

FINAL PROGRAMME

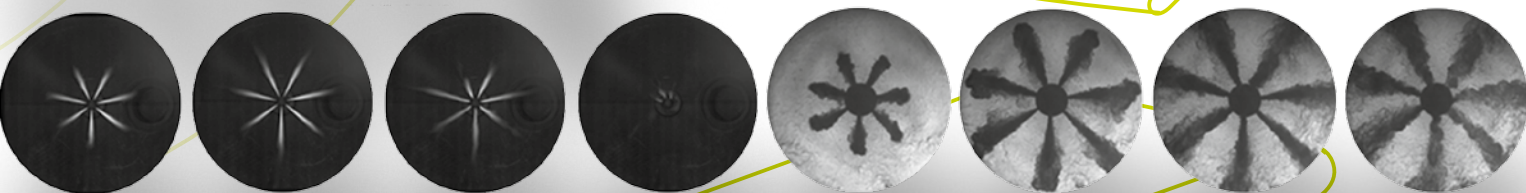
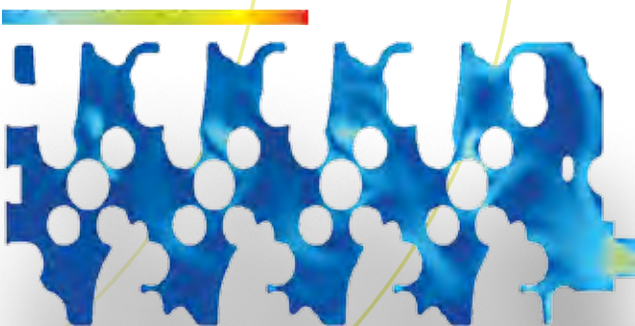


THIESEL 2014

Thermo-and fluid dynamic processes
in **direct injection** engines

September 9th-12th · 2014 · Valencia (Spain)

ORGANISED BY: CMT-MOTORES TÉRMICOS · Universitat Politècnica de València (Spain)



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



Prof. Francisco José Mora Mas

Rector de la Universitat Politècnica de València
Rector of the Universitat Politècnica de València

» Es un gran honor para la Universitat Politècnica de València celebrar el Congreso Internacional Thiesel 2014 y acoger, en esta octava edición de relevancia mundial, a un nutrido número de profesionales, académicos y expertos del sector de la automoción para presentar, compartir y difundir las investigaciones más novedosas, así como la implementación de los resultados que se consolidan como los últimos avances en motores.

La importancia de la I+D+I en el campo de la tecnología del motor no cesa de crecer, de forma especial en el motor de combustión directa, que se consolida como el sistema por excelencia de combustión aplicable en las próximas décadas, a todo tipo de vehículos, tanto diésel, gasolina como a vehículos híbridos.

Thiesel se presenta como una valiosa plataforma de intercambio de los últimos trabajos internacionales y da a conocer los resultados de las investigaciones dirigidas a mejorar la eficiencia de los motores y a reducir las emisiones contaminantes. Proporciona una oportunidad idónea para compartir teorías y métodos que ofrecen soluciones respetuosas con el medio ambiente, además de generar una gran expectación e interés en el sector automovilístico con los últimos descubrimientos y tecnologías.

La industria y el mercado automovilístico se encuentran en constante evolución y desarrollo. Este es un sector que avanza a pasos agigantados y requiere de grandes dosis de ingenio, innovación y difusión eficaz de los avances obtenidos. Gracias a las investigaciones y a la calidad de contribuciones realizadas por expertos del motor en el marco de Thiesel este objetivo fundamental se cumple plena y satisfactoriamente.

