



# CASCADES

14

I.Mech.E. London  
March 13<sup>th</sup>–14<sup>th</sup>, 2014

**4<sup>th</sup> CIMAC CASCADES**  
Seminar for younger engineers

**“Fuel Efficiency – Are  
Improvements Possible?”**



**Case Studies  
In Combustion engine Applications  
And Design Experiences**

[www.cimac.com](http://www.cimac.com)

**Invitation**



# To Inspire. To Inform.



## Dear friend of CIMAC,

CIMAC and its UK National Member Association (UK NMA) are pleased to invite you to the 4<sup>th</sup> CIMAC CASCADES event. This opportunity for young engineers in the large engine industry will be held on Friday 14<sup>th</sup> March 2014 between 8:30 and 16:30 at the Institution of Mechanical Engineers in London.

This CIMAC CASCADES event offers the opportunity for young engineers to meet with leading industry experts to exchange information and network together. The objective is to encourage and inspire students and recently graduated engineers to realise their goals in an engineering career. The core event will be nine short presentations by young engineers to describe their projects, how they tackled them, the difficulties they encountered and the outcome. The theme on which the presentations will be based is:

Presenters	Title	Company
Martin Axelsson	Manager, Engine performance Expertise, Research & Technologies	Wärtsilä Finland OY
Michael Gisiger	Senior Manager Sales and Application Engineering	ABB Turbo-Systems AG
Marius Ligensa	Senior Manager, Design	L'Orange GmbH
Benjamin Oszfolk	Manager Research & Technology New Propulsion Systems	MTU Friedrichshafen GmbH
Madan Pal	Research Tribologist	Daido Metal Co. Ltd.
Thomas Frank Petersen	Research Engineer	MAN Diesel & Turbo SE, Copenhagen
Viktor Spirov	Graduate Analysis Engineer	Ricardo UK Ltd.
Noriaki Yoshioka	Engineering Staff	Niigata Power Systems
Dr. Shinsuke Murakami	Development Engineer Commercial and Large Engines	AVL List GmbH

## “Fuel Efficiency – Are Improvements Possible?”

The young engineer who makes the best contribution as judged by the UKNMA will receive the CIMAC CASCADES AWARD.

### Pre-programme

On Thursday, 13<sup>th</sup> March 2014 before the CASCADES event there will be a social evening to enable you to meet, and share your experiences, with your contemporaries and established industry experts. You are invited to:

- An afternoon visit to **The London Transport Museum** in Covent Garden, a fascinating collection of exhibits that track the evolution of London Transport through its 150-year history.
- An evening reception at the same venue after it is closed to the public, followed by dinner.

### Fees

The fees for the pre-programme and CASCADES event will be £240 inclusive of 20% VAT, payable by participants. There are a limited number of places on a first-come, first-serve basis for students to attend the seminar on 14<sup>th</sup> March 2014 free of charge, but they will be charged £120 inclusive of 20% VAT if they wish to join the pre-programme on 13<sup>th</sup> March. See page 4 for registration details.

We look forward to seeing you at CASCADES 2014 in London.

**Humphrey Niven**, President of CIMAC UK National Member Association.

# Programme\*

**March 13<sup>th</sup>, 2014**

Visit the London Transport Museum in Covent Garden early to have a thorough look round.	Open 10:00 to 18:00
A welcome reception and dinner at the London Transport Museum	18:30 to 21:15

**March 14<sup>th</sup>, 2014**

## **4th CIMAC CASCADES at the Institution of Mechanical Engineers, London**

Registration	08:30 to 09:00
Welcome address by Chairman Dr. Christoph Teetz, President CIMAC	09:00 to 09:10
Welcome address by Humphrey Niven, Chairman CIMAC UK NMA	09:10 to 09:15
Keynote speech by John Carlton, Professor of Marine Engineering at the City University, London	09:15 to 09:35

