Professor Hayao Kobayashi

Guest professor, Department of Chemistry, College of Humanities and Sciences, Nihon University

He studied chemistry at the University of Tokyo. He became Lecturer at Toho University in 1971 and was promoted to Professor in 1980. He moved in 1995 to the Institute for Molecular Science (IMS). In 2007, he retired from IMS and became a guest professor of Nihon University. More than 40 years, he has worked on the chemistry of molecular conductors. His main interest was in the design of new molecular conductors. He has discovered various types of new molecular superconductors based on organic π -donor (BEDT-TTF, BETS) and π -acceptor (M(dmit)₂ (M=Ni, Pd)) molecules including the first examples of κ -type organic superconductor (κ -(BEDT-TTF)₂I₃: 1987), the antiferromagnetic organic superconductor (κ -(BETS)₂FeBr₄: 1999) and the field-induced organic superconductor (λ -(BETS)₂FeCl₄: 2001). In 2001, he has also succeeded to develop the first single-component molecular metal, [Ni(tmdt)₂].

Award: The Chemical Society of Japan (CSJ) Award (2005)

The Chemical Society of Japan (CSJ) Award for Creative Work (1996)