Por último, me gustaría dirigir unas palabras de agradecimiento y felicitación al Instituto Universitario CMT - Motores Térmicos, por la gran labor que están desarrollando y, a la vez, extender una cálida bienvenida a todos los participantes de Thiesel 2014 a la Universitat Politècnica de València, deseándoles un ambiente propicio de trabajo dinámico y una agradable estancia en la ciudad de Valencia <

» It is a great honour for the Universitat Politècnica de València to be holding this eighth edition of the International Conference Thiesel 2014 and to welcome a whole host of professionals, academia and experts in industry, to share and diffuse the latest information and theories on a range of topics related to research on automotive engines, as well as the implementation of the latest discoveries in motors.

Innovative research in the field of engine technology is of growing importance, as internal combustion technology gains more and more relevance and impact due to it being the dominant combustion system for the next few decades and being implemented in diesel, petrol, hybrid vehicles.

Thiesel is a valuable international platform for the exchange of the most up-to-date international research projects, and allows the transfer of research results aimed at improving engine efficiency and reducing contaminating emissions.

It provides an ideal opportunity to share theories and methods that offer environmentally friendly solutions, as well as to generate great interest among the automotive sector concerning the latest discoveries and technologies.

Fast-moving and ever evolving, the automotive market and industry progress at an astounding rate and require innovation and effective diffusion of the advances made. Thanks to the investigations and the quality of the contributions made by experts in engines within the Thiesel framework, this fundamental objective will be satisfactorily achieved.

Finally, I would like to dedicate my gratitude and congratulations to CMT-Motores Térmicos, for the great work they are doing and at the same time, warmly welcome all the participants of Thiesel 2014, to the Universitat Politècnica de València. I wish you a pleasant stay in the city of Valencia, where you will surely discover both an enjoyable and dynamic working environment <



» THIESEL 2014 is the eighth edition of this conference and it has gained a consolidated position as a meeting point between industry, research institutions and academia involved in R&D for automotive engines. Considering that engine science and technology have evolved during these years, with new emerging engine concepts, and that the frontiers between spark-ignition and compression-ignition are becoming more and more diffuse, in 2012, the conference renewed its name to THIESEL Conference on 'Thermo- and Fluid-Dynamic Processes in Direct Injection Engines'. This gave it a boost, which proved that in such a technological context, it was reasonable to exploit R&D synergies and enhance the exchange of valuable knowledge and experience.

It is generally agreed that the internal combustion engine will remain the main propulsion system for vehicles in the next 20 to 30 years and furthermore, will remain present even in hybrid and electrified vehicles. Therefore, innovative research on combustion engines represents a most promising way to a substantial reduction of pollutant emissions, until new solutions based on hydrogen and fuel cell technologies may reach their maturity.

Innovation, however, calls for important research efforts. On the combustion side, further development for advanced control strategies and hardware able to fully exploit the flexibility provided by modern multiple injection systems will be required. Regarding other engine processes, advances will also be necessary in the thermal and air management of the engine, in response to foreseen demands for a precise control of heat flows, exhaust gas recirculation (EGR) and turbo-charging system operation. Also, it is likely that new and challenging issues regarding after-treatment technology and engine noise abatement will arise.

The outlook allows for an optimistic view on the potential of clean and silent combustion engine technologies. However, their success depends on the academic researchers' awareness of the automotive industry needs and on the will of automotive industry to invest in medium-to-long term basic research.

The main objective of THIESEL 2014 is to contribute to this success by attracting good quality papers from both Industry and Academia, describing the most recent developments and latest innovations relative to thermo-and fluid dynamic processes in direct injection engines, and by facilitating the exchange of valuable knowledge and experience between the main actors of the automotive R&D sector ◀

