Institution of Mechanical Engineers
Automobile Division

I MECH E

IPDS 2006

Integrated Powertrain & Driveline Systems 2006

First Announcement & Call for Papers

14-15 JUNE 2006
FORD MOTOR COMPANY, DUNTON, ESSEX

www.imeche.org.uk/events/power

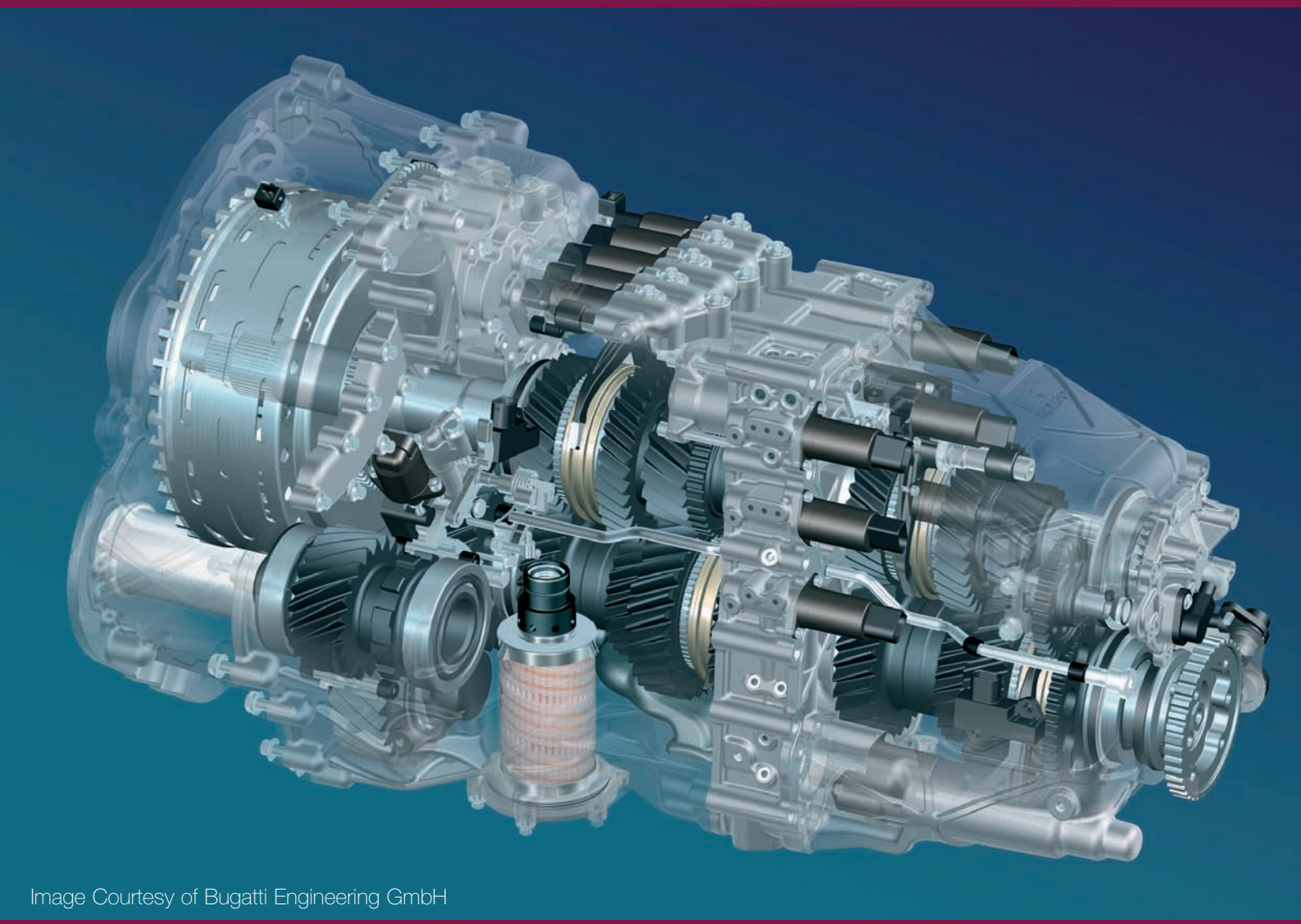

Image Courtesy of Bugatti Engineering GmbH

Integrated Powertrain & Driveline Systems 2006

The holistic view of powertrain development that includes engine, transmission and driveline is now well accepted. Future trends indicate an increasing range of engines and transmissions with a consequent greater diversity of combinations. Coupled with the increasing introduction of hybrid vehicles, the scope for research, novel development and new products is clear. This conference aims to address these areas with an emphasis on transmissions, whilst having an integrated vehicle systems theme.

