Special Interest Group:
Precision Engineering for Sustainable Energy Systems
13th - 14th October 2021

Virtual Meeting

euspen

Dear delegates,

We very much look forward to welcoming you to eu**spe**n's Special Interest Group meeting on Precision Engineering for Sustainable Energy Systems which will take place virtually from Wednesday 13th – Thursday 14th October 2021.

To help you with your planning, we have provided a summary of key information for the meeting. For any issues during the conference please contact info@euspen.eu.

Meeting Access

The meeting platform for the virtual presentations will be conducted using Zoom. It is recommended that you become familiar with this tool and download if necessary.

When trying to access the meeting you may receive the following message "waiting for the host to start this meeting". If you see this message, please wait and as soon as the meeting is ready to start you will be permitted access to the plenary.

Please make sure you have your full name detailed on your Zoom profile so that we can identify you**.**

We kindly ask delegates to place themselves on mute during the meeting to avoid any background noise whilst presenters are presenting.

Programme

The full meeting **programme** is available on the event webpage and a summary of the day's events are detailed below. Please note that all times are shown in Central European Summer Time (CEST). A printable copy of the programme can be found **here**.

Date	Programme Summary	Time (CEST)
Wednesday 13th October	**Tutorial:** Gear metrology for Wind Energy Systems	09:00 – 12:30
Wednesday 13th October	**Meeting: Day 1** - Keynote & oral presentations - Coffee & debate sessions	13:00 – 17:30
Thursday 14th October	**Meeting: Day 2** - Keynote & oral presentations - Workshop: High-performance computing for wind energy - HPCWE - Coffee & debate sessions	09:00 – 15:20

Tutorial

Dr Martin Stein from Physikalisch-Technische Bundesanstalt, DE and Dr Rob Frazer from National Gear Metrology Lab, Newcastle University, UK will give a live, interactive tutorial on **Gear metrology for Wind Energy Systems**. The tutorial will show attendees how gears are measured, discuss some limitations of these processes and introduce participants to some of the strategies that are being researched. For more information visit the tutorial **webpage**.

Workshop

Prof.Atanas Popov from The University of Nottingham, UK will chair a live EU-funded workshop on **High-performance computing for wind energy**.

A large number of wind power generators are being deployed at land and sea worldwide to meet the demand for clean alternatives to fossil fuel. At each stage of the wind farm life cycle, from site assessment and development to construction and operation, massive amounts of data are produced that are processed by powerful computer systems. This EU-funded HPCWE project addresses the computational challenges faced by the wind energy industry in Europe and Brazil. These include the efficient use of computational resources in wind turbine simulations, smooth integration of meso-scale and micro-scale simulations, and the system optimisation. The project aims to deliver a step change in the use of high-performance computing regarding wind flow simulations, by reshaping almost every stage of wind energy exploration.

The Workshop will present the latest research findings and developments on the project, with reference to specific work packages and activities within the programme. For more information visit the workshop **webpage**.

Keynotes

We are delighted to welcome the following two prestigious keynotes who will be presenting at the meeting:

Wednesday 13th October 2021

13:10 – 13:40

Dr Jörn Stenger

Physikalisch-Technische Bundesanstalt (PTB), DE and EURAMET chairperson

Title: EURAMET's strategy and research programmes for sustainable energy systems and Green Deal

Thursday 14th October 2021

09:00 – 09:30

Christian Fenselau and Lasse Lundberg Nowack

Vestas Wind Systems A/S, DK

Title: Precision Engineering through digitalisation – Use Case: Wind Turbines

Oral Presentations

Details of all oral presentations can be found on the meeting **programme**.

Delegates will have the opportunity to ask presenters questions during the coffee and debate session adjacent to the oral session. The coffee and debate sessions are an opportunity for delegates to ask questions and enter into open discussion around state-of-the-art practice, key research and developments. These sessions will be facilitated by the oral session chair.

Session chairs will aim to take as many questions as possible during the allotted time. To ask a question delegates should either:

1. Type a question in the chat box.
2. Select the 'raise hand' option on Zoom to indicate to the session chair that you would like to ask a question.

   To raise a hand in Zoom on Windows PC or Mac you will need to:

   - Select 'Participants' from the meeting controls at the bottom of your screen.
   - Select 'Raise Hand' from the options that appear inside the participants panel.

   

   Further information can be found **here**.

If selected to ask a question you should unmute your microphone and proceed to ask your question. You should then place yourself back on mute once your question has been answered.

Abstracts

All Precision Engineering for Sustainable Energy Systems 2021 abstracts will be accessible via the proceedings section of the eu**spen** knowledge base from Monday 11th October. Please select 'SIG : Sustainable Energy Systems' from the event drop down to access the abstracts.

Meeting recordings

Meeting recordings for Wednesday 13th October and Thursday 14th October will be made available on the eu**spen** knowledge base w/c 18th October 2021. Further information on how to access these recordings will be sent to all delegates once they have been uploaded to the Knowledge Base.

On behalf of the eu**spen** team, thank you for supporting us and for allowing us to remain connected. We look forward to welcoming you virtually to the meeting.