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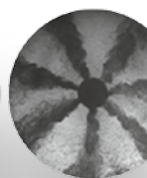
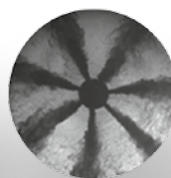
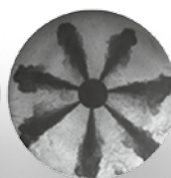
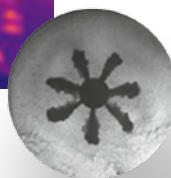
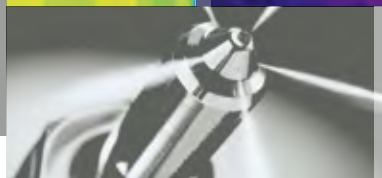
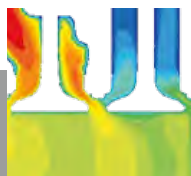
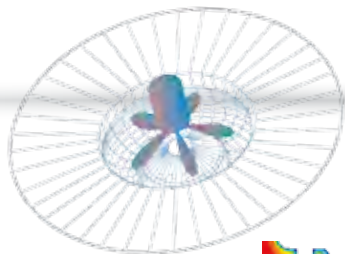
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 Dr. C. SOTERIOU · Delphi Diesel Systems - U.K.
 Prof. F. TINAUT · Universidad de Valladolid - SPAIN
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SESSION MATRIX

	TUESDAY, SEPT 9 th	WEDNESDAY, SEPT 10 th	THURSDAY, SEPT 11 th	FRIDAY, SEPT 12 th
07:30-08:30		CONFERENCE REGISTRATION		
08:30-10:30		SESSION A.1. Fuel Injection & Sprays (I)	SESSION C.1. Combustion (I)	SESSION E.1. Emissions & Aftertreatment
10:30-11:00		COFFEE BREAK		
11:00-13:00		SESSION A.2. Fuel Injection & Sprays (II)	SESSION C.2. Combustion (II)	SESSION F.1. Air Management & Turbocharging (I)
13:00-15:30		LUNCH		
15:30-17:00		SESSION B.1. Modelling (I)	SESSION C.3. Combustion (III)	SESSION F.2. Air Management & Turbocharging (II) 15:00-16:30
17:00-17:30		COFFEE BREAK		
17:30-19:00		SESSION B.2. Modelling (II)	SESSION D.1. Fuels	SESSION F.3. Air Management & Turbocharging (III) 16:45-17:45
18:00-19:30	CONFERENCE REGISTRATION			
19:30-20:00	WELCOME ADDRESS			
20:00-21:30	WELCOME COCKTAIL			CLOSURE ADDRESS 17:45-18:15
20:30-24:00				GALA DINNER

CONFERENCE REGISTRATION	7:30 - 8:30
SESSION A.1. Fuel Injection & Sprays (I) Keynote address: P. MACAUDIERE	8:30 - 10:30

Air quality: PSA Peugeot Citroën technologies for a Diesel engine more and more environmentally friendly

P. Macaudiere. PSA PEUGEOT CITROËN (FRANCE)

Fuel heating in high pressure Diesel nozzles

G. Strotos, P. Koukouvinis, A. Theodorakakos, M. Gavaises. CITY UNIVERSITY LONDON (UK)

» L. Wang, J. Li. CATERPILLAR (USA) » R. M. McDavid. CATERPILLAR (UK)

Visualization analysis of relationship between vortex flow and cavitation behavior in Diesel nozzle

H. Watanabe, M. Nishikori. NIPPON SOKEN (JAPAN) » T. Hayashi, M. Suzuki, N. Kakehashi. DENSO CORPORATION (JAPAN)

» M. Ikemoto. TOYOTA MOTOR CORPORATION (JAPAN)

Visualising injection events in a fully operational Diesel injector with a multi-hole transparent tip

M. Winterbourn, C. Soteriou, C. Daveau. DELPHI DIESEL SYSTEMS (UK) » N. Mitroglou, M. Gavaises. CITY UNIVERSITY LONDON (UK)

COFFEE BREAK	10:30 - 11:00
SESSION A.2. Fuel Injection & Sprays (II)	11:00 - 13:00

