

## CELEST Member Short Profile



**Carlos Ziebert**



Dr. Ziebert earned his Diploma degree and his PhD in Physics from the Saarland University Saarbrücken, Germany. In 2002 he joined KIT. He has more than 20 years of international R&D experience in thin film technology, modelling and thermal characterization of materials for energy systems and has published 89 peer-reviewed articles with a h-index of 24. He has been project leader in 5 projects related to electrochemical energy storage and from 2011 to 2013 he was the manager of the EERA Joint Program on Energy Storage. Currently Dr. Ziebert is the leader of the group Batteries - Calorimetry and Safety. In the POLiS - Cluster of Excellence for Battery Research for Post Lithium Storage, his group is responsible for the thermal characterization and safety of Na and Mg cells, which are expected to offer greater sustainability, safety and storage capacity combined with lower costs. As part of the umbrella concept Research Factory Battery, he is involved in the two competence clusters Batt use (battery usage concepts) and AQua (analytics / quality assurance) with the projects BatgasMod (battery gas modeling) and AnaLiBa (analytics on Li-ion batteries). At the European level, he leads the work package 4 on Cell and battery pack testing and modelling in the Horizon 2020 project HELIOS - High-performance moduLar battery packs for sustainable urban electrOmobility Services.

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Research areas		
My research is focused on electrochemical/thermal characterization and safety testing of Lithium-ion cells.		
Lab equipment (at campus north of KIT)		
The IAM-AWP Calorimeter Center, led by Dr. Ziebert, was founded in 2011 and operates Europe's largest battery calorimeter laboratory. It offers: 2 3D Tian-calvet calorimeters, 7 accelerating rate calorimeters (ARCs), Gloveboxes for cell assembly and disassembly, 11 temperature chambers for different temperature ranges and cell sizes, Cyclers with several hundred channels, Gas chromatography-mass spectrometry system.		
Carlos Ziebert @ IAM-AWP	Link IAM-AWP	Link lab equipment
<a href="https://www.iam.kit.edu/awp/21_140.php">https://www.iam.kit.edu/awp/21_140.php</a>	<a href="https://www.iam.kit.edu/awp/">https://www.iam.kit.edu/awp/</a>	<a href="https://www.iam.kit.edu/awp/169.php">https://www.iam.kit.edu/awp/169.php</a>