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NAFEMS^{WORLD}CONGRESS

9-12 JUNE | SALZBURG | AUSTRIA

A WORLD OF ENGINEERING SIMULATION

incorporating the 1st

spdm INTERNATIONAL CONFERENCE
Simulation Process & Data Management

CALL FOR PAPERS

www.nafems.org/congress

principal sponsor

 **SIMULIA**



THE INTERNATIONAL CONGRESS ON SIMULATION TECHNOLOGY FOR THE ENGINEERING ANALYSIS COMMUNITY



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INTERNATIONAL CONFERENCE
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NAFEMS is pleased to announce the 2013 NAFEMS World Congress, which will be held from 9-12 June 2013 in Salzburg, Austria. The Congress will be the only independent, global conference that focuses entirely on simulation and its impact on industry and beyond. As the international association dedicated to engineering analysis and simulation, NAFEMS has gained respect as being the independent voice of the CAE community, representing over 1000 member organisations worldwide including prominent software vendors, global manufacturing industry and leading academic institutions.

Two Conferences in One

For the first time, the Congress will also incorporate the 1st International Conference on Simulation Process & Data Management. Over the past three years, NAFEMS has held a series of dedicated conferences on the topic of simulation data and process management in both Europe and North America. The popularity of these has been such that the 1st International SPDM Conference has been launched, and will run alongside the NAFEMS World Congress in 2013. Bringing together industrial users, technology experts, academics and software vendors alike, this ground-breaking event will allow all those with an interest to take part in the first truly independent, international forum dedicated to SPDM.

Call for Papers

Attendees from around the globe will take part in the event, from every industry involved in engineering simulation and analysis and SPDM - making it the best platform to showcase how simulation is used in your organisation. NAFEMS invites you and your company to get involved in the World Congress by submitting a paper for presentation in Salzburg.

Make sure you are a part of the event by submitting your abstract today.

Papers focusing on SPDM will be included in the SPDM conference. All attendees and presenters at each conference will have access to both conferences simultaneously.

The Congress will cover a wide range of topics, addressing every aspect of engineering simulation in a full 3-day program. NAFEMS invites papers from any area in simulation including, but not limited to, the areas listed opposite.

In the first instance, abstracts of 300-600 words should be submitted for consideration by 5th November 2012. Abstracts must be clearly marked with presentation title, author's name, organisation, address, phone numbers and email address, indicating the industry area and technical topic your abstract relates to.

E-mail your abstract to
nwc13@nafems.org

DEADLINE FOR ABSTRACT SUBMISSION

5th November 2012

Congress Themes

The Congress will cover a wide range of topics, addressing every aspect of engineering simulation in a full 3-day program. Papers related to SPDM will automatically be considered for the SPDM Conference.

We invite papers from any area in simulation including, but not limited to, the following areas:

Structural Analysis

- Linear and Nonlinear Analysis
- Materials Characterisation
- Joints, Connections & Welding
- Contact
- Durability, Fatigue & Fracture
- Thermal Structural Analysis
- Metal Forming
- Molding Simulation

Computational Fluid Dynamics

- Turbulence
- Conjugate Heat Transfer
- Multiphase and Phase Change
- CFD Post-Processing
- Atmospheric Modelling
- Acoustics
- Mesh Solutions & Mesh Adaption
- Water Treatment
- High Performance Computing
- Fire Modelling

Dynamics & Testing

- Crash Simulation
- Durability
- Seismic
- Linear Dynamics
- Non-linear Dynamics
- Multi-body Simulation
- Combining Physical & Virtual Testing
- Impact

Analysis Management

- Quality Assurance
- Measures of Agreement
- Automation of Analysis
- Virtual Testing in a Regulatory Environment

Business Issues

- The Business Case for Simulation
- The World Market for Simulation

Simulation Data Management

- SDM Requirements
- SDM Strategies
- Scope of SDM
- Experience of SDM Systems
- Simulation Process Management
- Data Standards

