

Experience Report "Extreme Workshop" 2024 in Pittsburgh, Pennsylvania

From 06.05.2024 to 09.05.2024 this year's "Extreme Workshop" took place under the organization of the University of Pittsburgh. A total of four other universities, including the University of Virginia, NTNU, RWTH Aachen University and the University of Bayreuth, traveled to Pittsburgh, Pennsylvania, with their delegations. From the University of Bayreuth, was participated with a group from the Chair of Ceramic Materials (CME) under the direction of Prof. Dr.-Ing. Stefan Schafföner. He was accompanied by group leader Dr. Nico Langhof, as well as a doctoral student and two students from the the Master's degree program in Materials Science and Engineering.

The focus of this year's workshop was on high-temperature materials with temperatures above 550 °C. In addition to various presentations by specialists regarding to the topics of the metallic materials and superalloys, ceramic composite materials and protective coatings. As well as other topics, the participants were actively involved by interactive case studies, demonstrations, laboratory tours and even a quiz. For example, the workshop participants had the opportunity to hold an intact tile of the space shuttle's thermal protection system (TPS) in their own hands. Thanks to the participation of Dr. Bryan Harder (NASA Glenn Research Center) and Dr. Douglas G. Konitzer (formerly GE Aerospace), the participants also gained valuable insights into the industrial applications of the various materials as discussed. In the course of two poster sessions, participants had the opportunity to find out about the research of the individual participants and to exchange ideas. Intercultural exchange was also promoted through various events outside the seminar room. These included an evening boat trip on the Monongahela River and Allegheny River in front of the Pittsburgh skyline, a joint visit to PNC Park for a Pittsburgh Pirates baseball game, a guided tour for the Nations Rooms of the Cathedral of Learning, and a farewell dinner.

The University of Bayreuth is already being discussed as the organizer for the next workshop. Through the interesting professional training, the intercultural exchange and excursions outside of the workshop, it is always an exciting and worthwhile experience for the participants.

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