<b>Session chairman:</b>	<b>Humphrey Niven</b>	<b>09:35 to 11:05</b>
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Presenter	Presentation
Martin Axelsson	Performance Development of Future High Power Density Engines with High Efficiency
Michael Gisiger	VCM, the Key for Enhancing Gas Engines for Demanding Applications
Marius Ligensa	Controlled Common Rail Injector for High Speed Engines

<b>Coffee break</b>	<b>11:05 to 11:35</b>
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<b>Session chairman:</b>	<b>Graham Calder</b>	<b>11:35 to 13:05</b>
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Presenter	Presentation
Benjamin Oszfolk	New Propulsion Systems for Non-road Applications and the Impact on Combustion Engine Operation
Madan Pal	Advances in Plain Bearing Technology for Better Fuel Efficiency. Does Experience in the Automotive Market Translate to the Large Engine Market?
Thomas Frank Petersen	Improve the Fuel Efficiency and NOx Emission Trade-off in Two-stroke Marine Engines with Design of Experiments

<b>Lunch break</b>	<b>13:05 to 14:00</b>
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<b>Session chairman:</b>	<b>John Smythe</b>	<b>14:00 to 15:30</b>
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Presenter	Presentation
Viktor Spirov	Design of large Engine Crankshafts for Improved Fuel Economy
Noriaki Yoshioka	The Development of Niigata Marine Hybrid Propulsion System
Dr. Shinsuke Murakami	Potentials for Efficiency Improvement of Gas Engines

<b>Tea break</b>	<b>15:30 to 16:00</b>
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CIMAC CASCADES AWARD Judging Panel: TBA	16:00 to 16:20
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Closing remark by the Chairman Dr. Christoph Teetz, President CIMAC	16:20 to 16:30
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# General Information

## Registration and Payment

Please register between 13<sup>th</sup> January and 28<sup>th</sup> February 2014 at the latest via

[www.cimac.info/cascades2014](http://www.cimac.info/cascades2014)

The registration procedure will be handled by CIMAC UK NMA. You will receive the official confirmation and an invoice by e-mail. Please pay the participation invoice by Bank Transfer in GBP by 7<sup>th</sup> March 2014 at the latest.

## Social Event at the London Transport Museum on 13th March 2014

Please confirm during the registration process that you will join this event.

## Timetable and Logistics

You will be provided with a complete timetable with organisational information including maps and event locations by e-mail when your registration is confirmed.

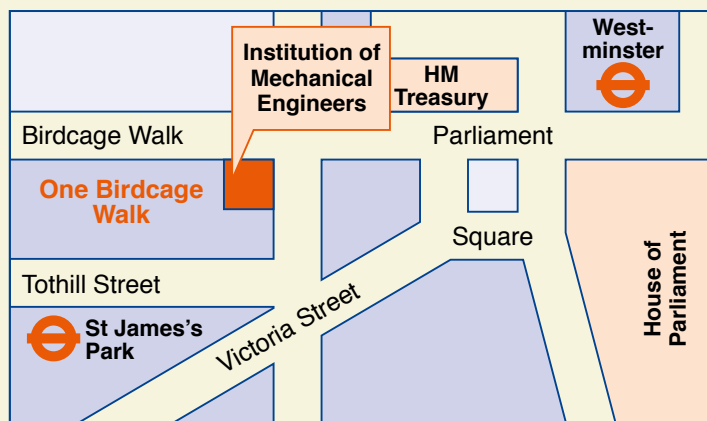
## Hotel Accommodation and Travel

We suggest that you make your own travel plans as at this time of year there is ample opportunity to take advantage of low season rates. There are many hotels to suit all tastes and price ranges in and around London. Extensive and frequent transport connections facilitate travel from the London airports—London City, Gatwick, Luton, Stansted and Heathrow—into central London. Information can be found on the following website:

[www.visitlondon.com/traveller-information](http://www.visitlondon.com/traveller-information)

Should you require specific assistance then please contact us by e-mail with your request.

Locations of the London Transport Museum and the Institution of Mechanical Engineers are shown in the maps below:



## The 4th CIMAC CASCADES is hosted by

CIMAC UK NMA

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