



Prof. Zenji Horita

1. School of Engineering, Kyushu Institute of Technology, Japan
2. Magnesium Research Center, Kumamoto University, Japan
3. Synchrotron Light Application Center, Saga University, Japan
4. Emeritus Professor of Kyushu University, Japan



Prof. Zenji Horita obtained his Bachelor and Master degrees in Kyushu University, Fukuoka, Japan, and received his PhD in 1983 from the University of Southern California, Los Angeles CA, USA. He was a distinguished professor in the Graduate School of Engineering, Kyushu University, and was concurrently appointed a principal investigator of the International Institute for Carbon-Neutral Energy Research (I²CNER) and the director of the International Research Center on Giant Straining for Advanced Materials (IRC-GSAM) in Kyushu University. He was a visiting professor of Arizona State University in USA (1991-1992), the University of Ancona in Italy (2003) and the University of Rouen in France (2010, 2016). He is now Professor Emeritus of Kyushu University, Fukuoka, Japan, and is currently working as a professor of the Kyushu Institute of Technology, Kumamoto University, and Saga University, Japan. His research has been dedicated to materials development using processes of SPD (Severe Plastic Deformation) with evaluation of mechanical properties and microstructural characterization. He has been engaged in producing high-performance materials with structural and functional properties well enhanced by SPD processes such as Equal-Channel angular Pressing (ECAP), High-Pressure Torsion (HPT) and High-Pressure Sliding (HPS). He has explored not only the mechanisms for the enhanced properties but also practical application of the SPD-processed materials.

Prof. Horita has authored more than 700 papers in refereed journals and is receiving more than 50957 citations with h-index of 113 (Google Scholar Citations). He is the editor-in-chief of Materials Transactions monthly published from the Japan Institute of Metals and Materials (JIM). He is also a member of the JIM, the Japanese Society of Microscopy (JSM), the Iron and Steel Institute of Japan (ISIJ), the Japan Institute of Light Metals (JILM) and The Metallurgical Society (TMS).

Prof. Horita was awarded for his achievements in research and development. Among them are the John E. Dorn Memorial Award, University of California, Berkeley (1984); the Honda Memorial Young Researcher Award, The Honda Memorial Foundation (1985); The Japan Institute of Metals and Materials Meritorious Award (1999); Sōmiya Award, The International Union of Materials Research Societies (IUMRS) (2005); The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology (2011); The Japan Institute of Metals and Materials Distinguished Contribution Award (2013); the Honda Frontier Award, The Honda Memorial Foundation (2013); The Medal of Honor with Purple Ribbon, the Japanese Cabinet (2015); The Japan Institute of Metals and Materials Murakami Memorial Award (2017); the NanoSPD Achievement Award, NanoSPD Organizing Committee (2017); The Best Award of the Japan Institute of Light Metals (2018); and The Japan Institute of Metals and Materials Gold Medal Award (2024).