

SPM ERFA 22 Meeting

28.MAY.2026



Kresten Juel Jensen

Partner & Co-founder, resolvent

Introduction to resolvent

Resolvent is a simulation consultancy company dedicated to helping clients improve their product through simulations and tailor-made engineering tools.



Farshad Roohbakhshan

Lead Simulation Engineer, Danfoss

Validation of Press-fit Simulations

Walkthrough of which types of press-fit simulations are performed at Danfoss, how these are approached, and best practice for press-fit simulations.



Alexander Barlo

Postdoctoral Researcher, DTU Construct

Data- and Simulation-driven Decision Support in Automotive Manufacturing

With the manufacturing process of a car door as an example, the impact and challenges overcome with simulation was presented. How the choice of contact formulation and material model are important quantities.



Patrik Kennes

Principal CAE Engineer, Cochlear

Validation of piezo bender actuator model for a bone conduction implant

The presentation went through how simulation was used to develop the next generation of subdermal anchored bone conduction units. How simulation was used in the development stages and how simulations were validated against measurement.



Ashish Chawla

Senior Engineer – Research & Development,
Convatec

CFD Model Validation

A walkthrough of how simulation was used to describe the most important characteristics of molten aluminum and using statistical models to develop a transfer function for the operators to ensure high quality during manufacturing.



André Gugele Steckel

Senior Modelling Specialist, resolvent

Modelling and Validation of Thin-film Actuation in Microscale Acoustofluidics

Presentation about the novel design of a Thin-film actuator and the application of Acoustofluidics. The theory was presented with visualizations and concluded with a comparison to the latest tests validating the implementation



Ashish Chawla

Senior Engineer – Research & Development,
Convatec

Topology optimization for nonlinear mechanics applications: efficient methods and robust post-evaluation of designs.

Presented state-of-the-art applications of topology optimization including design against buckling. How topology optimization can be used in nonlinear mechanical applications, for instance including contact.