



## Biography of Janusz Lipkowski

Janusz Lipkowski graduated from Warsaw University, Faculty of Chemistry, Warsaw, Poland 1960-1965 and obtained the M.Sc. Degree in Chemistry, cum laude.

After a few months period of postgraduate in the Institute of Nuclear Research, Chemistry Campus in Warsaw, he got the research assistant position at Warsaw University, Faculty of Chemistry, Department of Crystallography, 1965-1967.

He moved to the Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, where he performed PhD study under Prof. Wiktor Kemula. He obtained there Ph.D. in Chemistry (1972) based on the PhD thesis entitled "Klatyraty  $\text{Ni}(\text{NCS})_2(4\text{-Metylopirydina})_4$  jako sorbenty chromatograficzne" ("Clathrates of  $\text{Ni}(\text{NCS})_2(4\text{-Methylpyridine})_4$  as chromatographic sorbents"). From 1972 Janusz Lipkowski was employed as Senior Research Assistant, the Institute as above. In 1975 awarded by Polish Chemical Society individual award for outstanding young researchers.

Within 1975-1976 Janusz held postdoctoral research position at the Center of Structural Diffraction of Italian National Research Council, Parma, Italy. Research performed with Professors G.D. Andreotti and M. Nardelli. During this time he initiated more scientific cooperation contacts in Italy, particularly with research groups at CBR Center in Roma-Montelibretti (A. Guarino, C. Ossicini).

The Diffraction Center of CNR in Parma was, at the time, outstanding in terms of experimental equipment and computing possibilities. Janusz Lipkowski has efficiently used these in his studies of x-ray structure of clathrates (main topic) and photochemical substrates.

After his return to the Institute in Warsaw Janusz organized a 5 people research team working on physical chemistry of inclusion-type compounds, concentrating on non-bonded interactions, microcalorimetry studies and solving molecular mechanisms of mixture separations on preparative and chromatographic scale as well as advanced structural studies.

In 1978- he was nominated the Head of the Department of Physicochemistry of Supramolecular Complexes (formerly: Physicochemical Methods of Analysis) of the Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, department employing over 40 researchers. This duty involved him in deep reformulation of the research program of the Department.

In September 1980 Janusz organized International Symposium on 'Clathrate Compounds and Molecular Inclusion Phenomena' in Jachranka near Warsaw. This event proved to be timely meeting, attracting people from this field of research and resulting in a series of important results:

1. Decision of the participants to have symposia every 2 years;
2. Generation of new scientific journal (Journal of Inclusion Phenomena);
3. Edition of a 3-volume monograph book on Inclusion Compounds.

All the above was successfully realized, the symposia were organized in Parma (Italy), Tokyo (Japan), Birmingham (UK), Orange Beach (USA) and then in Japan again(Kioto, Fukuoka), in France (Lyon), Canada (Ottawa) etc., more recently the symposia series merged with the series of macrocyclic chemistry and the combined series are organized annually. The Journal went through some title changes and still exists, the book series was even supplemented by volumes 4 and 5.

In 1982 Janusz Lipkowski submitted the DSc (habilitation) thesis entitled "współzależność budowy i właściwości fizykochemicznych klatratów tworzonych przez kompleksy koordynacyjne  $MX_2A_4$ " ("The relationship between structure and physicochemical properties of clathrates formed by coordination complexes  $MX_2A_4$ ") which, after the formal procedure led him to D.Sc. Degree in Chemistry (Dr.hab.), the Institute as above. With this degree he was promoted to the position of Associate Professor.

An important stage in evolution of Janusz's scientific interests and research program was extension towards supramolecular chemistry. In 1983 he successfully invited Jean-Marie Lehn, who kindly accepted and delivered a series of lectures on supramolecular chemistry, at the Institut in Warsaw. Janusz, with the cooperation of some of his coworkers, have prepared Polish version of the lectures and edited it in a book entitled "Chemia supramolekularna". It appeared in 1985, two years before Nobel prize to Jean-Marie Lehn, and he says the Polish book was the first worldwide on the topic. Janusz Lipkowski some years before started publicizing in Poland this field of chemistry, e.g. his review article "kompleksy koronowe i kryptatowe" which appeared in 1975 was number 4 chronologically in the world, as found by German .

