

## CELEST Member Short Profile



### Jürgen Janek

Jürgen Janek holds a chair for physical chemistry at JLU since 1999 and is scientific director of the BELLA laboratory at Institute of Nanotechnology @KIT since 2011. He graduated from Leibniz University in Hannover, spent time during his postdoc period in labs in Oxford and Seoul and was awarded with a Gerhard Hess grant by DFG (equivalent to later Emmy-Noether program) and a Karl-Winnacker grant by Hoechst AG. Later he became visiting professor at Tohoku University (Japan), Seoul National University (Korea) and Université d'Aix-Marseille (France). Today, his research group at JLU includes about 60 scientists at different levels of education, and he is director of the Center for Materials Research. He was recently awarded with an honorary doctorate by TU Delft (Netherlands) for his achievements in energy storage research, was awarded as highly cited researcher (Clarivate) in 2020 and 2021, and became member of the National Academy of Sciences – Leopoldina in 2022.



**Institute of Physical Chemistry  
& Center for Materials Research  
Justus-Liebig-University Gießen**  
Heinrich-Buff-Ring 17  
35392 Gießen

#### Contact details

Prof. Dr. Dr. h.c. Jürgen Janek  
+49 641 99 34500  
juergen.janek@pc.jlug.de

#### Research areas

Physical Chemistry of Solids, Solid state electrochemistry, solid state ionics – with special focus on transport processes in solid electrolytes and mixed conductors, interface and electrode phenomena, materials analytics, battery cell concepts, electrochemistry of oxygen, lithium, sodium, magnesium and chlorine.

#### Lab equipment (at JLU)

**Analytics:** ToF-SIMS, FIB-SIMS, Orbitrap-SIMS, AFM-SIMS (from autumn 2022), XPS/UPS/Auger, XRD, HRSEM; specialty: all analytical techniques are connected to gloveboxes via a LEICA shuttle system. No sample is exposed to atmosphere.

**Electrochemical Characterization:** various techniques, like CV, EIS, microelectrodes, cell cyclers, etc.

**Synthesis and materials preparation:** High T synthesis at defined atmosphere, plasma reactors, sputtering, PLD

Jürgen Janek @ PCI	Link PCI	Lab equipment PCI
<a href="http://www.uni-giessen.de/janek">www.uni-giessen.de/janek</a>	<a href="http://www.uni-giessen.de/pci">www.uni-giessen.de/pci</a>	<a href="http://www.uni-giessen.de/zfm">www.uni-giessen.de/zfm</a>

Partners

