SPEAKERS

Dr. Venugopal, *Director, Technology and Planning, Cummins India*
Dr. Shankar is a technology innovation leader with strong technical expertise in Cleantech, Energy, Nanotechnology & Advanced Materials. He has rich experience in translating technical ideas into technology innovations. He is skilled in identifying new technologies for potential business opportunities and 'Innovative New Product Development' He has a successful innovator track record with numerous granted patents, technical publications and presentations and the ability to lead global multi-functional teams with focus on delivery of business strategy.

Mr. Kanikdale, *Technical Lead, Product Line Interface, Cummins India.*
Mr. Kanikdale is basically a mechanical engineer from Nagpur University. He has done his M.Tech in thermal engineering from IIT Bombay. He has been working in automotive industry since last 10 years. He is presently working with Cummins Research and Technology India Ltd as Technical Leader for power generation business. He is a certified Six Sigma Green Belt and also pursuing his executive MBA from SP Jain institute of Management and Research.

Mr. Kapse, *Technical Lead, Product Validation Specialist, Cummins India.*
Mr. Kapse is basically a mechanical engineer from North Maharashtra University. He has done his M.Tech in Thermal Engineering from NIT Warangal. He has been working in automotive industry since last 8 years. He is presently working with Cummins India Ltd as Product Validation Specialist Leader for Mid-Range Engine Business. He is a certified Six Sigma Green Belt.

Mr. Khot, *Senior Engineer, Computational Fluid & Thermal Engineering Group, Cummins India.*
Mr. Khot is mechanical engineer from Pune University. He has done his MS in Computational Fluid Dynamics from IIIT & Moscow State University. He also holds post graduate diploma in Steam Engineering & Control Instrumentation from Forbes Marshall. He is Six Sigma trained belt & filed 3 USA invention disclosures for Cummins.

2 Day Workshop on

Innovation Flow

19th to 20th July 2013 at ARAI, Pune

REGISTRATION FORM

Name, Designation, Dept., Office No., Mobile No. & Email ID :	
Delegate - 1	
Delegate - 2	
Delegate - 3	
Company Name & Address	
Co-ordinator's Name, Designation, Contact No., Email ID	
100% Advance Payment Details	

Please fax/email/post duly filled-in registration form on or before 15th July 2013 to:
Dr. K. C. Vora, Dy. Director & Head, ARAI Academy & Co-ordinator, SAEINDIA Western Section.
ARAI Post Box 832, Pune 411004 / S. No. 102, Vetal Hill, Off Paud Road, Kothrud, Pune 411038
Tel: 020-3023 1183/ 1136, Fax: 020-3023 1104
Email : **executive@saeiws.org, training.pga@araiindia.com**

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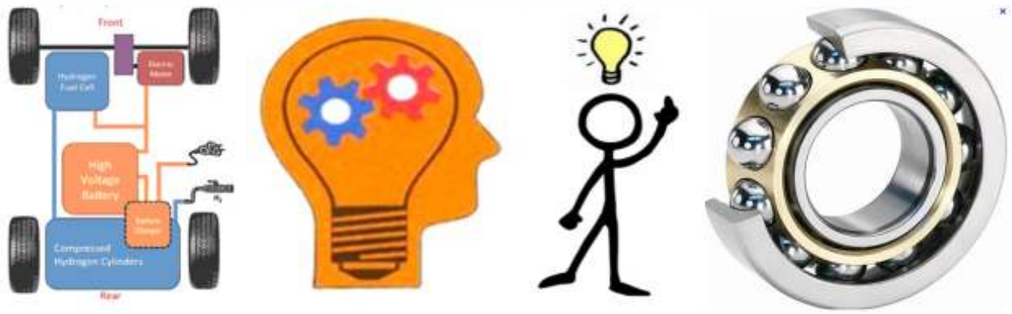
BEST LEARNING CENTRE AWARD TO
ARAI ACADEMY & KNOWLEDGE CENTRE BY ISTD

2 Day Workshop on



Innovation Flow

at

ARAI, Pune

(The Automotive Research Association of India)

19th to 20th July 2013

JOINTLY ORGANIZED BY

ARAI® Progress through Research

SAEINDIA The Engineering Society For Advancing Mobility Land Sea Air and Space
Western Section

BACKGROUND & OBJECTIVES

The aim of this module is to elaborate on the fundamentals, principles and advanced technologies involved in Innovations. Engineering systems and products have been continuously undergoing changes towards evolution slow and fast. In the language of innovation, the Ideality (ratio of Useful Function to Harmful Function & Cost) of any technical system must increase with evolutionary trends. Today, success of engineering research organization lies in answering only one and simple questions: What's Next?

The "Innovation Flow" workshop focuses on coaching engineers about the systematic innovation principles, frameworks and ways to apply for engineering system in question. The workshop also enables to create creative mindset and build appreciation for current technology solutions prevalent in industry. The continuous application of this knowledge can directly lead to accelerate the product and technology development cycle. Engineers are encouraged to validate the outcome of this workshop with existing patents and prevalent solutions in their own working area. It will also help delegates to orient towards creative ideas to meet stringent automotive norms, new technologies and Innovations. Also, it will facilitate delegates to network with the leaders in automotive Industries.

