

**Speaker of Session 02** 

## PHOTOVOLTAICS

Dr. rer. nat. Christoph Gerhard, M.Sc. Dipl.-Ing. (FH)



After his apprenticeship and professional life as skilled engineering worker in precision optics, Dr. Gerhard studied Precision Manufacturing Technology at the University of Applied Sciences in Göttingen, Germany. In 2006, he prepared his diploma thesis on the development of novel short-pulse laser sources for materials processing applications at the Institute of Optics in Orsay, France. For the results of this work, he received the Georg-Simon-Ohm Award from the German Physical Society in 2009.

After working in industry as product manager for optics for 3 years, he started working on the scientific investigation of laser-based materials processing at the University of Bremen in 2009. In addition, he extra-occupationally studied Optical Engineering and Photonics and received his master's degree in 2010. Dr. Gerhard then worked as Scientific Coordinator of the Lower Saxony Innovation Network for Plasma Technology in Göttingen and Clausthal-Zellerfeld, Germany. In the course of this function, he investigated novel hybrid plasma-assisted laser processing techniques for the machining of transparent materials. In 2013, he further spent a research stay at the Laboratory of Lasers, Plasmas and Photonic Processes in Marseille, France, working on laser-based materials analysis of optical glasses.

Based on this research, he received his doctor's degree in Natural Sciences from Clausthal University of Technology in 2014. In 2015, his doctoral thesis entitled "Atmospheric pressure plasma-assisted laser ablation of optical glasses" was awarded the Young Talent Award Green Photonics by the Fraunhofer Society. He is currently working as scientist at the Fraunhofer Application Center for Plasma and Photonics in Göttingen, Germany.

Dr. Christoph Gerhard is member of the German Physical Society and the German Society for Plasma Technology. He authored and co-authored 26 original research papers and is the chief editor of a textbook on laser ablation.