CAD CAE Integration

- CAE Interoperability
- Simulation Driven Design
- Meshing
- Integration of Analysis into the Design Process
- The Semantic Web
- CAD Representation of Manufacturing Features

Composites

- Layup Optimisation
- Draping
- Composite Manufacture and Assembly
- Simulating As-Built and In-Service Conditions
- Multi-scale, Multi-fidelity Modelling
- Damage and Failure Criteria

Life Sciences

- Biomedical
- Biomechanics

Geotechnical and Foundation Engineering

- Constitutive Models for Civil Engineering
- Input Parameters for Geotechnical Models
- Using FEA with Eurocode 7
- Soil-Structure Interaction

Confidence in Results

- Verification & Validation
- Benchmarks & Test Cases
- Lessons Learnt from Round Robins
- High Confidence FEA and CFD

All industry sectors are invited to submit papers.

Full details of the topics being considered, further information about the World Congress and SPDM conference, and how to submit your paper can be found at www.nafems.org/congress.

www.nafems.org/congress

Multiphysics

Fluid-Structure Interaction
Structure-acoustics
Vibro-acoustics
Multi-physics, Multi-scale, Multi-fidelity Modelling
Benchmarking and Validation of Multiphysics

Emerging Issues

Current Industrial Applications
Future Industrial Needs
Business Benefits of CAE
Solver Technology
Virtual Reality
Visualization
High Performance Computing
Nanotechnology
OpenSource Codes

Stochastics

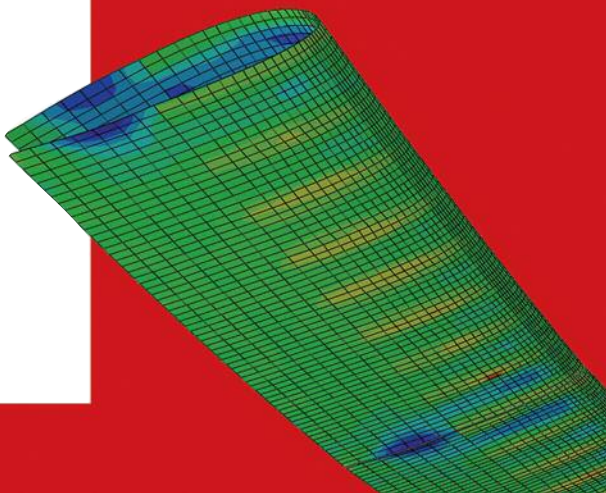
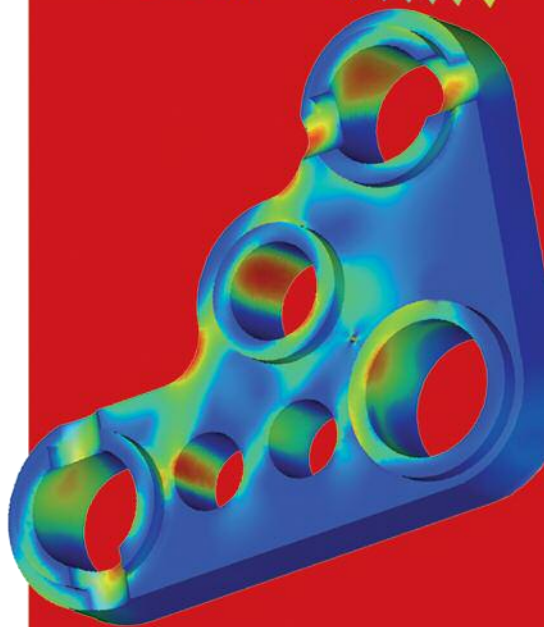
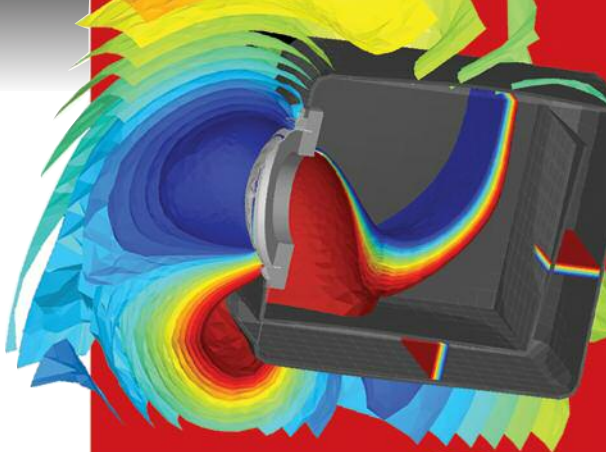
Sensitivity Analysis
Taguchi Methods
Variational Studies
Robust Design

