NAFEMS

NAFEMS NORDIC CONFERENCE

19-20 May 2026 | Gothenburg, Sweden

The Conference for Engineering Simulation and Analysis
- neutral. independent. interdisciplinary -

Invitation and preliminary agenda

- Plenary presentations by Volvo Cars, Airbus Operations, GKN Aerospace, RISE Research Institutes of Sweden, University of Oulu

- High quality technical presentations

- Short training on Artificial Intelligence / Machine Learning (AI/ML)

- Accompanying software exhibition

- Networking, exchange of experiences and information

- Open to NAFEMS members* and non-members

Platinum sponsor

EDR™ MEDESO

Gold sponsors

COMSOL

rescale

SIEMENS

Silver sponsors

BETA SIMULATION SOLUTIONS

DASSAULT SYSTEMES

www.nafems.org/nordic26

* Free attendance for NAFEMS members by using four NAFEMS seminar credits.

NAFEMS, the independent international association for the engineering modelling, analysis and simulation community, is holding its Nordic conference from 19 - 20 May 2026 in Göteborg, Sweden.

This NAFEMS Nordic 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.

It 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.

The conference welcomes participation from every type of organisation – large and small, across all industry sectors. It 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.

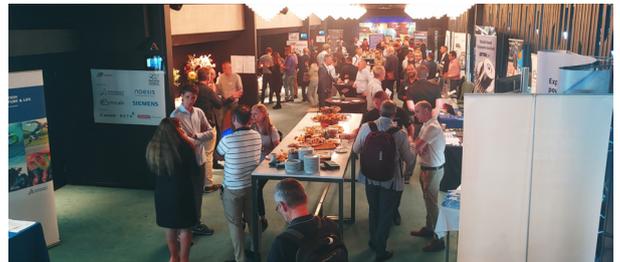We are looking forward to welcome you in Göteborg, Sweden.

NAFEMS NORDIC Steering Committee
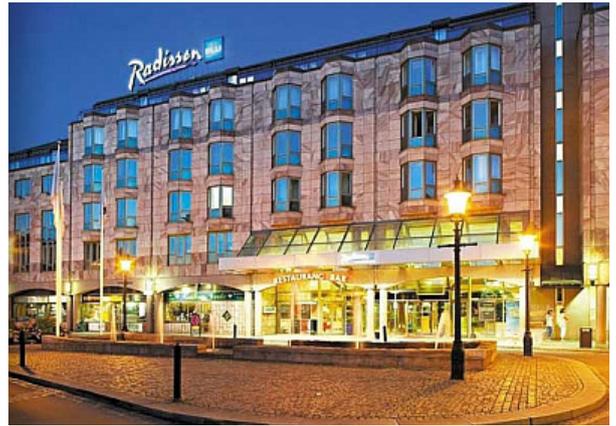
Radisson Blu Scandinavia Hotel

Hardware and software exhibition

If you are interested in participating as an exhibitor or sponsor, you can find an information brochure at www.nafems.org/nordic26.

Exhibition area in front of the conference rooms

NAFEMS NORDIC

Steering Committee members

J. Granlund (Dassault Systemes, SWE), Chair

P.-O. Jansell (Altair Engineering, SWE)

L. Pilgaard Mikkelsen (DTU, DEN)

A. Ptchelintsev (EDRMedeso, FIN)

C.-F. Stein (FS Dynamics Sweden, SWE)

A. Jensen (Grundfos, DEN)

M. Andreasson (Hexagon, SWE)

T. Hansen (Novo Nordisk, DEN)

K. Wieck Bundgaard (Velux, DEN)

P. Poskiparta (Virtual Test Channel, FIN)

F. Santandrea (Volvo Group, SWE)

T. Frondelius (Wärtsilä, FIN)

Exhibitors 2026

(27 February)

- BETA CAE / Cadence
- Comsol
- Dassault Systemes
- EDRMedeso
- Magna Powertrain Engineering Center Steyr
- NAFEMS
- Rescale
- Siemens
- Simvia
- Total Materia
- ...

Venue and hotel accommodation

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 on our conference website.

Conference registration

Please register by completing the attached registration form or online at www.nafems.org/nordic26

Conference language

English

Delegate fee (per person)

- Not-NAFEMS members: 800 Euro
- NAFEMS members using 4 seminar credits: free*
- NAFEMS member with no seminar credits: 550 Euro

All costs plus 25% Swedish VAT.

These fees include attendance at the conference, proceedings, lunches and break refreshments on each day and beverages and snacks in the evening of the first day. Hotel accommodation is not included.

* NAFEMS membership fee for companies/institutes

A standard NAFEMS site membership costs 1.405 Euro per year. An academic site membership costs 880 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!

Cancellation policy

- Up to 6 weeks before the start: 100% refund
- Up to 1 week before the start: 25% refund, no seminar credits refunded
- Later and in the event of no-show: no refund

Substitute participants can be provided. The cancellation must be made in writing.