Cavitation in mini-sac nozzle and injected liquid jet

R. H. Pratama, A. Sou. KOBE UNIVERSITY (JAPAN) » Y. Wada, H. Yokohata. MAZDA MOTOR CORPORATION (JAPAN)

Effect of needle lift on atomization in Diesel fuel spray

K. Komada, D. Sakaguchi, H. Ueki. NAGASAKI UNIVERSITY (JAPAN) » H. Tajima, D. Tsuru. KYUSHU UNIVERSITY (JAPAN)

Cinema-stereo imaging of fuel dribble after the end of injection in an optical heavy-duty Diesel engine

W.E. Eagle, M.P.B. Musculus. SANDIA NATIONAL LABORATORIES (USA)

The modelling of single and multi-component droplet evaporation

J. D. Camm, R. Stone, M. H. Davy. UNIVERSITY OF OXFORD (UK) » D. Richardson. JAGUAR LAND ROVER (UK)

LUNCH	13:00 - 15:30
SESSION B.1. Modelling (I) Keynote address: C. ANGELBERGER	15:30 - 17:00

Studying combustion variability and knock in a downsized SI engine using Large-Eddy Simulation

C. Angelberger. IFP Energies Nouvelles (FRANCE)

Complex physics modelling of Diesel injector nozzle flow and spray supported by new experiments

J. Shi, N. Guerrassi, G. Dober, K. Karimi, Y. Meslem. DELPHI AUTOMOTIVE SYSTEMS (LUXEMBOURG)

CFD modelling of combustion in heavy-duty diesel engines

G. D'Errico, T. Lucchini, A. Onorati. POLITECNICO DI MILANO (ITALY) » G. Hardy. FPT INDUSTRIAL (SWITZERLAND)

COFFEE BREAK	17:00 - 17:30
SESSION B.2. Modelling (II)	17:30 - 19:00

3D numerical analysis of Diesel combustion under cold ambient condition

Y. Imaoka, T. Nishizawa, S. Iio, M. Hasegawa, A. Teraji, K. Kawamoto. NISSAN MOTOR CORPORATION (JAPAN)

Comparing accuracy and efficiency between a multi-zone model and artificial neural networks in dynamic simulations of PCCI Diesel engine combustion for engine control

B. Jochim, R. Zweigel, M. Korkmaz, D. Abel, H. Pitsch. RWTH AACHEN UNIVERSITY (GERMANY)

Effects of in-cylinder non-uniformities on mixture preparation in a light-duty Diesel engine operating a light-load Partially Premixed Combustion strategy

F. Perini, R. D. Reitz. UNIVERSITY OF WISCONSIN-MADISON (USA)

» K. Zha, D. Sahoo, S. Busch, P. C. Miles. SANDIA NATIONAL LABORATORIES (USA)

THURSDAY, 11th SEPTEMBER

SESSION C.1. Combustion (I)

Keynote address: T. KOCH

8:30 - 10:30

The future of the combustion engine beyond 2020

T. Koch. KARLSRUHE INSTITUTE OF TECHNOLOGY (GERMANY)

Investigations of closely coupled pilot and main injections as a means to reduce combustion noise

S. Busch, K. Zha, P.C. Miles. SANDIA NATIONAL LABORATORIES (USA)

An optimized combustion system dedicated to a 1.5l down-speeded Diesel engine

P. Gastaldi, L. Mermaz-Rollet. RENAULT POWERTRAIN (FRANCE)

Application of JP-8 to Premixed Charge Ignition (PCI) combustion in a single-cylinder Diesel engine

Y. Park, C. Bae. KAIST (KOREA) » C. Mounaïm-Rousselle, F. Foucher. UNIVERSITÉ D'ORLÉANS (FRANCE)

COFFEE BREAK

10:30 - 11:00

SESSION C.2. Combustion (II)

11:00 - 13:00

Combustion system design of the new PureTech 1.2 e-THP engine

P. Souhaité, S. Mokhtari, A. Tellier. PSA PEUGEOT CITROËN (FRANCE)

Improvements in thermal efficiency of premixed Diesel combustion with optimization of combustion related parameters and fuel properties

