

NAFEMS Technical Working Group Overview

Optimisation Working Group (OWG)
2019

Optimisation

- The NAFEMS Optimisation Working Group is responsible for promoting the adoption, further development and best practice of optimisation theory and methods to engineering simulation for the benefit of the analysis community
- Optimisation is the process of selecting the best option from a range of possible choices
- Regular online meetings
- **Chair** – Nadir Ince, GE Power
- The group includes representatives of 4RealSim, Altair Engineering Ltd, ANSYS, Applied Computing & Engineering Ltd, Atieva Inc, Boeing Company, Comercia, Cranfield University, Dynardo GmbH, EADS Innovation Works, EnginSoft UK Ltd, ESI Group, ESTECO SpA, FE-Design GmbH, Federal-Mogul Nürnberg GmbH, GE Power, General Motors, GRM Consulting, iChrome Ltd, Icon Technology & Process Consulting Limited, Land Rover Chassis, Leeds University, MDAO Technologies, Newcastle University, Noesis Solutions NV, Rolls-Royce Group PLC, Siemens, Strathclyde University, Taylor's University, Tecnalia, Wilde Analysis Ltd
- Information about the Optimisation Working Group can be found on the NAFEMS website at www.nafems.org/community/working-groups/optimisation
- To enquire about joining this working group complete the online form at www.nafems.org/community/working-groups/optimisation/get_involved

Optimisation

- **Areas of Interest**
 - Optimisation benchmarks & worked examples
 - The group have recently formed a special interest group for NAFEMS members who have an interest in optimisation technology but are not necessarily experts. This special interest group is meeting on a bi-monthly basis.
- **Recent Publication**
 - How to Perform Optimisation Under Uncertainty
 - Robust design optimisation in virtual product development
- **Optimisation Special Interest Group**
 - The Optimisation Working Group has formed a Special Interest Group (SIG) in order to help disseminate best practice and encourage the adoption of optimisation methods and technology.
 - To participate in the Optimisation SIG you do not have to be an expert in this technical area.
 - The Optimisation SIG is for NAFEMS members who are interested in expanding their capabilities in the optimisation technical area.

Chair Bio

Dr Nadir Ince

Director, Analytics & Digital Engineering Power Digital Solution
GE Power

- MSc & PhD - University of Manchester – Thermo Fluids Dept.
- Several years experience as a Post Doctoral research fellow and Lecturer at several universities
- Area of research interests:
 - CFD tool development
 - Turbulence modelling
 - Multi-disciplinary optimization
- Active member of NAFEMS and Ercoftac

