# 2<sup>nd</sup> Call for Papers

# 7<sup>th</sup> EUROPEAN LS-DYNA CONFERENCE

14<sup>th</sup> - 15<sup>th</sup> May 2009 Salzburg (Austria) and Bad Reichenhall (Germany)



Salzburg, Austria



Courtesy of Dr. Ing. h.c. F. Porsche AG

Organized by











#### Introduction

The 7<sup>th</sup> European LS-DYNA Users Conference will be held in Salzburg (Austria) and Bad Reichenhall (Germany), 14<sup>th</sup> - 15<sup>th</sup> May 2009.

This conference will provide an ideal forum for LS-DYNA users from all over the world to share and discuss their experiences, to obtain information on upcoming features of LS-DYNA and to learn more about new application areas. The conference will be accompanied by an exhibition featuring the latest software and hardware developments related to LS-DYNA.

It will take place at "one of the most beautiful regions on earth", as Alexander von Humboldt described Salzburg. The Old Town of Salzburg is a splendid example of baroque architecture and is awarded as UNESCO world heritage. Salzburg is also known as the birthplace of the famous composer Wolfgang Amadeus Mozart. The conference venue is located in the centre of Salzburg. Salzburg can be reached easily via freeway, the high speed train ICE, and the international airports of Salzburg or Munich.

We kindly encourage all users to contribute by submitting a paper. For registration please use the registration form attached.

The following keynote speakers have already confirmed their presentations:

#### Aircraft Industry

- Blade Retention and Bird Impact M. Nucci (Snecma, F)

# Automotive Industry

- Process Integration Forming to Crash
   J. Kohler (Daimler AG, D)
- Multi-Disciplinary Optimization Crash, NVH ...
   Dr. T. Zeguer (Jaguar Cars Limited, UK)
- Material Modeling for Crash
   P. du Bois (Consultant, D)

# Impact Applications

- High Speed Impact - Test and Simulation Prof. S. Hiermaier (Fraunhofer Institut EMI, D)

#### Metal Forming

- Trends and Developments Dr. W. Volk (BMW AG, D)
- Deep Drawing Processes
   Prof. J. Danckert (University Aalborg, DK)

#### Railway Industry

- Crashworthiness of Trains

Dr. M. Seitzberger (Siemens AG, A)

#### Research

- Modeling of Wood Prof. J. Eberhardsteiner (TU Wien, A)

## Validation & Verification

- Model Calibration with Experiments Prof. M. Langseth (NTNU Trondheim, NO)

# Development of LS-DYNA

- General Developments Dr. J. Hallquist (LSTC, USA)
- Material Models Dr. B. Feng (LSTC, USA)

Development of LS-OPT

Dr. N. Stander (LSTC, USA)

The Conference will be organized by DYNAmore with assistance from Alyotech, Arup, ERAB, and LSTC.

The organizers are looking forward welcoming you in the beautiful city of Salzburg, Austria.

# Call for Papers

With your contribution either from industry or academia on applications on LS-DYNA and LS-OPT we will achieve a successful User Conference in Salzburg.

The topics of your paper may cover the following applications:

- Crashworthiness
- Occupant safety
- Metalforming
- Optimization
- Robustness
- Spotwelding, bonding
- Implicit
- Pedestrian safety
- Impact, drop test
- Plastics
- Composites
- Ballistics and penetration
- Fluid structure interaction, CFD
- CAE process integration

# from the industry sectors

- Automotive
- Aerospace
- Mechanical engineering
- Ship building / offshore
- Transportation
- Biomechanics
- Civil engineering
- Packaging industry

...



Courtesy of Daimler AG

Courtesy of Adam Opel GmbH

# Conference Paper Submission

Please submit your paper by sending a short abstract to cf09@dynamore.de.

Abstract deadline: **O6<sup>th</sup> February 2009**Acceptance notification: 20<sup>th</sup> February 2009
Final paper deadline: 03<sup>rd</sup> April 2009

Conference language: English

#### Conference Venue

Salzburg Congress Auerspergstraße 6 5020 Salzburg, Austria http://www.salzburgcongress.at

Some seminars and meetings will be held at the Hotel Bavaria, Bad Reichenhall, Germany.

# Preliminary Conference Schedule

Wednesday, 13th May, 2009

06:00 pm Registration (- 9:00 pm) 06:00 pm Welcome Reception

Thursday, 14th May, 2009

08:00 am Registration

09:00 am Technical Papers (- 6:00 pm) 08:00 pm Conference Gala Dinner

Friday, 15<sup>th</sup> May, 2009

08:30 am Technical Papers 04:00 pm End of Conference



Hardware and Software Exhibition

#### Exhibition / Sponsoring

If you would like to participate as an exhibitor or sponsor please ask for further information.

