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<https://belenus-project.eu/>

## **Young Scientist Training School Programme: “Materials and Coatings against High-Temperature Corrosion”**

### **Young Scientist Training School: 5th of October 2022**

We are delighted to offer you the opportunity to attend a one-day workshop and a one-day young school within the framework of the European Project of "**Lowering Costs by Improving Efficiencies in Biomass Fueled Boilers: New Materials and Coatings to Reduce Corrosion**".

**The workshop and young school will be held at VTT, Espoo, Finland on the 4th and 5th of October 2022, respectively.**

**The BELENUS project** <https://belenus-project.eu/> was funded by the EU Horizon 2020 program and started in April 2019. BELENUS brings novel corrosion prevention approaches to achieve cost-effectiveness for biomass plants involving the whole value chain. The ambitious goal proposed by BELENUS is sustained by the achievement of 3 technological breakthroughs which constitute the technological pillars, focused on preventing corrosion and increasing in performance and reliability of small and medium combined heat and power (CHP) biomass plants: [1] biomass highly-corrosion resistant coatings and lower base materials presently under development; [2] strategies of welding and bending for improving quality and efficiency of boiler components; [3] online corrosion monitoring.

The aim of this workshop is to disseminate project results and to bring together the main actors of the industry, plant owners and researchers related to the topic of material and component degradation in the Biomass field. The Young Researchers Training School not only aims to disseminate project results but also to show up materials and processes against corrosion for different industrial applications. We hope that you will be able to attend and look forward to your input and views on the challenge of enhancing the lifetime of industrial plant components

**Please sign up no later than 30.9.**

## YOUNG RESEARCHERS TRAINING SCHOOL AGENDA: 5<sup>TH</sup> OF OCTOBER

Topic	Speaker	Institution	When
<ul style="list-style-type: none"> <li>• <i>Side effects of biomass combustion- from fuel preparation till the ash management</i></li> </ul>	<i>Karol Witkowski</i>	<i>EIFER</i>	<i>9:00</i>
<ul style="list-style-type: none"> <li>• <i>Boiler Fireside Corrosion Practical Considerations</i></li> </ul>	<i>Colin Davis</i>	<i>UNIPER</i>	<i>9:30</i>
<ul style="list-style-type: none"> <li>• <i>Protective coatings for steel high-temperature corrosion resistance</i></li> </ul>	<i>Pauline Audigie</i>	<i>INTA</i>	<i>10.00</i>
<b>Coffee break</b>			<b>10.30</b>
<ul style="list-style-type: none"> <li>• <i>Coatings processes for high-temperature corrosion resistance</i></li> </ul>	<i>Francisco Gonçalves</i>	<i>TEandM</i>	<i>11:00</i>
<ul style="list-style-type: none"> <li>• <i>Analytical strategies in high-temperature corrosion research.</i></li> </ul>	<i>Torbjörn Jonsson</i>	<i>CHALMERS UNIVERSITY</i>	<i>11:30</i>
<ul style="list-style-type: none"> <li>• <i>Pilot Plant Testing in hydrogen production by fuel reforming, and biomass combustion</i></li> </ul>	<i>Manuel Benito</i>	<i>CIEMAT</i>	<i>12:00</i>
<b>Lunch</b>			<b>12.30</b>
<ul style="list-style-type: none"> <li>• <i>Materials for a fossil-free future – the importance of high-temperature corrosion</i></li> </ul>	<i>Johanna Nockert</i>	<i>KANTHAL</i>	<i>14.00</i>
<ul style="list-style-type: none"> <li>• <i>Furnace modelling for corrosion risk assessment</i></li> </ul>	<i>J. Kapanen</i>	<i>VTT</i>	<i>14.30</i>
<b>Coffee break</b>			<b>15.30</b>
<ul style="list-style-type: none"> <li>• <i>Social dimension of bioenergy</i></li> </ul>	<i>Leire Martiarena</i>	<i>ZABALA</i>	<i>16.30</i>
<ul style="list-style-type: none"> <li>• <i>Practical Cases</i></li> </ul>	<i>Francisco J. Pérez</i>	<i>UNIVERSIDAD COMPLUTENSE DE MADRID</i>	<i>17.00</i>

## The venue:

Teknologian Tutkimuskeskus VTT Oy,

Kivimiehentie 3, 02150 Espoo, Finland

[Teknologian tutkimuskeskus VTT Oy - Google Maps](#)

