Engineering programmes and five Post Graduates programmes and accredited by NAAC with 'A' Grade. The institution aims to provide excellent learning facilities by imparting practical training, knowledge and skills to the youth. The college has signed MoUs with research organizations and industries to promote closer interaction in the areas of technology development, student training, curriculum updation and establishment of state-of-art-centers of excellence. The college is located at 18km from Coimbatore.

### ABOUT THE SEMINAR

Multidisciplinary Design Optimization (MDO) enables engineers to revise design strategies and to address more complex problems. Data Science based Multidisciplinary Design Optimization (MDO) methods are disrupting the way the Computer Aided Engineering (CAE) analyses is performed. Traditional Response Surface based optimization methods fail to handle huge design variables and responses that are involved in the real-world design optimization problems. The challenge in deployment of MDO algorithms in solving real-world design problems is huge time associated in running full complex phenomenon involving geometric, material and contact nonlinearities with large number of design variables and multiple performance responses and constraints pertaining to multiple domains. The main goal is to create advanced and complex engineering systems that must be competitive not only in terms of performance, but also in terms of manufacturability, serviceability and overall life-cycle cost effectiveness. The need is the rigorous, quantitative multidisciplinary design methodology that can work hand-in-hand with the intuitive non-quantitative and creative side of the design process.

### TOPICS TO BE COVERED

- \* *Introduction to MDO - Engineering Optimization*
- \* *MDO for Light weighting the Automotive Structures and its Engineering Applications*
- \* *MDO - Requirements Durability, Crash, Vehicle Dynamics*
- \* *MDO for Aircraft design*
- \* *Data Driven CAE*
- \* *MDO in Hyper Works Based Solutions*
- \* *Overview of Data Science in MDO*
- \* *Case Studies for Product Development - Data Science perspective*
- \* *Accelerating MDO with Machine Learning*
- \* *Applications of MDO in Engineering & Tools*

### RESOURCE PERSONS

**Dr. R Ranga Srinivas Gunt**  
Deputy General Manager,  
Mahindra Research Valley, Chennai  
**Mr. Manoj Kumar Ramasamy**  
Manager - R&D, Fiat Chrysler Automobiles  
**Mr. Madeshwara**  
Technical Manager, Altair Engineering, Bangalore  
**Prof. R. Kousik Kumaar**  
Asst.Prof, Aeronautical Engineering,  
Nehru Institute of Engineering & Technology  
**Dr. E. Subha**  
Asso.Prof, S&H, KCE  
**Mr. S. Manikandan**  
Asst Prof, IT & Head-DSAC, KCE  
**Dr. M. Prakash**  
Prof - CSE & DSAC, KCE  
**Dr. S. Kannimuthu**  
Asso Prof, CSE, KCE  
**Prof G. Anbu**  
Asst.Prof, Automobile, KCE

### ELIGIBLE AUDIENCE

Faculty members, Research Scholars, Industry persons, UG/PG students from the Departments of

**Automobile Engineering  
Mechanical Engineering  
Computer science and engineering  
Information Technology**

are eligible for this interdisciplinary seminar



### REGISTRATION FEE

Students : Rs. 650  
Research Scholars : Rs. 750  
Academicians : Rs. 850  
Registration fee is payable through DD in favor of "Karpagam College of Engineering" Payable at Coimbatore. Or through NEFT

#### Note:

1. Registration form can be photo copied.
2. The participants can use college bus facility.
3. Accommodation could be provided on additional payment, on prior request.
4. No TA/DA will be paid.

### IMPORTANT DATES

Last date for receipt of application: **07.12.2019**  
Intimation of selected Participants: **12.12.2019**