

# XIII FINNISH MECHANICS DAYS

AUGUST 29–31, 2018

## BACKGROUND

The first Finnish Mechanics Days conference was held in Oulu, 36 years ago in 1982. Since then, the conference has taken place every three years.

The conference covers *theoretical, computational and experimental mechanics* of solids, soils, rocks and fluids – including a large variety of engineering applications: static and dynamic analysis of structures; mechanics of materials; fluid dynamics; fluid-structure interaction; fracture mechanics; fatigue; thermomechanics; micromechanics; contact mechanics; structural optimization; numerical analysis; multibody dynamics; mechatronics; design of structures and machines; industrial and medical applications of mechanics etc.

A special emphasis is given to *collaboration between different fields* – such as civil engineering, mechanical engineering and fluid dynamics – and *collaboration between industry and academia*.

## OBJECTIVE

The objective of the conference is to stimulate, promote and combine *academic research and industrial development of engineering applications* within various areas of mechanics, ranging from solid and soil mechanics to fluid mechanics. The conference provides a forum for researchers, engineers, teachers and other professionals to network, discuss and share ideas and information.

## DATE AND VENUE

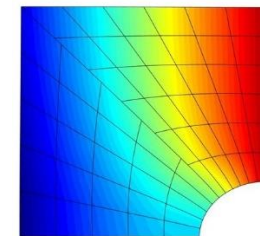
The conference is held on August 29–31, 2018, at conference center Chydenia in the Aalto University Töölö campus, Helsinki (Runeberginkatu 22–24). Other locations: Helsinki Town Hall (Kauppatori), Brewery-Restaurant Bryggeri (Torikorttelit), Meripaviljonki Restaurant (Siltasaari).

## PLENARY LECTURERS

Prof. Emer. Viggo Tvergaard, Solid Mechanics, Department of Mechanical Engineering, DTU, Denmark  
*Modelling ductile fracture at moderate to low stress triaxiality*

Prof. Emer. Laszlo Fuchs, Computational Fluid Dynamics, Department of Mechanics, KTH, Sweden  
*Fluid mechanics of blood flow in life saving devices: accomplishments and challenges*

CEO, DSc (Tech) Patrik Rautheimo, Elomatic Ltd, Finland  
*Topic to be announced*



XIII Finnish  
Mechanics  
Days 2018

August 29–31  
Aalto University  
Helsinki, Finland

## INSTRUCTIONS FOR AUTHORS

Prospective participants are invited to submit a short (half-page) abstract, including the title of the presentation, as an e-mail attachment in the pdf-format to address [smp2018@aalto.fi](mailto:smp2018@aalto.fi) by May 31, 2018 – and after acceptance to register to the conference via the [conference online system](#). After the conference, participants will be invited to prepare and submit an extended abstract or a full-length journal article for a peer review process of a special issue of *Rakenteiden Mekaniikka – Journal of Structural Mechanics* (<https://rakenteidenmekaniikka.journal.fi>).

## IMPORTANT DATES, REGISTRATION FEES AND ACCOMODATION

Deadline for one page abstracts	May 31, 2018	Notification of acceptance	June 15, 2018
Deadline for early registration, 350 euros	June 30, 2018	Deadline for late registration, 400 euros	August 1, 2018

Registration fees include welcome reception (Wed), conference dinner (Thu), lunch (Thu & Fri), coffees and snacks (Thu & Fri).  
Hotel and hostel offers can be found via the [conference online system](#): <https://confedent.eventsair.com/suomen-mekaniikkapaivat-2018/reg>

## SOCIAL PROGRAM

Welcome reception at Helsinki Town Hall on Kauppatori/Kruununhaka, Helsinki (Pohjoisesplanadi 11–13)  
Get-together night at Brewery-Restaurant Bryggeri in Torikorttelit/Kruununhaka, Helsinki (Sofiankatu 2)  
Conference dinner in Meripaviljonki Restaurant in Siltasaari (or better, on Eläintarhanlahti), Helsinki (Säästöpankinranta 3)  
Excursion to Aalto Ice Tank basin in the Aalto University Otaniemi campus, Espoo (Tietotie 1) (to be confirmed)

## ORGANIZING COMMITTEE

Juha Paavola, Professor of Structural Mechanics / Aalto University — Conference Chairman  
Jarkko Niiranen, Assistant Professor of Computational Structural Engineering / Aalto University — Conference Chairman  
Mikael Rinne, Professor of Rock Mechanics / Aalto University  
Pentti Kujala, Vice Dean, Professor of Marine Technology / Aalto University  
Ville Vuorinen, Assistant Professor of Computational Fluid Dynamics in Energy Technology / Aalto University  
Jouni Freund, University Lecturer of Mechanics of Materials / Aalto University  
Tuomas Sipilä, Research Team Leader, Marine and Arctic Technology / VTT Technical Research Centre of Finland  
Peter Råback, Product Manager, Elmer software / CSC – IT Center for Science  
Lauri Uotinen, Chairman of Finnish Association of Structural Mechanics

CONTACT INFORMATION: [HTTP://CIVILENG.AALTO.FI/EN/SMP2018](http://civileng.aalto.fi/en/smp2018) — [MEKANIKKAPAIVAT2018@CONFEDENT.FI](mailto:MEKANIKKAPAIVAT2018@CONFEDENT.FI)