H. Ogawa, Q. Xiong, T. Obe, Y. Sakane, G. Shibata. HOKKAIDI UNIVERSITY (JAPAN)

Analysis of combustion concepts in a newly designed 2-stroke HSDI compression ignition engine

J. Benajes, R. Novella, D. de Lima. UNIVERSITAT POLITÈCNICA DE VALÈNCIA. (SPAIN) » P. Tribotté. RENAULT SAS (FRANCE)

The effect of jet spacing on the combustion characteristics of Diesel sprays

T. Bazyn, C. Koci. CATERPILLAR (USA)

LUNCH

13:00 - 15:30

SESSION C.3. Combustion (III)

Keynote address: S.A. CIATTI

15:30 - 17:00

Overview of Argonne gasoline compression ignition research: progress and approaches to expand the operating regime

S. A. Ciatti. Argonne NATIONAL LABORATORY (USA)

Flame and soot processes via dual-wavelength diffused back-illumination imaging and 1-D spectroscopy

J. Manin, S.A. Skeen, L.M. Pickett. SANDIA NATIONAL LABORATORIES (USA)

Experimental and numerical kinetic characterisation of n-heptane oxidation

M. H. Hakka, R.F. Cracknell, A. Pekalski.. SHELL GLOBAL SOLUTIONS (UK) » P.-A. Glaude, F. Battin-Leclerc. CNRS, UNIVERSITÉ DE LORRAINE (FRANCE)

COFFEE BREAK

17:00 - 17:30

SESSION D.1. Fuels

17:30 - 19:00

Investigation of the combustion in both metal and optical Diesel engines using a high-glycerol-ethers/Diesel blends

C. Beatrice, G. Di Blasio, M.Lazzaro, E. Mancaruso, R. Marialto, L. Sequino, B.M. Vaglieco. ISTITUTO MOTORI (ITALY)

Methodology for analysis and simulation of dual fuel combustion in large engines

M. Krenn, A. Wimmer. GRAZ UNIVERSITY OF TECHNOLOGY (AUSTRIA)

» G. Pirker. FORSCHUNGSGESELLSCHAFT FÜR VERBRENNUNGSKRAFTMASCHINEN UND THERMODYNAMIK mbH (AUSTRIA)

» S. Djuranec, M.C. Meier, U. Waldenmaier, J. Zhu. MAN DIESEL & TURBO SE (GERMANY)

Virtual fuel approach: a new simulative methodology to analyse effects of fuel properties on mixture formation in compression ignition combustion

B. Graziano, J. Mora Perez, F. Kremer, S. Pischinger, M. A. Reddemann, R. Kneer. RWTH AACHEN UNIVERSITY (GERMANY)

» A. Heufer, H. Rohs. FEV GmbH (GERMANY)

SESSION E.1. Emissions & Aftertreatment

Keynote address: P.C. MILES

8:30 - 10:30

A history of optically accessible engines and their impact on our understanding of engine combustion processes

P.C. Miles. SANDIA NATIONAL LABORATORIES (USA)

Fuel accounting for the first cranking cycle of a GDI engine

J. F. Rodríguez, W.K. Cheng. MASSACHUSETTS INSTITUTE OF TECHNOLOGY (USA)

Improved SCR simulation and control by kinetic modelling of the SCR catalyst

M. Schönnen, Y. Rosefort, I. C. Özyalcin, FEV GmbH (GERMANY) » V. Koll. RWTH AACHEN UNIVERSITY (GERMANY)

Impact of engine combustion on the reactivity of diesel soot from commercial vehicle engines

S. Lindner, A. Massner, U. Gaertner. DAIMLER AG (GERMANY) » T. Koch. KARLSRUHE INSTITUTE OF TECHNOLOGY (GERMANY)

COFFEE BREAK

10:30 - 11:00

SESSION F.1. Air management & Turbocharging (I)