Hardware and software exhibition / sponsoring

We would like to extend an invitation to your company to be part of the conference as exhibitor and/or sponsor. Please request further information or download the exhibition and sponsorship opportunity brochure (pdf) at www.nafems.org/nordic26.

Conference organization

NAFEMS Deutschland, Österreich, Schweiz GmbH
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e-mail: info@nafems.de
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. Please find more information at www.nafems.org.

Conference room

Conference website and registration:

www.nafems.org/nordic26

Room A/B

1 A/B – KEYNOTE & PLENARY PRESENTATIONS 1

10:30 **Welcome and NAFEMS Introduction**
NAFEMS NORDIC Steering Committee, T. Morris, A. R. Oswald (NAFEMS)

10:40 **Keynote-Presentation:**
FEM and the Airframe: Making Aircraft in 2026
Sjoerd Van Der Veen (Airbus Operations)

11:15 **Keynote-Presentation:**
CFD in the Automotive Industry 2026 and Onwards - Present Status and Future Needs
Torbjörn Virdung (Volvo Car Corporation)

11:50 **Keynote-Presentation:**
Structural Composite Modelling at GKN Aerospace: From Accuracy to Industrial Reliability
Sérgio Costa (GKN Aerospace Sweden)

12:25 **Platinum Sponsor Presentation: EDRMedeso**
n.n. (EDRMedeso)

Lunch break

12:35 **Room A**   **Room B**

2 A – CRASH / DROP TEST / CASTING	2 B - FATIGUE / OPTIMIZATION
13:35 **Zero Plastic for Packaging – A FEM Case Study for Drop Tests** Utku Özden (Velux)	**Efficient Approach to Fatigue Analysis for Nonlinear Loads in Combination With Long Time Histories for a Hook Coupling** Dominik Hofmann, Mehdi Moradi (Magna Engineering Center Steyr)
14:00 **Giga-Casting – Posing New Challenges for Crash & Safety Simulations** Mathieu Moerckel (Keysight Technologies)	**Integrated Optimization of Fatigue Damage in FEA** Reinhard Helfrich (Intes)
14:25 **Modelling of Biocomposites in Crash Applications** Konstantinos Rachoutis (BETA CAE / Cadence); Johann Körbelin (Volvo Car Corporation)	**Robust and Reliability Based Optimization of Multi-Step Forming Processes with a Focus on the Effects of Stresses** Maysam Naghinejad, Gerrit Klaseboer, Redmer van Tijum, Jan Post, Yutao Pei (University of Groningen)
14:50 **Using Model Validation Approaches to Understand Predictive Capability of Structural Castings** Erik Dartfeldt, Torsten Sjögren (RISE Research Institutes of Sweden); Jakob Olofsson, Toni Bogdanoff (Jönköping University)	**Enhanced Non-Parametric Topology-, Shape- and Sizing-Optimization using Non-linear Structural Modelling** Anton Jurinic, Claus B. W. Pedersen (Dassault Systemes); Jason Action, Clay, T. McElwain (Lockheed Martin Aeronautics)
15:15 Break	Break

3 A - MATERIALS / CRACK / DEFORMATION	3 B - ENGINEERING SIMULATION
16.00 **Modeling Handball-Induced Head Injuries** Cyrus Nilsson, Arvid Johansson (FS Dynamics)	**Predicting Bearing Seal Performance: Simulation Study on Water Ingress and Seal Deformation** Mehul Pandya, Fabrizio Mandrile (SKF Technologies)
16:25 **From Statistical Crack Initiation to Physics-Based Propagation: A GSPM–Phase-Field Approach for Glass Fracture** Sebastian Müller, Morgane Blondel (Keysight Technologies); Jean-Daniel Martinez (Audi), Daniel Lopez (Audi/NTNU)	**From Engineering Signals to Executive Decisions: Translating Software Usage Data into Shared Understanding** Niklas Larsson (Notrex)
16:50 **High-Fidelity Finite Element Model Development for Damage Detection of Wind Turbine Composite Blades** Nina Moelle (pSeven)	**Simulation as a Strategic Asset: Evolving SDM from Within the Enterprise** Dina Sotnik (PTC Sweden)
17:15 **Considering the Local Anisotropy in the Simulation Process Chain for Short and Long Fiber Reinforced Thermoplastics** Harish Pothukuchi, Martin Schwab (4a Engineering)	**Handling the Obstacles to Virtual Engineering** Bernd Fachbach (Fachbach-Consulting)

17:40 End of presentation day 1

17:40 **Get together in the exhibition hall: Networking and discussion with beverages and snacks**

Room A/B

5 A/B – KEYNOTE & PLENARY PRESENTATIONS 2

08:30 **Welcome**
NAFEMS NORDIC Steering Committee, T. Morris, A. R. Oswald (NAFEMS)

08:40 **Keynote-Presentation:**
Multiphysics and Multiscale Modelling of Li-ion Batteries: For Reliable and Safe Battery Systems
David Carlstedt (RISE Research Institutes of Sweden)