When talking about supramolecular and inclusion compounds it should be noted that Janusz played a role in practical uses of cyclodextrins in his lab, particularly in chromatography. Nowadays, when purchasing a HPLC equipment one obtains a set of cyclodextrin samples for possible chiral analyses. No doubt Lipkowski's group contributed to development of this particular field, cooperating closely with Budapest team of Jozsef Szejtli. Within the program Japan Society for Promotion of Science and Polish Academy of Sciences in 1984 (May-October) Janusz Lipkowski spent Sabbatical Leave with Professor T. Iwamoto at the University of Tokyo, Japan working on inclusion compounds using novel, at that time, computer equipment.

In 1986 Prof. Lipkowski became Deputy Director for Research, Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, sizeable and high research institution in Warsaw. A few years later, in 1990, he was promoted to Professor (the title awarded by the President of Poland).

After the Solidarity revolution in Poland some significant changes happened in organization of scientific research in Poland. Among others, no political party recommendations were needed for becoming director of the PAsci institute and in this situation Janusz was persuaded to be a candidate to this position. After strong competition Janusz Lipkowski was elected Director, Institute as above, and served at this position until election to the position of 1st vice-President of Polish Academy of Sciences, i.e. till 2003.

Worth to mention his teaching and related organizational activity in School of Sciences (non-governmental university-type school (Warsaw), in 2001 incorporated into the Cardinal Wyszyński State University, Warsaw). Janusz was teaching chemistry (general, inorganic, radio- and coordination), crystallography and material science. It lasted from 1993 to 2000 and from 2007 up to retirement in February 2023.

In the term 2003-2006 Janusz Lipkowski served as 1st Vice-President of Polish Academy of Sciences, responsible mainly for its research institutes. He did a lot in order to improve this part of, otherwise excellent, Academy of Sciences. Later he served as Chairman, Board of Trustees, Division of Mathematical, Physical, Chemical and Earths Sciences, Polish Academy of Sciences (2011-14), and Chairman, Committee of Chemistry, Polish Academy of Sciences (terms 2007-2010 and 2011-2014), also Chairman, National Committee for ICSU (International Council of Sciences) (terms 2007-2010 and 2011-2014).

President, Warsaw Learned Society (TNW), 4 terms from 2008 to 2020. TNW is the direct successor of the oldest scientific society in Poland, dated back to 1800, the very important NGO in the country.

#### Selected awards and distinctions

Group member in the Prize of Chairman of the Committee of Science and Technology, 1968

Individual Prize Division of Mathematical, Physical and Chemical Sciences, Polish Academy of Sciences, 1983

Leader of the research team awarded the Prize of the Scientific Secretary of Polish Academy of Sciences, 1983

Member of the group awarded the Prize of the Scientific Secretary of Polish Academy of Sciences, 1985

Silver Medal of Parma University, 1976

Golden Cross of Merit (1982 ?)

Honorary Diploma of Physicochemical Institute of National Academy of Sciences of Ukraine, Odessa, 1992 – special invited „Zelinsky lecture”

Doctor *honoris causa*, Institute of Inorganic Chemistry, Russian Academy of Sciences, Novosibirsk (1997)

Corresponding member, Polish Academy of Sciences, 1998

Full member Polish Academy of Arts and Sciences (2013)

Diploma of merit, Academy of Sciences of Moldova, 1999

Chivalry Cross Polonia Restituta (2001?)

Honorary Professorship, Siberian Branch of Russian Academy of Sciences, Novosibirsk, 2001

Golden Medal, Zolotaja Sigma, Siberian Branch of Russian Academy of Sciences, Novosibirsk, 2001

Honorary Medal of Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, 2004

Jan Zawidzki Medal, Polish Chemical Society, 2006

Honorary Membership of Academy of Sciences of Moldova, 2006

Honorary Order of Republic of Moldova, 2006

Member Academia Europea, 2011

Corresponding member Polish Academy of Arts and Sciences (2012)

Active member Polish Academy of Arts and Sciences (2019)

Fello Royal Society of Chemistry , 2019

Honorary Fellow of Warsaw Learned Society

Honorary Member of Polish Crystallographic Society

Series of awards for the patented innovation and production of ecological fireworks (with Gao Fireworks)