

**One day Workshop  
On**

**“Aerodynamic Analysis on Tesla  
Cybertruck”**

**16<sup>th</sup> December, 2015**

**Registration Form**

Name \_\_\_\_\_

Designation \_\_\_\_\_

Organization \_\_\_\_\_

Official Address \_\_\_\_\_

Mobile/Telephone \_\_\_\_\_

E-mail \_\_\_\_\_

**Payment Details**

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Date \_\_\_\_\_ Signature \_\_\_\_\_

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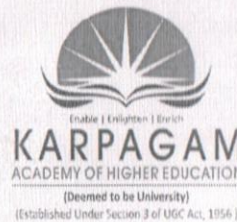
**16<sup>th</sup> December, 2015**

**Venue-MBA Seminar HALL**

**Organized by**

**Department of Automobile Engineering**

***Faculty of Engineering***



**Karpagam Academy of Higher Education  
(Deemed to be University)**

(Established Under Section 3 of UGC Act, 1956)

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**About the Institution**

Karpagam Academy of Higher Education (KAHE) established under Section 3 of UGC Act 1956 is approved by Ministry of Human Resource Development, Government of India. Dr. R. Vasanthakumar, the President of the trust a philanthropist, industrialist, entrepreneur and culture promoter. Today, with strength of 6000 students and over 750 teaching & non-teaching staff, the Karpagam Academy of Higher Education (KAHE) is setting new benchmarks in the educational sphere.

**About the Department**

The Department of Automobile Engineering was established in the year 2009. The department aims at maintaining high standard of excellence through value-based education, technology and innovation. The devoted faculty members of the department combine their commitment to research with hard work and commitment in teaching. The Department has well equipped laboratories to impart Training to students with state-of the art technologies.



**Workshop Content:**

- Introduction to Aerodynamics
- Low and high-speed flows
- Air flow visualization of various shapes in speed wind tunnel.
- Design Requirement for High Speed Aerodynamic Pressure
- Boundary layer analysis
- Fluid flow nature
- Aerodynamic design
- Mathematical approach for estimation of Aerodynamic properties
- Material failure analysis
- MATLAB applications in engineering
- Experimental Techniques

**Objective of the Workshop:**

The course builds from the big ideas in finite element analysis and computational fluid dynamics to various case studies which is a numerical and computational method used to solve the real engineering problems related to physics, structural analysis, heat transfer, fluid flow, mass transport, and electromagnetic potential field. The workshop aims to give students and professionals solving engineering situations analytically and research problem on suitable FEA tool.

**Resource Persons:****Dr. K. SUNDARARAJ**

Professor and Head,  
Department of Aeronautical Engineering,  
KCT Coimbatore, Tamil Nadu.

**KARPAGAM ACADEMY OF HIGHER  
EDUCATION****Chief Patron,****Dr. S. Subramanian**

Vice Chancellor,  
Karpagam Academy of Higher Education

**Dr. G. Sekar**

Registrar,  
Karpagam Academy of Higher Education

**Patron****Dr. R. Sundararajan**

Dean,  
Faculty of Engineering.

**Convener****Dr.P.Shanmughasundaram**

Professor & Head  
Department of Automobile Engineering.  
Karpagam Academy of Higher Education

**Organizing Secretaries****R.Madhavan**

Assistant Professor  
Department of Automobile Engineering.  
Karpagam Academy of Higher Education

**K.R.Sandhya**

Assistant Professor  
Department of Automobile Engineering.  
Karpagam Academy of Higher Education

**KARPAGAM GROUP OF INSTITUTIONS**

- Karpagam Academy of Higher Education
- Karpagam College of Engineering
- Karpagam Institute of Technology
- Karpagam Teacher Training Institution
- Karpagam College of Education
- Karpagam College of Pharmacy
- Karpagam Nursing College
- Karpagam Medical College
- Karpagam Polytechnic College.