09:15 **Keynote-Presentation:**
Simulation-Driven Systems Engineering — Role of Simulation in Holistic Product Design
Juho Könnö (University of Oulu)

09:50 **Invited Presentation:**
AI and Engineering Simulation
Frode Halvorsen (EDRMedeso)

10:15 Break

Room A

5 A - MULTIPHYSICS / MULTISCALE / NVH

11:00 **Simulated Sound Reduction of Window Glazing Units**
Anders Peter Fjeldsted Aunins (Velux)

11:25 **CAE-Driven Auralization: From Virtual NVH Simulation to Perceived Sound**
Massimiliano Calloni, Eva-Lotta Modin (Keysight Technologies)

11:50 **Efficient Multiphysics Simulation of Fuel Cell and Electrolyzer Stack Modules Using Applied to Industry Cases**
Tore Findsen (Resolvent)

12:15 **Multiscale Phase Field Modeling: Extending Classical FEA for Microstructure and Damage Driven Problems**
Alexander Mavromaras, Kyle Starkey (Materials Design)

12:40 **Cavitation Damage Prediction in Diesel Injector Nozzles: Geometry-Driven Robustness Analysis**
Deepak J. Patil (Cummins Technologies India); Matthew State, Stephen Conway (Cummins)

13:05 Lunch Break

6 A - AI/ML

13:50 **Simulation Driven Electric Powertrain Design Utilizing SysMLv2 for Automated Model Generation**
Juho Könnö, Isa Banagar, Iiso Kramsu (SysAI)

14:15 **Physics Informed Neural Network for 3D Elasticity based on Deep Energy Method: A Mesh-Based Approach for Complex Geometries**
Ameer Hamza Arif, Jalal Torabi (Wärtsilä)

14:40 **Physics-Informed Neural Network Material Models for Crash Simulation of Additively Manufactured Metallic Structures**
Sebastian Müller, Fatima Daim, Tetsuro Matsumoto (Keysight Technologies); Eisei Higuchi (Honda R&D)

15:05 **From Tools to Agents: How Agentic Engineering Workflows are Reshaping Simulation-Driven Product Development**
John Webster (SimScale)

15:30 End of Conference

Room B

5 B - AI/ML SHORT TRAINING

Simulation AI:
What Holds Up in Practice, and Why
Max Kassera (yasAI / NAFEMS trainer)

AI systems have increasingly become a source of innovation in engineering simulation, but the current hype cycle also produces unrealistic promises and many failed pilots. In practice, it's easy to make an AI model look good on a curated dataset, but it's much harder to make it valuable in a simulation workflow.
This workshop will identify where promises outpace true readiness, clear up misconceptions, and show when and how engineers can benefit from AI modeling.

Lunch Break

6 B - WORKFLOW

Accelerating Scientific Workflows with Domain-Specific Hardware: GPUs, Arm Chips and Beyond
Sam Zakrzewski (Rescale)

Efficient Workflows to Perform Physical Test and Simulation Correlations
Eric Veron (Dassault Systemes)

Dynamic Reporting and Post Processing for CFD: Improving Workflow Efficiency and Collaboration
Efthymia Chatzivasiloglou (BETA CAE / Cadence)

Hybrid Electric Vehicle: Advanced Engineering Methods in a Collaborative Environment to Accelerate Modern Vehicle Motor Design
Nina Moelle (pSeven)
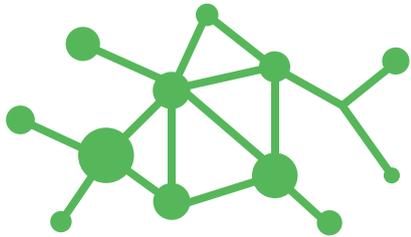
NAFEMS REGIONAL CONFERENCES

Additional NAFEMS regional conferences will take place worldwide in spring and fall 2026:
www.nafems.org/nrc26

spdm2026 CONFERENCE · NAFEMS
27-28 OCTOBER 2026 | MUNICH | GERMANY

AI & ML IN CAE APPLICATIONS
NAFEMS CONFERENCE | 28-29 OCTOBER 2026 MUNICH · GERMANY

Two conferences in one place

The SPDM Conference takes place in conjunction with the Artificial Intelligence and Machine Learning in CAE Applications Conference. The second day of the SPDM Conference is dedicated to SPDM and AI/ML, which will also be the focus of the first day of the Artificial Intelligence and Machine Learning in CAE Applications Conference.

Delegates will be able to attend either one or both conferences with an overlapping session on day two to exploit the synergies between the two focus subjects.

www.nafems.org/spdm26
www.nafems.org/aiml26

NAFEMS WORLD CONGRESS 2027
A WORLD OF ENGINEERING SIMULATION
25-28 APRIL 2027 | VANCOUVER | CANADA #NWC27

Safe the date!
Abstract submission deadline likely mid November 2026
www.nafems.org/congress

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