11:00 - 13:00

Individual optimization of effective compression and expansion ratios for thermal efficiency improvement using a single-cylinder diesel engine equipped with VVA system

A. Fukunaga, H. Osada, K. Shimada, T. Okamoto, N. Uchida. NEW A.C.E. INSTITUTE (JAPAN)

Acoustic characterization of automotive turbocompressors

A. Torregrosa, A. Broatch, R. Navarro, J. García Tíscar. UNIVERSITAT POLITÈCNICA DE VALÈNCIA (SPAIN)

A numerical study of trailing edge geometry for low inertia automotive mixed flow turbines

T. Leonard, S. W. Spence, J. Early. QUEEN'S UNIVERSITY BELFAST (UK) » D. Filisinger. IHI CHARGING SYSTEMS INTERNATIONAL (GERMANY)

Development of a turbocharger compressor with variable geometry for heavy duty engines

M. Wöhr, E. Chebli, M. Müller, J. Leweux, A. Gorbach. DAIMLER AG (GERMANY) » H. Zellbeck. TU DRESDEN (GERMANY)

LUNCH

13:00 - 15:00

SESSION F.2. Air management & Turbocharging (II)

15:00 - 16:30

Keynote address: Y. TERASAWA

Mazda's future powertrain strategy and development status of new internal combustion engines

Y. Terasawa. MAZDA MOTOR CORPORATION (JAPAN)

An investigation on the performance of the combined Diesel-brayton cycle engine

H. He, W. Zhuge, K. Huang, Y. Zhang. TSINGHUA UNIVERSITY (CHINA) » S. Liu. CHINA NORTH ENGINE RESEARCH INSTITUTE (CHINA)

Optimization of a radial turbine design for improved engine-turbocharger matching

P. Kapoor. DELFT UNIVERSITY OF TECHNOLOGY (THE NETHERLANDS)

» A. Javed. MITSUBISHI TURBOCHARGER AND ENGINE EUROPE (THE NETHERLANDS)

» A. W. Costall. IMPERIAL COLLEGE LONDON (UK)

COFFEE BREAK

16:30 - 16:45

SESSION F.3. Air management & Turbocharging (III)

16:45 - 17:45

Air loop characterization and first potential of an automotive two-stroke HSDI Diesel engine

C. Ternel, G. De Paola. IFPEN (FRANCE) » P. Tribotté. RENAULT (FRANCE)

Influence of swirl ratio on combustion system performance of a 0.4L single-cylinder Diesel engine

J. de La Morena. GENERAL MOTORS POWERTRAIN-EUROPE (ITALY) » A. Vassallo. GENERAL MOTORS POWERTRAIN-NORTH AMERICA (USA)

» R. C. Peterson, V. Gopalakrishnan, J. Gao. GENERAL MOTORS R&D (USA)

CLOSURE ADDRESS

17:45 - 18:15

GALA DINNER

20:30 - 24:00



IJER SPECIAL ISSUE

THIESEL 2014 will be published in a special issue of the
International Journal of Engine Research (IJER)

POSTER SESSION

The following poster session is planned to enable the presentation of interesting work that could not be included in the Conference presentations. Abstracts of these works are included in the Conference Proceedings. Conference participants are invited to visit the poster session and discuss the issues with their authors.

Numerical investigation of cavitation phenomenon and its effect on the Diesel spray by ELSA

Z. He, L. Zhang. JIANGSU UNIVERSITY (CHINA)

Analytical and experimental performance study of Diesel engines powered with hydrotreated bio-oil

G. F. García Sánchez, J. L. Chacón Velasco, A. Chaves Guerrero. UNIVERSIDAD INDUSTRIAL DE SANTANDER (COLOMBIA)
A. López. UNIVERSIDAD DE ANTIOQUIA (COLOMBIA)

Mixture formation in DISI Engines investigated for conventional multi-hole and colliding-jet injectors by a new LIF technique