INTENDED LEARNING OUTCOMES

On completion of the module, the delegates should be able to:

- Understand Innovation
- Understand Structured Method of Innovation
- Understand systematic innovation
- Understand Ideation framework
- Learn to develop insights into problem
- Create novel ideas
- Lead multi-disciplinary teams.
- Demonstrate independent learning ability necessary for conducting professional development.
- Become self-disciplined self-motivated, demonstrating personal responsibility in the pursuit of studies and professional practice.

"NOTHING IS RANDOM; THE ONLY CATCH IS TO KNOW HOW IT WORKS"

– MAXWELL

PROGRAMME

Day One

08.30 - Registration

09.30 - Inauguration & Welcome Address

09.45 - Introduction to Innovation

11.30 - Creative Engineering and TRIZ (Rusian acronym for theory of inventive problem solving)

13.30 - Lunch

14.30 - Structured Innovation

17.00 - Conclusion

Day Two

09.30 - Focus on Innovation Opportunity

11.30 - Ideation - Leap & Orient

13.30 - Lunch

14.30 - Trends - What's next ?

15.30 - Innovation Strategy

16.45 - Valedictory & Feedback Session

17.00 - Conclusion

Note : ARAI reserves the rights to change the dates, schedule, contents, speakers, venue, etc. for the programme without any notice.

2 Day Workshop on Innovation Flow

WHO SHOULD ATTEND ?

- Organizations involved in R&D, design, manufacturing, testing and product development teams.
- Automotive & Component manufacturers.
- Suppliers of critical components and advanced / lightweight materials.
- Scientist, Innovator & Patent Expertise.
- Engineering / consulting companies.
- Professors / engineering college students.
- Engineers who are interested in pursuing further studies.

REGISTRATION FEES

Category	Registration Fees (Rs.) (per participant)	Total Fees including Tax of 12.36% (RS.) (per participant)
Non SAE Members	10000	11236
SAE Members	7000	7866
SAE Faculty Members	4000	4495
SAE Students	2000	2248

Registration fees include :

- Breakfast
- Lunch
- Delegate kit

MODE OF PAYMENT

At Par / Multicity cheque or demand draft in favour of

The Automotive Research Association of India

payable at Pune.

ARAI, over four & half decades, has provided its design and development expertise to the Indian automotive industry, focusing on the testing and evaluation of components and systems to meet national and international standards. ARAI strives to achieve international recognition in these areas. In keeping with the globalization of economy and business, ARAI continues to enlarge its scope of services to meet the requirements of automotive industries around the world. In addition to utilizing state-of-the-art technology, laboratories and highly-trained personnel, ARAI recognizes the need to develop a new generation of engineers to meet the demands of the automotive industry, not just in India but across the globe.

ARAI ACADEMY is classified into three divisions:

LEARNING CENTRE has embarked upon a programme of building up human resources by commencing educational programme (Graduate and Post graduate) with specialization in Automotive Engineering. It has tied up with VIT University (Vellore), Veltech University (Chennai), College of Engineering (Pune), University of Alabama (USA), Loughborough University (UK) and University of Braunschweig (Germany).

TRAINING CENTRE has devised various Proficiency Improvement Programmes (PIPs). It gives engineers, faculty and student's knowledge and technical expertise in a wide range of automotive disciplines. It helps in understanding system's view point for automotive design and manufacture, with specific skills in formulating automotive engineering solution in terms of their function and performance, through optional modules.

KNOWLEDGE CENTRE has collection of books & standards, technical papers and numerous journals, technical reports and seminar / conference proceedings. It publishes monthly magazine 'Automotive Abstracts'.

Please visit www.araiindia.com for more information.

The Society of Automotive Engineers India SAEINDIA, Western Section, Pune, is a vibrant premier professional society, having substantial following in the Indian automobile industry, involved in serving the Mobility Engineering Community engaged in design, manufacture and service of self-propelled vehicles and systems that move in land, sea, air and space. Its vision is to continuously enrich knowledge base of practitioners in mobility industry and institutions in the service of humanity.

SAEINDIA is India's leading resource for mobility technology. As an individual member driven society of mobility practitioners, the ownership of SAEINDIA wrests with its members who are Individuals from the mobility community, which includes Engineers Executives from Industry, Government Officials, Academics and Students.

Following are the current activities of SAEINDIA for different categories of members:

1. Engineers & Business Executives: Mobility Congress, SIAT, Workshops, Seminars, Conferences, Eminent Speakers Series, Tech-Talk Series, etc.
2. Engineering Student Members: BAJA, SUPRA, Effi-cycle, Annual Socials, Project Competition, Collegiate Club Activities, etc..
3. School Children: AWIM (A World In Motion)

SAEINDIA is a Platform where all Engineers & Officers from Automotive Industries network with each other, share their ideas, Improving technical knowledge and thereby build strong relations. This also helps them in their managerial roles in their respective fields and industry.

Please visit www.saeindiaws.org for more information.