# Registration Fees

Industry: 560,- Euro / 510,- Euro\* Academic: 390,- Euro / 350,- Euro\* \* Early booking before 1st February 2009

+ VAT if applicable

# Accomodation

Conference registrants can reserve a discounted room rate in hotels in Salzburg by using the congress accommodation booking service which is accessible through http://www.dynamore.de/conference.



City of Salzburg

#### Travel Information

By air: International Airports Salzburg or Munich By train: ICE train station Salzburg

# Outings

Optional partner program

Thursday, 14th May, 2009

- Salzburg city sightseeing
- "Fiaker" sightseeing by horse cab
- Guided Salzburg Festival Halls tour

Friday, 15th May, 2009

- Salzburg city sightseeing
- "Fiaker" sightseeing by horse cab
- The "Sound of Music" dinner show
- The Mozart dinner concert Optional post-conference program

Optional post-conference prograr Saturday, 16<sup>th</sup> May, 2009

- "Sound of Music" tour
- Guided Salzburg city sightseeing tour

# Registration and Contact

DYNAmore GmbH Industriestr. 2

D-70565 Stuttgart, Germany

Tel. +49 (0) 7 11 - 45 96 00 - 0 Fax +49 (0) 7 11 - 45 96 00 - 29

E-mail: cf09@dynamore.de

# Additional Information

http://www.dynamore.de/conference



Salzburg



#### Pre- and Post-Conference Seminars

## Crashworthiness Simulation using LS-DYNA

This is an advanced course and applies to engineers which have experience in application of explicit programs or which bring along experience from the field of dynamic and nonlinear calculation with implicit programs. The aim of the course is to show how to perform a crashworthiness simulation in the automobile industry using LS-DYNA.

11<sup>th</sup> - 13<sup>th</sup> May 2009, 1.450.— Euro Lecturer: P. Du Bois (Consultant)

## Implicit Analyses using LS-DYNA

The seminar is designed for engineers intending to use LS-DYNA to carry out implicit analysis. Also, experienced 'explicit' users have the opportunity to learn more about the key issues to bear in mind when converting an explicit to an implicit input file. 12<sup>th</sup> - 13<sup>th</sup> May 2009, 980.— Euro

Lecturer: Prof. Dr. M. Pitzer (University of Applied Sciences Gießen-Friedberg)

## Optimization with LS-OPT

The seminar gives an introduction to the optimization program LS-OPT and shows its possibilities and limits. LS-OPT is a powerful optimization software particularly suitable for highly nonlinear problems. LS-OPT is primarily intended to be used for general design optimization, shape optimization, parameter identification, DOE-studies and robustness or reliability analysis.

11<sup>th</sup> - 13<sup>th</sup> May 2009, 1.450.– Euro Lecturer: Dr. N. Stander (LSTC)

#### Meshless Methods in LS-DYNA

This seminar will introduce attendees to the application of the meshless "Element-Free Galerkin" (EFG) and "Smooth Particle Hydrodynamics" (SPH) methods in LS-DYNA. The seminar will outline the theoretical bases and thoroughly refers to the settings required in the LS-DYNA input deck in order to carry out an EFG/SPH simulation.

12<sup>th</sup> - 13<sup>th</sup> May 2009, 980.— Euro (490,— Euro per day, can be booked separately)

Lecturer: Dr. C.-T. Wu - EFG,

Dr. J. L. Lacome - SPH (LSTC)

# User Interfaces in LS-DYNA

This seminar is designed for users in both industrial and academic research who intend to integrate their own routines in LS-DYNA and to share their implementation experience with a larger audience. 11th May 2009, 490.— Euro

Lecturer: Dr. T. Erhart (DYNAmore)

# Modeling of Geomaterials with LS-DYNA 1)

The course starts from the common ground of introductory metal plasticity modeling and successively builds on this base adding the constitutive modeling features necessary to model geomaterials.

12th - 13th May 2009, 980.- Euro

Lecturer: Dr. L. Schwer (Schwer Engineering

& Consulting Services)

## PRIMER as a Preprocessor for LS-DYNA

In this seminar the practical use of PRIMER is arranged for the participant. All important functions are described and demonstrated in the context of a Workshops. On the basis of many training examples the participant learns the safe operation for different areas of application.

