

INTERNATIONAL ASSOCIATION FOR THE ENGINEERING MODELLING, ANALYSIS AND SIMULATION COMMUNITY

Announcement and Call for Papers

NAFEMS20 NORDIC CONFERENCE



The Conference for Engineering Simulation and Analysis May 26 - 27, Göteborg, Sweden

The conference will provide a unique, independent, neutral, and comprehensive overview of the current state of art in the engineering simulation analysis.

Please submit abstracts latest 7 February 2020 to roger.oswald@nafems.org.

Call for Papers

NAFEMS, the independent international association for the engineering modelling, analysis and simulation community, is holding its Nordic conference from 26 - 27 May in Göteborg, Sweden. This two-day conference will focus on existing best practices as well as state-of-the-art in FEA, CFD and associated technologies – ensuring delegates receive a fully comprehensive overview of the technology available to them.

The conference will increase awareness and provide a discussion forum for topics that are vital to engineering industrialists and academics, offering attendees an unrivalled combination of industrial knowledge, expertise and forward-thinking to aid their deployment of CAE over the next few years.

Get Involved! - Submit your abstract

You are invited to participate by telling the engineering analysis community how simulation is being used in your organisation and where you believe CAE is heading. The conference welcomes participation from every type of organisation – large and small, across all industry sectors.

The event is open to both members and non-members of NAFEMS, with members able to attend the event for free towards using four seminar credits, as part of their membership benefits package.

We look forward to your abstract submission by 7 February 2020 to roger.oswald@nafems.org.

Your NAFEMS Nordic Steering Committee

www.nafems.org/nordic20

We are looking for contributions from all industry, application and research areas on the following topics - but not limited to:

Driving Design with Engineering Simulation

- Finite Element Analysis
- Computational Fluid Dynamics
- Multibody dynamics
- Discrete Element Methods
- Boundary Element Method
- Meshfree methods
- New/emerging numerical methods
- Co-simulation / code coupling
- Structure integrity, static, dynamic, high speed impact
- Fluid flow
- Acoustic
- NVH
- Electrical
- Heat transfer
- Optical
- Electromagnetic fields, EMC
- Multiphysics
- Multiscale
- Multidisciplinary analysis
- Optimisation (structures, flow, ...)
- Pre- and postprocessing
- Stochastic / probabilistic methods

Systems Modelling

- MBSE
- Systems engineering
- Standards
- FMI / FMU
- Multidisciplinary Analysis

Implementing Simulation Confidence

- Quantifying business benefits
- Generating confidence in results
- Verification and validation
- Uncertainty quantification
- Education and training
- Simulation governance
- Robust design
- Testing and gualification
- Certification by analysis
- Integrating analysis & test

Deploying your Simulation Capability

- Automation
- Democratisation
- HPC High performance computing
- Cloud computing
- Licensing
- CAD CAE integration
- Real time simulation
- Business case simulation projects

Effective Simulation of Materials

- Composites
- Concrete
- Metallics
- Nanomaterials
- Foam, plastics, rubber
- Soil
- Bio materials
- Crack propagation / fracture
- Damage / failure
- Delamination
 Durability / fat
- Durability / fatigue
 Phase transformation
- Phase transformation
- Plasticity / hyper elasticity / viscoelasticity
- Microstructural modelling
- Material dampingConstitutive laws of materials

Digital Engineering

- Digital twin
- Al & machine learning
- Industry 5.0 / digital manufacturing
- Virtual reality / augmented reality
- Internet of things

Manufacturing Process Simulation

- Additive manufacturing
- Casting, cutting, drawing, forging
- Welding / heat treatment
- Composites manufacturing

ITEA3 VMAP project

Interface standard for integrated virtual material modelling in manufacturing industry

Simulationsdatenmanagement SDM

- Deployment of SPDM solutions
- Digital threads and digital twins implemented in SPDM
- Business value of SPDM solutions
- Data and process integration tools
- Examples of deployment of democratised simulation applications
- SPDM strategy and requirements
- Scope of SPDM
- Data standards

We are looking forward to your abstract submission.