R. Weiß, T. Mederer, M. Heldmann, M. Wensing. FRIEDRICH-ALEXANDER UNIVERSITÄT ERLANGEN-NÜRNBERG (GERMANY)

Methane slip reduction from natural gas engines by oxygen stratification using gas permeation membrane

H. Tajima, D. Tsuru. KYUSHU UNIVERSITY (JAPAN)

An investigation into piston cavity geometry effects on thermal efficiency of a heavy duty Diesel engine

H. Osada, N. Uchida, T. Okamoto, K. Shimada, A. Fukunaga. NEW A.C.E. INSTITUTE (JAPAN)

Optimization of Urea-SCR System with Various Configurations of Exhaust Pipe

M. Choi, Y. Yoon, S.-W. Lee, Y.-S. Cho. KOOKMIN UNIVERSITY (KOREA)

Performance and Emission Characteristics of Bio-Oil Blended Fuels in Compression Ignition Engine with Compression Ratio of 22

T.Y. Kim, S. Lee, K. Kang. KOREA INSTITUTE OF MACHINERY & MATERIALS (KOREA)

CONFERENCE EXHIBITION

As in previous years, we are hoping to hold an exhibition with a selection of stands representing high-profile companies connected to the development of Direct Injection engine technology:

Cambustion

J6 The Paddocks · 347 Cherry Hinton Road
Cambridge CB1 8DH · United Kingdom
Tel. +44 1223 210250
Email: sales@cambustion.com
Website: www.cambustion.com

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E-mail: volker.Leismann@horiba.com
Website: www.horiba.com

■ CONFERENCE LOCATION

» The conference will take place in the Conference Building at the Universitat Politècnica de València, Valencia (Spain) on September 9th - 12th, 2014.

■ CONTACT DETAILS

» CONFERENCE SECRETARIAT

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E-mail: secrecon@mot.upv.es
<http://www.cmt.upv.es/Thiesel.aspx>

» REGISTRATION AND HOTELS:

Pacific World (Meetings & Events Spain SLU)
General Urrutia 75. 3B
46013 Valencia, Spain
Tel.: +34 96 352 81 61
Fax: +34 96 394 11 58
E-mail: registration-thiesel2014@pacificworld.com

■ REGISTRATION FEES

» Registration should be made through the Conference website. The registration fee is:

- € 700 (payment in national currencies will also be accepted)
- € 850 for late registrations received after 25th July 2014.

The fee will include:

- Attendance to the Conference sessions
- Conference Proceedings (electronic format)
- Coffee breaks and lunches during the Conference
- Welcome reception and closure gala dinner

Would-be participants are encouraged to fill in the on-line registration form which may be found on the Conference website (www.cmt.upv.es) and submit it on-line or send it together with the payment form by post, fax or e-mail to the Congress Office Pacific World (address given above).



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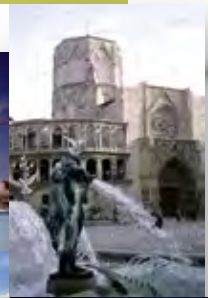
» Accommodation at special preferential rates is available when booking through the on-line facility offered on the Conference website (www.cmt.upv.es/Thiesel.aspx), in the following hotels:

HOTEL	Double Room for single use	Double Room
Hotel Tryp Oceanic 4* C/ Pintor Maella, 35. · 46023 Valencia	77 €	88 €
Hotel Barceló 4* Avda. de Francia, 11 · 46023 Valencia	68 €	80 €
Hotel Renasa 3* Avenida de Cataluña, 5 · 46010 Valencia	68 €	75 €
CM Galileo Galilei Hall of Residence on the University Campus Avenida de los Naranjos s/n · 46022 Valencia	46 €	61 €

Prices are per room and night and include breakfast and taxes. Early booking is recommended to ensure availability of a room in the hotel of your choice. Due to accommodation problems in the city of Valencia where many events and fairs take place, no room will be guaranteed after August 7th, 2014. If you intend to bring an accompanying person, please indicate so in the registration form. For more information about hotels or planned social activities, consult the Conference website.

