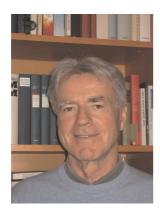




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Biographical sketch: Professor Bernd Giese



Professor Bernd Giese is Professor of Organic Chemistry at the University of Basel, Switzerland. He was born in Hamburg, Germany, in 1940, studied in Heidelberg, Hamburg, and Munich, and received his Ph.D. in 1969, working in the group of Rolf Huisgen. After two years in a pharmaceutical research group at the BASF, Ludwigshafen, he started his independent research at the University of Münster and received his Habilitation at the University of Freiburg in 1976. One year later he became a full professor at the TU Darmstadt, Germany, and accepted a call as a chair at the University of Basel in 1989. He served as dean at the TU Darmstadt and as head of the department at the University of Basel. He is a member of the Editorial Advisory Board of several journals, including Bioorganic and Medicinal Chemistry and has acted as a regional editor of SYNLETT from its beginning.

Professor Giese's research covers studies on bridged cations, selectivity-reactivity correlations of reactive intermediates, polar and steric effects of radical addition reactions, stereoselectivity of radical C,C-bond formations, conformation determinations of chiral radicals by ESR, total synthesis of macrolides, radical-induced DNA strand cleavage, photocleavable protecting groups, electron transfer through DNA, and peptides.

Professor Giese developed a new synthetic method that involves alkyl halides, metal hydrides, and alkenes. This three-component radical chain reaction was one of the starting points of modern synthesis with carbon-centered radicals. He applied this method, which is often called the Giese reaction, to the synthesis of several target molecules. In his bioorganic studies Professor Giese's experiments helped to elucidate the controversial problem of long-distance electron transfer through DNA. He showed that electrons migrate through DNA in a multistep, hopping reaction, where each single hopping step depends strongly on the distance. The overall process is a diffusion process with appropriate DNA bases as stepping stones.

Professor Giese has published ca. 300 papers and has authored or coauthored three books on radical chemistry. He has received several awards and is member of the Deutsche Akademie der Naturforscher Leopoldina and the American Academy of Arts and Sciences.