Please distribute this Call for Papers also to interested colleagues and. Many thanks in advance.

Your NAFEMS Nordic Steering Committee





Abstract submission

Please send a 1/2 page abstract to roger.oswald@nafems.org latest

7 February 2020.

Abstracts shall be marked with author's name, organization, address, fax, phone numbers and email address.

Author notification:

Approx. 3 weeks after submission deadline. Authors whose abstracts are accepted will be asked to prepare an extended abstract (typically 1-2 pages) and a PowerPoint presentation. Full written papers will not be required. Extended abstracts must be submitted lastest 4 May 2020. Presentation length: 25 minutes incl. discussion.

Venue / hotel

Radisson Blu Scandinavia Hotel Södra Hamngatan 59, 401 24 Göteborg, Sweden, Tel: +46 31 758 5000, Fax: +46 31 758 5001 www.radissonblu.se/hotell-goteborg NAFEMS Nordic conference registrants can reserve a discounted room at the hotel. Please find a booking link at our conference website. The group code is: "NAFEMS".

Delegate fee

Not-NAFEMS members:6.400 SEKPresenter from companies for the production/
processing of material goods/goods in
factories/plants:freeNAFEMS members using 4 seminar credits:free*NAFEMS member with no seminar credits:4.000 SEKThese fees include attendance at the conference, one copy of
the proceedings, lunch for all two days, break refreshments
each day, and beverages and snacks in the evening of the first
day. Hotel accommodation is not included.

Conference language English

Hardware and software exhibition

The conference will be accompanied by a hardware / software exhibition. Please request further information.

* NAFEMS membership fees for companies / institutes

A standard NAFEMS site membership costs 1.200 Euro per year. An academic site membership costs 750 Euro per Jahr. Beneath many others, NAFEMS members will get eight seminar credits (1 credit = 1/2 seminar/conference day) per year.

NAFEMS members can use seminar credits towards free attendance at this event. This event will charge four seminar credits per delegate. You can register 2 delegates included in your membership to this conference! Please consider becoming NAFEMS member before registering!

Organisation

NAFEMS Deutschland, Österreich, Schweiz GmbH Griesstraße 20, 85567 Grafing b. München, Germany Phone: +49 176 217 984 01, Fax: +49 3 22 11 08 99 13 41 E-mail: info@nafems.de, Web: www.nafems.org

About NAFEMS

NAFEMS is the International Association of the Engineering Modelling, Analysis and Simulation Community. Our principal aims are to:

- Improve the professional status of all persons engaged in the use of engineering simulation
- Establish best practice in engineering simulation
- Provide a focal point for the dissemination and exchange of information and knowledge relating to engineering simulation
- Promote collaboration and communication
- Act as an advocate for the deployment of simulation
- Continuously improve the education and training in the use of simulation techniques
- Be recognised as a valued independent authority that operates with neutrality and integrity

We focus on the practical application of numerical engineering simulation techniques such the Finite Element Method for Structural Analysis, Computational Fluid Dynamics, and Multibody Simulation. In addition to end users from all industry sectors, our stakeholders include technology providers, researchers and academics.

Confernce webseite

www.nafems.org/nordic20

Please complete and fax to +49 3 22 11 08 99 13 41 or e-mail to roger.oswald@nafems.org

🖵 I herewith register for the NAFEMS Nordic Regional Conference, 26 - 27 May 2020 in Göteborg, Sweden.

- □ I am NAFEMS member free attendance using 4 seminar credits
- □ I am NAFEMS member no more seminar credits available: 4.000 SEK plus Swedish VAT
- □ I am not NAFEMS member: 6.400 SEK plus Swedish
- L will submit an abstract which I will send to roger.oswald@nafems.org latest 7 February 2020 to roger.oswald@nafems.org.
- $\hfill\square$ Please send an agenda when published.
- Please send exhibitor information.
- □ Please send information about sponsoring opportunities.

Sender

Company / University			
Address			
Phone			
E-Mail			
Date / Signature:			