HOW TO REACH VALENCIA

ABOUT VALENCIA



» **By plane:** Valencia has an international airport, Manises, located at approximately 4 kms. from the city centre. There are regular scheduled national and international flights from several European airlines. A regular bus line links the airport to the Central train station of Valencia, located in the heart of the city. In addition, the new metro line links the airport to all major city points in Valencia.

» **By road:** The city of Valencia also offers excellent communication by road. The A-7 Mediterranean Motorway that runs north to south provides easy connection to Catalonia and France in the north and to Alicante, Murcia and Andalucía in the south. There are also good road connections to the rest of Spain, in particular the A-3 dual motorway to Madrid.



» **By rail:** Valencia has also very good train connections. The high speed train Euromed links several times a day Barcelona to Valencia in approximately 3 hours. The journey between Madrid and Valencia by the regular high speed link Alaris takes about 1 hour and 40 min.

Valencia is a cosmopolitan and lively city on the East Coast of Spain, within easy access to some splendid holiday resorts such as those on the Costa Blanca and Costa de Azahar, and not far from the Balearic Islands. Valencia itself is a fascinating place, with a characteristic blend of historical tradition –with interesting examples of Middle Age and Renaissance architecture– and modern architecture –the City of Arts and Science. It has a varied cultural offer (Oceanographic museum, museum of Modern Arts,...) and an exciting nightlife, excellent weather and world– renowned festivals and regional cuisine. Taste some of the typical ‘tapas’ in one of the numerous restaurants outside tables and the traditional ‘Paella Valenciana’ or one of the dozen rice dishes that Valencian people have invented.

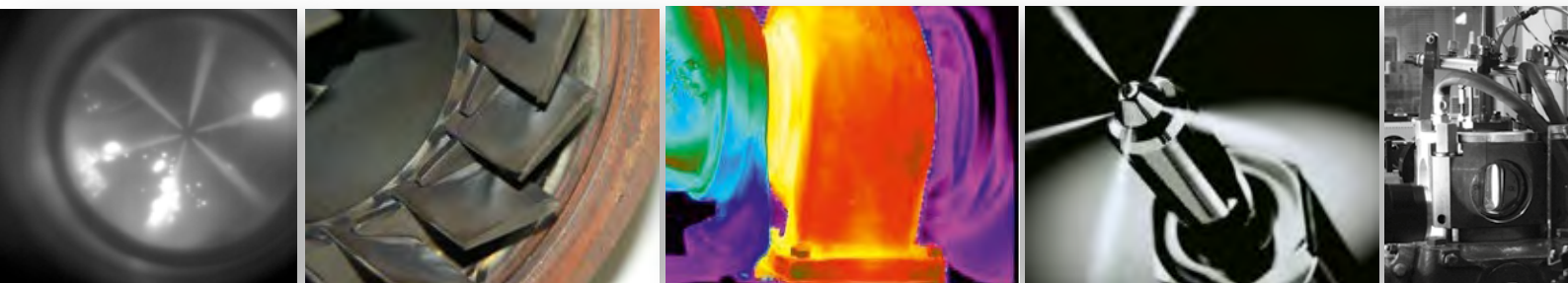
Valencia’s beach is an ideal place to spend time sunbathing and swimming. You may also enjoy a nice walk in the shadow of the palm trees of the ‘Paseo Marítimo’ that lines the sea, or along the new harbour, built for the 32nd America’s Cup.

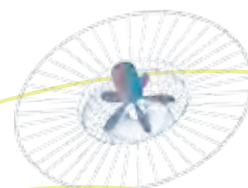
We hope that you will enjoy your stay in this Mediterranean city.



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For updated information about the Conference please visit the web site: [http:// www.cmt.upv.es](http://www.cmt.upv.es)

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