Education & Training

Meshing
Element Selection
Methods Development
Modelling Techniques
Simulation Skills Management
Qualifying the Analysts
Results Interpretation
Using FEA and CFD for Code Compliance

Optimisation

Topology, Shape, Sizing
Structural
Fluid
Multidisciplinary/Multiphysics/Multiobjective
Algorithms
Design/Process Integration



Venue

Salzburg Congress
Auerspergstraße 6, 5020 Salzburg, Austria

About Salzburg

Wolfgang Amadeus Mozart, the Salzburg Festival, the baroque old town, the spirit of the Sound of Music and numerous famous visitors and residents, have all contributed to Salzburg's profile on the world stage. The city is, and always has been, a talismanic place for music lovers, romantics and connoisseurs. And the city has not lost any of its congeniality over the years. On the contrary, traditional aspects are accompanied by modern points of contrast, creating a fascinating combination in both the city's architecture and cultural offering.

Centrally located in mainland Europe, Salzburg is serviced by its own airport and is connected to Munich Airport by shuttle bus. The city can also be easily accessed by car and rail.



Salzburg Congress

Salzburg Congress has established itself as a popular and internationally recognised venue for seminars, congresses, trade fairs and events of every kind. Two pillars of this success have most definitely been the versatility of the infrastructure and the modern architecture of the building. The five floors of the 'Convention Centre' have earned this facility its 'pole position' in the Mirabell Park at the heart of the city of Salzburg.

Located in the centre of the city, Salzburg Congress is easily accessible, and there is an abundance of suitable accommodation situated near by.

Congress Fees

Authors & Delegates (NAFEMS Members)	€900
Authors & Delegates (Non Members)	€1155

Congress fees include

- Attendance at both the World Congress & SPDM Conference
- Lunches
- Refreshments
- Congress Banquet
- Cocktail Reception
- One set of Proceedings



www.nafems.org/congress

Sponsorship & Exhibition Opportunities

Join us in Salzburg

We are delighted to offer your company the chance to be part of the 14th NAFEMS World Congress including the 1st International SPDM Conference. There are several outstanding opportunities available for your company to sponsor or exhibit, giving you maximum exposure to a highly targeted audience of delegates, who are all directly involved in simulation, analysis and design.

A Unique Opportunity

The World Congress presents a unique opportunity, as delegates are primarily high-level decision makers working in industry across the globe. The exhibition area will be a central point at the Congress, ensuring that there is a consistent level of "traffic" at all times – refreshments, announcements, events and competitions will focus on this area, giving you the chance to meet as many of our delegates as possible.

Align yourself with the NAFEMS Brand

As the only International Association for the Engineering Analysis Community, NAFEMS is widely held to be the leading independent source of information and training for engineering analysts and designers of all levels. Sponsors and exhibitors will have the chance to promote their attendance prior to the event, through the various packages available. Being seen to be participating in the NAFEMS World Congress gives the analysis world a positive impression of your company's commitment to best practice, standards and continued professional development.

Benefits

So what are the benefits of sponsoring and exhibiting at the Congress?

- Promote your company to a large but highly focused group of individuals who have a pre-qualified interest in your product
- Establish important contacts within the industry
- Keep an eye on the activities of your direct competition
- Increase your company's visibility and standing in the analysis community
- Showcase your latest product releases and service offerings
- Discover exactly what your target market needs, and what trends are emerging across the industry

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