

# Polish-German Workshop on Advanced Materials for Energy Applications



on the occasion of  
35 years of cooperation



under the auspices of the Rector of the AGH University of Science and Technology, Professor Tadeusz Słomka

<b>MONDAY, 04.07.2016</b>	
<b>9:00 -10:00</b>	<b>Registration (Auditorium; A0 building)</b>
<b>10:00 -10:30</b>	<p style="text-align: center;">Opening and Welcome</p> <ul style="list-style-type: none"> <li>- Prof. T. Szmuc, V-ce Rector for Cooperation of AGH University of Science and Technology</li> <li>- Prof. H. Bolt, member of the Board of Directors, Forschungszentrum Jülich</li> <li>- Prof. A. Czyrska-Filemonowicz - 35 year of cooperation between AGH University of Science and Technology and Forschungszentrum Jülich</li> </ul>
<b>10:30 -12:00</b>	<p style="text-align: center;">Thematic Session: Energy</p> <ul style="list-style-type: none"> <li>- Prof. L. Singheiser: Requirements for materials and coatings under part load operation conditions and high load flexibility of "Energiewende" scenarios</li> <li>- Prof. R. Dunin-Borkowski: Advanced transmission electron microscopy of materials for energy-efficient information technology</li> <li>- Prof. T. Beck: Very High Cycle Fatigue (VHCF) Behavior of Martensitic 9-12% Cr Steel for Steam Turbine Blades at High Mean Stress and the Influence of Notch Effects</li> </ul>
<b>12:00 -13:00</b>	<b>Photo shooting and Lunch</b>
<b>13:00 -14:30</b>	<p style="text-align: center;">Thematic Session: Energy</p> <ul style="list-style-type: none"> <li>- Prof. J. Mayer: The role of HRTEM in the development of new high-strength steels</li> <li>- Prof. W. J. Quadackers: Oxidation induced Microstructural Changes during High Temperature Application of Nickel base Alloys</li> <li>- A. Kruk, DSc.: The 3D imaging and metrology of microstructural elements in innovative materials for energy systems and aeronautics</li> </ul>
<b>14:30 – 15:00</b>	<b>Coffee break</b>
<b>15:00 – 17:00</b>	<p style="text-align: center;">Thematic Session: Materials for Energy - Analytical Techniques</p> <ul style="list-style-type: none"> <li>- <u>Dr Kinga Zawadzka</u>, O. Krysztal, E. Godlewska, M. Nocun, A. Czyrska-Filemonowicz (AGH-UST): "Electron microscopy analyses of surface-modified thermoelectric materials for energy systems"</li> <li>- <u>Dr W. Nowak</u> (FZJ-IEK2): Effect of boron addition on oxide scale formation of Ni-base superalloys</li> <li>- <u>Dr B. Rutkowski</u>, A. Gil, A. Czyrska-Filemonowicz (AGH-UST): The microstructure of the Sanicro 25 steel after steam oxidation studied by advanced electron microscopy and spectroscopy methods</li> <li>- <u>Dr I. Povstugar</u> (FZJ-ZZCh): Atom probe tomography of high-temperature alloys: 3D elemental analysis for comprehensive nanoscale characterization</li> <li>- <u>Dr M. Ziętara</u>, A. Kruk, A. Czyrska-Filemonowicz (AGH-UST): Electron microscopy and tomography for characterization and metrology of Ni-base single crystal superalloys for turbine blades</li> <li>- <u>Dr M. Wirtz</u> (FZJ-IEK2): Fusion reactor materials under extreme heat and particle loads</li> </ul> <p style="text-align: center;">Final discussion and Closing</p>
<b>17:00</b>	<b>Visit to the AGH-UST laboratories</b>