



Obituary: Jan Pospiech (1936-2020)

We are sad to announce that Prof. Jan Pospiech passed away on February 28th, 2020. He is survived by his wife of 53 years Małgorzata.

Jan Jerzy Pospiech was born on June 9th, 1936 in Bytom. He obtained his master degree in physics from Jagiellonian University in 1962. Since then till his retirement in 2006, he was employed at the Institute of Metallurgy and Materials Science (former Institute for Metal Research) belonging to the network of research institutes of the Polish Academy of Sciences. At the beginning, his interests were focused on magnetic properties of polycrystalline materials. His PhD thesis (supervised by Wojciech Truszkowski) defended in 1969 was about the impact of crystallographic texture on properties of ferromagnetic materials. At that time, textures were analyzed using two-dimensional pole figures. The subject that became Jan Pospiech's fascination and with which he is usually associated appeared during his postdoctoral stay with Hans Bunge at the Institut für Metallische Spezialwerkstoffe (DAdW) in 1969-1970; it was the analysis of textures based on three-dimensional orientation distributions. He contributed a lot to the development of this field, in particular to methods of determination and analysis of orientation distributions. Results of his work on fundamental regions (i.e., regions of the orientation space in which each geometrically distinct orientation is represented only once) are nowadays a part of every advanced system for texture analysis. He summarized his achievements in the habilitation thesis „Analysis of texture based on its three-dimensional representation” (1976, in Polish, Zeszyty Naukowe AGH, Kraków). He was also the co-author (with Jörn Hansen and Kurt Lücke) of irreplaceable at that time “Tables for Texture Analysis of Cubic Crystals” (Springer, 1978). In a broader perspective, his scientific interests encompassed the whole field of anisotropy of properties of polycrystalline materials. He was focused on theoretical problems, but in close connection with practical issues in plastic deformation, recrystallization and phase transitions in metals.

Jan Pospiech put a lot of effort to promote the truth and avoid mistakes. He is known for noticing the ‘ghost phenomenon’, i.e., the presence of false texture components in orientation distributions calculated from pole figures. It was believed that the ghosts were due to approximations of used computation method (series truncation). Jan Pospiech was rightly skeptical of this explanation. He communicated the problem to a number of researchers including Siegfried Matthies who ultimately gave a correct much deeper explanation.

Jan Pospiech was an active member of the texture community. In 1971, he co-organized in Kraków a conference which turned out to be the second in the now prestigious ICOTOM conference series. He also co-organized a number of smaller conferences, e.g., Sotama (with Jan Bonarski) and texture conferences in Mogilany. He was a frequent visitor to the Institut für Allgemeine Metallkunde at RWTH Aachen and the Max-Planck-Institut für Eisenforschung in Düsseldorf. He was a fellow of A. von Humboldt Foundation at RWTH Aachen in the years 1973-1975 and 1992. In Krakow, he created an internationally recognized research group cooperating with many research centers (among others in Germany, France,

USA, Austria, Hungary). The group promoted many doctors of technical sciences and four of its members received the title of professor.

Jan Pospiech was emotionally involved in his research. He spoke enthusiastically about his work as well as other subjects of science. Of all archetypes of a scientist, Jan Pospiech belonged to the category of benign and absent-minded. He commonly aroused affection of interlocutors. Jan Pospiech was a well-liked man of a gentle disposition. We will miss him, and we will always remember his scientific integrity.

On behalf of employees of IMMS PAS,

Adam Morawiec and Jerzy A. Jura