

Atul Chokshi Honorary Symposium

Prof. Atul H. Chokshi is senior professor and distinguished researcher at the Indian Institute of Science (IISc), Bangalore, India. He is one of the most prominent figure in the field of creep, superplasticity and deformation of nanocrystalline materials. His PhD on creep cavitation with Professor T.G. Langdon at the University of Southern California, USA has laid the foundation for a better understanding of creep failure due to cavitation in metallic alloys. He did his post-doctoral research at University of California at Davis with Professor A. K. Mukherjee, where he made significant contribution to the field of superplasticity.

Atul Chokshi started his professional career as a faculty member at University of California at San Diego. In due course, his obsession with interfaces and grain boundaries has motivated him to work on the plastic flow in nanocrystalline materials and applicability of conventional plastic flow theories during their deformation. A short sabbatical with Professor H. Gleiter in Germany has produced one of the most significant outcome in the field of plastic deformation of nanocrystalline materials reporting inverse Hall-Petch effect in nanocrystalline materials. Altogether, this work has opened a wide area of research in the field of deformation of nanomaterials. Around the same time, he also focused his research on the creep of ceramics. His contributions to the field of creep and superplasticity of metallic alloys and ceramics along with Langdon, Mukherjee, Nieh and Meyers are considered as the most impactful.

After his brief stay at UC San Diego, he realized his passion to serve his home country and hence moved back to India in the early 90s to join the Indian Institute of Science (IISc) as an Associate Professor. At IISc, in the last 25 years, he has produced several PhD graduates specialized in a wide range of high temperature deformation related topics. The diffusion and segregation effects in ceramics and their influence on creep, creep of magnesium alloys, size effects in nanocrystalline materials are some of the most notable ones.

In 2004, the Govt. of India has recognized his contributions to the Indian science and has awarded him the Shanti Swarup Bhatnagar Prize for Science and Technology, India's highest award for a scientist. He served in the International Advisory Committee of ICSMA for almost 9 years and was also the organizer of ICSMA in Bangalore in 2012.

To mark his distinguished career in the field of Mechanical Behavior of Materials, the friends, well-wishers and students have proposed to organize a honorary symposium at ICSMA 2022 in Metz.

Symposium Organizers:

Prof. Satyam Suwas, Professor and Chair of Materials Engineering, Indian Institute of Science, Bangalore
Dr. Praveen Kumar, Associate Professor of Materials Engineering, Indian Institute of Science, Bangalore