ECCOMAS European Community on Computational Methods in Applied Sciences

Jyväskylä – Dynamic City in the Heart of Finland

The Jyväskylä Region is located in the middle of the most beautiful Lakeland Finland. Jyväskylä is a dynamic and lively city, which is spezialised in Human Technology. The City of Jyväskylä is the seventh largest city in Finland with 142.000 residents. It is famous for its achievements in science and technology, its high-quality cultural activities and beautiful natural environment. Jyväskylä is also a youthful city with almost 30.000 students.

JAMK University of Applied Sciences is an international higher education institution with expertise in 8 different fields. The themes that cut across JAMK's strategy are the renewal and digitalisation of learning, the development of new business, sales expertise and entrepreneurship and the internationally acknowledged quality.

JAMK's six specific focus areas have been selected based on the needs of the operating environment and JAMK's as well as cooperation partners' strong expertise. Each focus area has a significant education task, focused RDI activity and professional service activity. JAMK's focus areas are automation and robotics, applied cyber security, innovative learning, bioecobomy, multidisciplinary rehabilitation and tourism.

Contact information

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Location

DIME21 will be hosted by the JAMK University of Applied Rajakatu 35, FI-40200 Jyväskylä, FINLAND.

The event is organized in cooperation with the Jyväskylä University, Faculty of Mathematics and Science.

Submissions and Registration

Submissions and conference registration should be performed electronically via the conference web site: www. jamk.fi/DIME21

For each accepted paper at least one registration as presenting author is required. The presenting author must register by October 30, 2021 to ensure the inclusion of the paper in the abstract book.



Digitalized methods and tools for industry and healthcare (DIME 2021)

December 1-2, 2021, Jyväskylä, Finland



www.jamk.fi/DIME21



DIME21 Thematic conference Updated April 23, 2021

Multi-disciplinary scientific computing has become basis of the many powerful digital solutions and technologies used both in academic and industrial communities. This trend has been enhanced by the ever-increasing capabilities of computational technologies, collecting and storing of information and signals online, the decreasing cost of computer hardware, availability of cloud based solutions for mobile use and raise of the artificial intelligence application. Advanced computational methods and tools are extremely important in analysis of big data from manufacturing processes, quality control and other intelligent systems for healthcare and industry. This conference on digitalized methods and tools for industry and healthcare is motivated by the urgency of interlinking latest methodological advances from the computational sciences in to the real life applications.

To answer these green digitalized challenges and to propose innovative design solutions, the ECCOMAS Industrial Interest Group (IIG) is organizing in Jyväskylä the 1st of an ECCOMAS Thematic Conference focused on the digitalized methods and tools for industry and healthcare DIME21. Participation of SMEs, industries and healthcare research organization is expected participating to the 2021 event hosted by JAMK.

Chairmen of the conference

Tero Tuovinen (JAMK Finland, and Eccomas IIG) Matti Kurki (JAMK) Pasi Raiskinmäki (JAMK)

Advisory committee

Pekka Neittaanmaki (University of Jyväskylä, Finland) Jacques Periaux (CIMNE, Spain) Nikolay Banichuk (Moscow State University, Russia)

Local Organizing committee

Anneli Kakko (JAMK) Tanja Minkkinen (JAMK) Elja Kallberg (JAMK)

Email: DIME21@jamk.fi

ECCOMAS Industry Interest Group

The ECCOMAS Industry Interest Group (IIG) is actively promoting the DIME21 conference is event tool to achieve main of the objective of the IIG: strengthening the ECCOMAS industrial liaison and developing contacts between ECCOMAS and the European Commission (EC).



IFME International Forum of Mechanical and Mechatronic Engineering

IFME network is cooperation between companies and universities in the field of mechanical and mechatronic engineering. Strong dialogue between industry and universities to support public sector decision making, also new insight to new cooperation possibilities.

Format of the workshop

The format of the DIME21 event will include plenary lectures, mini-symposia and contributed presentations and a round table focused on "Future computational and digital solutions of future industry and healthcare".

How to register

All contributors are invited to submit individual contributions related to any of the conference topics. Conference registration have to be performed electronically, via the website: www.jamk.fi/DIME21

Conference topics

Scope: Modelling, simulation, optimization, data driven computing, digital twins, neural networks, machine learning, artificial intelligence, big data analysis, industrial design, hybrid twins, reduced order modelling, fluid-structure interaction, medical modelling, industrial processes, CFD and CSM optimized design, robust design optimization, deterministic/stochastic optimization.

Application areas

3D additive manufacturing, industrial processes, medical tools, advanced sensors, surfacing technologies, material science, mechanical and mechatronics engineering, product life cycle analysis, active/passive devices control.

ECCOMAS Thematic Conference

DIME21 is the first of the series ECCOMAS Thematic Conferences organized by the ECCOMAS Industrial Interest Group (IIG).

ECCOMAS is the European Community on Computational Methods in Applied Sciences. Further information can be found: www.eccomas.org.

Call for MS and STS

For organizing a mini-symposium session or an STS session, please send a small description about the topics and the title of the session to DIME21@jamk.fi by September 1. Tell us also which authors should/will participate to your MS/STS. Authors will submit their abstracts normally using the abstract submission system.

Important dates

Deadline for presenting a one to four pages abstract	October 1, 2021
Decision on the acceptance	October 15, 2021
Deadline for registration to have the paper included into the abstract book	October 30, 2021
The DIME21 Conference	December 1–2, 2021

Registration

Group	Registration Fees
Delegates	300€
Students	200€
Company (1st delegate)	300€
Company (next delegates)	200€
Participation for one day	150€
Online	200€

Registration should be performed electronically via the conference web site: www.jamk.fi/DIME21.

The fees will include:

- » Conference Proceedings
- » Attendance at all scientific sessions
- » Lunch and coffee breaks, welcome reception and conference dinner