12<sup>th</sup> - 13<sup>th</sup> May 2009, 980.– Euro

Lecturer: R. Sturt (Arup)

# Enhanced Possibilities and Special Settings for Metalforming Simulation in LS-DYNA

This seminar conveys the basics of the simulation of metalforming processes with LS-DYNA and provides information and hints for the application. Thereby it is particularly focused on the specific settings and features for the forming processes in LS-DYNA. 11<sup>th</sup> - 12<sup>th</sup> May 2009, 980.— Euro

Lecturer: Dr. A. Haufe (DYNAmore)

# Metalforming Simulations with eta/DYNAFORM

The seminar offers an introduction to the simulation of metal forming processes with LS-DYNA. As preprocessor eta/dynaform is presented. The seminar introduces the different procedures to set up simulations for deep drawing. It covers one and multi step operations and presents the various options to post-process a results.

13<sup>th</sup> May 2009, 490.– Euro Lecturer: P. Vogel (DYNAmore)

## LS-DYNA Modeling of Blast & Penetration

This training class is intended for the LS-DYNA analysts possessing a comfortable command of the LS-DYNA keywords and options associated with typical Lagrangian analyses. This training class will attempt to provide the analyst with the additional tools and knowledge required to model the class of high energy events.

18<sup>th</sup> - 19<sup>th</sup> May 2009, 980.- Euro

Lecturer: Dr. L. Schwer (Schwer Engineering & Consulting Services)

Structural Optimization with GENESIS 1)

This seminar provides an introduction to the GENE-SIS software and the Design Studio for GENESIS graphical user interface. The individual concepts for optimization (topology, topometry, topography, sizing and shape) and fields of application will be outlined and discussed.

18th - 19th May 2009, 980.- Euro

Lecturer: Dr. M. Liebscher (DYNAmore)

# Seminar Information

Venue: Salzburg, Austria; 1) Bad Reichenhall, Germany

Language: English

Reduced conference fees for seminar attendees:

Per pre-/post-conference seminar day a discount of 50.— Euro on the registration fee for the European LS-DYNA conference in Salzburg is granted.

More information: http://www.dynamore.de/conference

7<sup>th</sup> European LS-DYNA Conference

14th - 15th May 2009, Salzburg, Austria, and Bad Reichenhall, Germany **Abstract Submission** ☐ I would like to present a paper with the following title. I will send a short abstract to cf09@dynamore.de: Conference Registration ☐ I register for the conference ☐ Industry: 560.- Euro; early registration\*: 510.- Euro ☐ Academic: 390.- Euro; early registration\*: 350.- Euro - only for students and employees of universities additional attendee(s) for Conference Gala Dinner: 80.- Euro ☐ Please send an invitation including agenda when available. ■ Please send exhibitor information. ☐ Please send sponsor information. Pre- and Post-Conference Seminars I would like to register for the following accompanying classes. Per day of attendance of a pre-/post-conference seminar a discount of 50. – Euro on the registration fee for the European LS-DYNA conference in Salzburg is granted. ☐ User Interfaces in LS-DYNA, 11<sup>th</sup> May 2009: 490.— Euro ☐ Enhanced Possibilities and Special Settings for Metalforming Simulation, 11<sup>th</sup> - 12<sup>th</sup> May 2009: 980.— Euro ☐ Metalforming Simulations with eta/DYNAFORM, 13<sup>th</sup> May 2009: 490.— Euro ☐ Optimization with LS-OPT, 11th - 13th May 2009: 1.450.— Euro ☐ Crashworthiness Simulation using LS-DYNA, 11th - 13th May 2009: 1.450.— Euro ☐ Implicit Analyses using LS-DYNA, 12<sup>th</sup> - 13<sup>th</sup> May 2009: 980.— Euro ☐ Modeling of Geomaterials with LS-DYNA, 12<sup>th</sup> - 13<sup>th</sup> May 2009: 980.— Euro ☐ PRIMER as a Preprocessor for LS-DYNA, 12<sup>th</sup> - 13<sup>th</sup> May 2009: 980.— Euro ☐ Meshless Methods in LS-DYNA, 12<sup>th</sup> - 13<sup>th</sup> May 2009 ☐ EFG on 12<sup>th</sup>: 490.— Euro ☐ Both days: 980.— Euro ☐ SPH on 13<sup>th</sup>: 490.– Euro ☐ Structural Optimization with GENESIS, 18th - 19th May 2009: 980.— Euro ☐ LS-DYNA Modeling of Blast & Penetration, 18<sup>th</sup> - 19<sup>th</sup> May 2009: 980.— Euro Sender Company / University \_ Department Title, First and Last Name \_\_ Street ZIP-Code, City Country Tel. / Fax E-mail

# Please copy, complete and mail or fax to

Date, Signature