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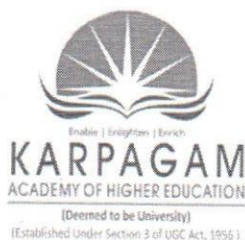
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Coimbatore, Tamil Nadu 641021

Email: [info@karpagam.com](mailto:info@karpagam.com), Web: [www.kahedu.edu.in](http://www.kahedu.edu.in)

**FACULTY OF ENGINEERING**

**DEPARTMENT OF AUTOMOBILE ENGINEERING**



## Report on One day Workshop on “Aerodynamic Analysis on Tesla Cybertruck”

DATE OF EVENT : 16<sup>th</sup> December, 2015

VENUE : MBA Seminar Hall

### About the Program:

The event of one day workshop on “Aerodynamic Analysis on Tesla Cybertruck” was organized by the Department of Automobile Engineering, Karpagam Academy of Higher Education, Coimbatore. This workshop was handled by Dr. K. SUNDARARAJ, Professor and Head, Department of Aeronautical Engineering, KCT Coimbatore, Tamil Nadu. The practical secession of the programme was held at CAE laboratory, Automobile department. The programme was planned to train the students in Aerodynamic simulation design of exterior design of vehicle.

The programe started with prayer song in an inaugural session and was inaugurated by Dean, Faculty of Engineering and HOD, Automobile Engineering of Karpagam Academy of Higher Education. The technical session started on the topic “Introduction to Aerodynamic” by Dr. K. SUNDARARAJ, Professor and Head, Department of Aeronautical Engineering, KCT Coimbatore, Tamil Nadu. In this session the speaker interacted with participant in such a way that he introduced the topic so as to understand the software briefly.

The hands-on training on Aerodynamic Analysis on Tesla Cybertruck were handled by Dr. K. Sundararaj and Professors of Automobile Engineering Department, Karpagam Academy of Higher Education in computer graphics laboratory.

At valedictory session, the Dean, Faculty of Engineering, Head of the department, Mechanical Engineering, and Dr. K. Sundararaj distributed certificates to the participants and gave vote of thanks.

**About the Resource Person:**

Dr. K. Sundararaj is currently working as Professor and Head at KUMARAGURU COLLEGE OF TECHNOLOGY (KCT), Coimbatore, India. At KCT, Dr. K. Sundararaj teaches and guides graduate students in the frontier areas of Aeronautical Engineering. Apart from academia, he is also involved in various developmental activities of the institution and the society at large.

Dr. K. Sundararaj holds a doctorate in the field of Mechanical Engineering with specialization in simulation of high-speed flows. Dr. K. Sundararaj has two decades of academic experience in India coupled with academic excellence. He has carried out studies related to Aero Dynamics, Engineering Mechanics and Heat transfer.

Dr. K. Sundararaj focuses his innovative engineering skills on applications of simulation of strategy planning for organizations to provide the best yield of manpower, machinery and materials.

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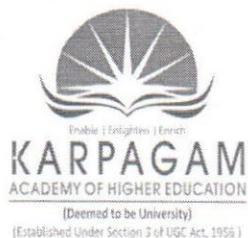
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**FACULTY OF ENGINEERING**

**DEPARTMENT OF MECHANICAL ENGINEERING**



## Consulted Feedback on “Aerodynamic Analysis on Tesla Cybertruck”

DATE OF EVENT : 16<sup>th</sup> December, 2015

VENUE : MBA Seminar Hall

Department of Automobile Engineering, Karpagam Academy of Higher Education, had successfully completed the One-day Workshop on “Aerodynamic Analysis on Tesla Cybertruck”. This workshop was highly valued by the student participants. A total of 30 numbers of students participated in the workshop from KAHE and other colleges. Out of 30 students 15 numbers of students were from Automobile Engineering Department. The participants were very much cherished the lecture of Dr. K. SUNDARARAJ, Professor and Head, Department of Aeronautical Engineering, KCT Coimbatore, Tamil Nadu. Dr. K. SUNDARARAJ and faculties of Automobile department provided hand practice of Aerodynamic wind tunnel simulation for the students. During hands on practice all the students were given proper attention individually.

Also, Dr. K. SUNDARARAJ happily commended the excellent grasping and quick learning capacity for our students. The infra structure available in the Computer graphics Laboratory of Automobile Department, KAHE were praised by him.

Overall the workshop was very much valuable for the students to build their future industrial prospective.

**HOD/Automobile**