



**VIRTUAL
CONFERENCE**

Special Interest Group:
**Structured &
Freeform Surfaces**
6th - 8th October 2020



Dear Delegates,

We very much look forward to welcoming you to euspen's Special Interest Group meeting on Structured & Freeform Surfaces, which will take place from Tuesday 6th – Thursday 8th October 2020 via Zoom.

To help you with your planning, we have provided a summary of key information for the meeting.

Meeting Access

euspen's Structured & Freeform Surfaces meeting will take place via [Zoom](#). It is recommended that you become familiar with this tool and download if necessary.

Zoom access links for the tutorial and meeting will be sent out via email to those delegates that have registered.

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

Please note that this virtual conference will be recorded to allow to delegates to watch post event.

Programme

The meeting programme is available on the [programme](#) 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).

Date	Programme Summary	Time (CEST)
Tuesday 6th October	Tutorial: Polymer replication & molding	09:00 –12:30
Tuesday 6th October	SIG Meeting: Day 1 <ul style="list-style-type: none">- Keynote & Oral Presentations- Coffee & Debate	13:30 –16:55
Wednesday 7th October	SIG Meeting: Day 2 <ul style="list-style-type: none">- SOTA & Oral Presentations- EU ProSurf Project Presentations- Poster Session- PTB Laboratory Tours- Coffee & Debate	09:00 – 17:20
Thursday 8th October	SIG Meeting: Day 3 <ul style="list-style-type: none">- SOTA & Oral Presentations- Coffee & Debate	09:00 – 12:45

Tutorial

Dr Guido Tosello, from the Technical University of Denmark will give a live tutorial on **Polymer replication & molding**.

The tutorial describes the state-of-the-art in replication of surface texture and geometries at the micro and nano scales and the programme focuses on the replication of surfaces in polymers. The full programme can be found on the [tutorial](#) webpage.

Keynote



Tuesday 6th October
13:40 – 14:10

Dr-Ing. Lars Schönemann
Leibniz-Institut für Werkstofforientierte Technologien IWT, DE
Review on the manufacture of multiscale structured surface

SOTA's

Wednesday 7th October

09:00 – 09:25

Prof. Dr Erwin Peiner, TU Braunschweig, DE

Semiconductor nanowire arrays for energy harvesting – fabrication and characterization

Thursday 8th October

09:00 – 09:25

Dr Adam Clare, University of Nottingham, UK

Electrochemical jet surface structuring: an overview

Oral & Poster Presentations

All oral and poster presentations will be presented live via Zoom and a timetable detailing all presentations can be found on the meeting [programme](#).

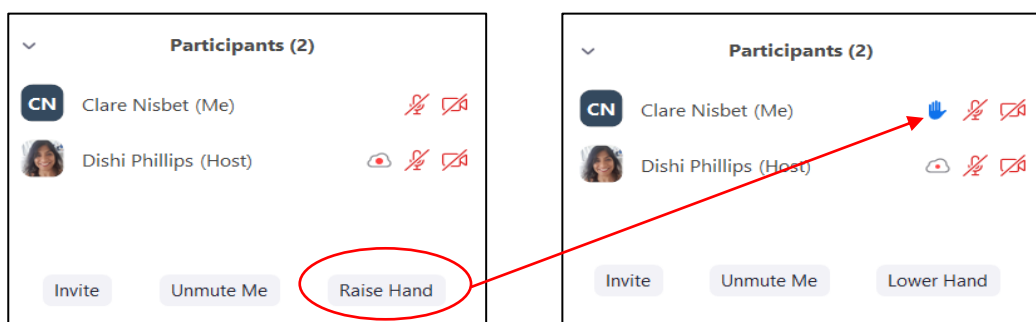
All oral presentations will be followed by 5-minutes of questions and answers.

All poster presentations will be followed by 2-minutes of questions and answers.

Question & Answers

At the end of each presentation, delegates will have the opportunity to ask the presenter questions. Session chairs will aim take as many questions as they can in the allotted time.

To ask a question delegates should select the **'raise hand'** option on Zoom during or directly after the presentation to indicate to the session chair that a question would like to be asked. Please do not type questions in the chat functionality.



If selected by the session chair to ask a question the delegate should unmute their microphone and proceed to ask their question.

Delegates should place themselves back on mute after their question has been answered by the presenter.

Coffee & Debate

The coffee and debate sessions are an opportunity for delegates to enter into open discussion and will be facilitated by the session chair.

We encourage delegates to bring along a cup of tea or coffee and join these sessions to openly discuss the session presentations, state-of-the-art practice, and key research and development in the area of precision engineering associated with structured and freeform surfaces.

PTB Virtual Tours

Despite being unable to meet at Physikalisch-Technische Bundesanstalt in Germany, we are delighted to be able to bring delegates seven virtual laboratory tours, which were pre-recorded at PTB for this meeting.

These tours will be shown on **Wednesday 7th October at 15:50** (CEST).

Tour	Tour Description
Metrology for Functional Nanosystems	Prof. Dr Stefanie Kroker presents recent developments and verifications of novel nanooptical systems for metrological or sensoric applications
Interferometry on gauge blocks	Dr Guido Bartl presents the principle and the applications of a Twyman-Green interferometer in the field of gauge block measurements
TU Braunschweig, IHT	Prof. Erwin Peiner demonstrates the fabrication of nanowires for energy harvesting, piezoresistive silicon microprobes for high speed topography and simultaneous mechanical property measurements
New Scanning electron microscopy (SEM) at PTB	Jannick Langfahl-Klabes introduces the new SEM at PTB and its application for the reconstruction of the 3D morphology of a tactile probing tip
Layer Thickness and Crystalline Standards	Dr Ingo Busch demonstrates his activities to develop crystalline silicon standards with ultraflat surfaces, atomic step artefacts
3D-Nanometrology	Dr Gaoliang Dai demonstrates critical dimension measurements using a large range nanomeasuring machine
Tactile Probing Methods	Dr Zhi Li demonstrates two tactile micro probing systems, a long slender fast silicon microprobe for topography and elastic property measurements and a linear capacitive MEMS sensor for nanomechanical measurements

On behalf of the **euspen** team, thank you for your continued support and for allowing us to remain connected. We look forward to welcoming you virtually to the Structured & Freeform Surfaces meeting.