

Vadim A Davankov Winner of the 2005 Chromatographic Society Martin Medal



Vadim Davankov was born in Moscow in 1937 and after attending the Mendeleev Institute of Chemical Technology in Moscow he studied under Professor Glockner at the University of Dresden where he worked on polymer chemistry. The chemistry of polystyrene has remained an interest ever since.

He returned to Moscow in 1962 and joined the Institute of Element-Organic Compounds (INEOC) where he eventually rose to become the Deputy-director (1989-1994). One of his most important achievements was the introduction of chiral ligand exchange chromatography; as early as 1968 he filed patents on the resolution of amino acids. He prepared his own stationary phases by chiral modification of polystyrene beads to give packings suitable for preparative-scale work. A series of studies into the mechanism of chiral recognition in ligand exchange chromatography were recognized in 1992 by the award of a Diploma for Scientific Discovery on the participation of achiral molecules in the chiral recognition of enantiomers by chiral selectors.

Equally important was his work on the properties of hypercrosslinked polystyrene networks introduced in the early 1980s which resulted in the large scale manufacture of such materials by Purolite International. This work also resulted in the synthesis of “nanosponges” – fundamentally new intramolecular hypercrosslinked macromolecular species. More recently he has worked with a number of US hospitals and other organizations on the construction of artificial kidneys.

Prof Davankov has authored over 400 papers (see below) and in 1988 he published with H.Walton and J.Navratil a definitive text on ligand exchange chromatography. He has received a number of Russian awards and honours; in 1992 was made a member of the American Chemical Society and in 1996 a member of IUPAC. He has served on the editorial boards of the Journal of Chromatography and Chromatographia.