By attending you will:

- Learn of the latest advances in integrated powertrain and driveline systems
- Network with key decision makers and make new contacts
- Present and discuss your ideas with a highly qualified audience
- Question the experts

CONFERENCE SCOPE

The Conference will focus on:

Powertrain Integration

- Engine matching and total system integration
- Efficient design
- Robustness
- Modelling and simulation methodology
- Hybridisation
- Weight reduction

Transmissions

- Manual, automatic
- Automated synchromesh transmissions
- DCT
- CVT & IVT
- Split path designs
- Layout and packaging
- Active differentials
- Components and actuation including clutch and gears
- Parasitic losses and transmission efficiency

Engine Integration

- Engine design for improved integration
- Engine technologies to give performance or economy benefits within an integrated system

Control

- System modelling
- Simulation DOE
- Driver interface
- Fuel economy and emissions optimisation
- Torque vectoring
- HIL
- Adaptive systems and OBD

Concept to Market Evolution

- Manufacturing and time compression aspects
- Design tools
- General automotive
- Off-highway
- Heavy duty
- Defence
- Motorsport

Performance & Attributes

- Driveability
- Vehicle and driver interface
- Economy
- Emissions
- End of life
- Reliability
- Refinement and NVH

Offers of Papers

If you work in this field and think others may be interested in your way of working or the technology being developed, why not share your knowledge and expertise by producing and presenting a paper. The first step is to produce a synopsis of your proposed paper.

Synopses of papers comprising up to 250 words should be submitted by 12 September 2005.

Selected authors will then be invited to submit draft papers up to 4000 words in length by 1 December 2005.

The Conference papers will be written and presented in English. Although all submitted papers will be considered by the Organising Committee, final acceptance will depend upon the Committee's decision based on the contents of the final manuscript and receipt by 10 March 2006. The presenting author of each paper will be entitled to a substantial reduction in the registration fee and it is the Institution's policy that no speakers will be reimbursed any travel or accommodation expenses. All papers will be published in a soft-bound volume available to all Conference delegates. Authors are expected to attend the Conference to present their work.

Authors are encouraged to submit their work to a PEP journal. Work submitted must be an extension of the paper submitted to the conference and be completely original and innovative. Full details of the criteria are available on the PEP website at www.pepublishing.com. Interested authors should view the aim and scope of the appropriate journal and follow the guidelines which are available on the PEP website.

Authors are encouraged to submit their synopses with full contact details electronically to Stephanie Love, Senior Events Executive by email to: s_love@imeche.org.uk

Exhibition and Sponsorship: Promotional Opportunities

The exhibition will provide an opportunity for companies to promote their latest products and services to a targeted audience of delegates. There is also the opportunity to further enhance your company profile by supporting one of many aspects of the event available for sponsorship.

For further information please contact Paul Terry on +44 (0) 20 7304 6867 or email pault@imeche.org.uk

Conference Enquiries

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Organising Committee

Nick Vaughan (Chairman)	Cranfield University
Geoff Davis	Ricardo UK Ltd
Chris Brace	University of Bath
Adrian Cole	TIC
Derek Eade	University of Hertfordshire
Dave Simner	Cranfield University

Please tick where appropriate:

I wish to offer a contribution to the Conference entitled:

Title:

Synopsis is attached: ☐

Synopsis will follow: By Mail ☐ **By Email** ☐ **(Please attach full contact details with your email)**

I would like to receive information on attending the Conference: ☐ **Available March 2006**

I would like to receive information on Sponsoring/Exhibiting at the Conference: ☐

Name

Position

Company

Address

Post Code

Telephone

Fax

Email

IMechE Member Number (if applicable)

Please attach your business card to this form.

The IMechE would periodically like to send you information on events, conferences and publications that you may be interested in. Would you like to receive such information? Yes ☐ No ☐

Other Possible Contributors/Delegates:

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