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Preface

Biography of Professor Stefan Paszyc

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Professor Stefan Paszyc was born on January 5, 1925 in Poznań, Poland. In 1950, he graduated from Adam Mickiewicz University (UAM) in Poznań with the degree of MSc in Chemistry. A year later he started research and teaching as an assistant in the Department of Physical Chemistry at the same university. His supervisor, Professor A. Gałecki, encouraged him to continue with his investigations in the field of photoelectrochemistry on what was then known as the Becquerel effect (photovoltaic effect). Paszyc undertook a systematic study of this phenomenon in aqueous and non-aqueous solutions of some aza and xanthene organic dyes and earned his Doctorate in Chemistry in 1959.

In 1960, he received a 1-year scholarship from the British Council and went to Cambridge University, UK to work under the well-known chemist Professor R.G.W. Norrish. In Cambridge, he continued working on the photovoltaic effect of aqueous solutions of some inorganic compounds by the flash photolysis technique, and published the results obtained [1]. After his return to Poland, he attempted to build an apparatus for flash photolysis. However, major technical and financial difficulties prevented the completion of the project. At this point, he started working on the photochemistry and radiation chemistry of some simple nitroalkanes, mainly in the liquid phase and in solution. Paszyc published a number of papers in this area, including a review "Photochemistry of Nitroalkanes" in the *Journal of Photochemistry* [2]. In 1966, he presented his postdoctoral dissertation that was recognized as "habilitation". A few years later as Assistant Professor ("Docent"), he organized and headed the Chemical-Physics Laboratory in the Faculty of Chemistry at UAM. In 1973 Paszyc was made Associate Professor, and in 1983 nominated Professor of Chemistry.

In 1970, he received a postdoctoral fellowship from Professor Paul de Mayo (University of Western Ontario, Canada) and joined the newly opened Photochemistry Unit where he worked on the photoluminescence of thioketones, especially adamantanthione [3].

On his return from Canada, Paszyc initiated a photochemical and photoluminescence study of nucleic acid components, their analogues [4] and Y_t base (wyosine) in solution [5]. One of the results of this work was the discovery of the aza-cyclobutane photocycloaddition reaction of pyrimidine-purine dinucleotide analogues linked together with a polymethylene chain. This was later demonstrated by other researchers working with the original dinucleotide. He was the first to examine the photochemical properties of synthetic Y_t base in aqueous solution, and the products of its photodegradation. The intermolecular interactions and electronic excitation energy transfer in Y_t-$(CH_2)_n$-adenine bichromophoric systems were also investigated [6]. He encouraged Professor A. Kawski, Gdańsk University, Poland and his research associates to work together on the elucidation of the fluorescence properties of wyosine and the bichromophoric systems named above.

In the early 1980s, after his return from sabbatical leave at the University of Florida, Gainesville, USA, Paszyc and his coworkers began intensive research on the trimethylpyrichrominium ion (vitamin B_1 derivative) in the excited states [7]. Its absorption and emission spectra and acid–base prop-

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erties were thoroughly examined [8,9], including the results obtained in cooperation with Dr. C.A.G.O. Varma, Leiden University, Netherlands, by means of the fast kinetics technique [10].

In cooperation with the Institute of Bioorganic Chemistry of the National Academy of Sciences in Tashkent, Uzbekistan, Paszyc together with his colleagues began work on the physicochemical properties (especially spectroscopic characteristics: IR, NMR, UV–visible) of gossypol and its tautomers in solution [11,12]. Paszyc persuaded Professors Brzezinski (Faculty of Chemistry, UAM) and G. Zundel (Munich, Germany) to become interested in this work. As a result, new interesting complexes of gossypol with Be, Cu, Ni and Zn cations were discovered and new conditions of tautomer formation were elucidated [13].

In the 1980s, in his laboratory, Paszyc together with the Institute of Bioorganic Chemistry, Polish Academy of Sciences (PAN) in Poznań conducted intensive research on the fluorophore derived from nucleosides of pyridinium salts [14]. As a result of photochemical reaction, a new compound was discovered called "luminarosine" which fluoresces strongly in the visible region of the spectrum. This compound is to be used as a fluorescent probe in work on the structure, conformation and stereodynamic properties of nucleic acids. Professors R.P. Steer and R.E. Verral from the University of Saskatchewan, Saskatoon, Canada joined Paszyc and his coworkers in detailed investigations of this compound and its derivatives [15].

In the years 1986–1990, Paszyc was coordinator of a large research project in the fields of physical chemistry, biochemistry and biophysics of biologically active substances. The project included 36 research groups throughout Poland, was financially supported by the Ministry of National Education and was highly praised by experts on respective topics. Paszyc has actively participated in the management and administration of the Faculty of Chemistry at UAM. For 2.5 years, he was Vice President for Research and International Relations at UAM. He also supervised several graduate students' PhD programmes and numerous students taking MSc's in Chemistry. Three of his students received postdoctoral degrees habilitation and were appointed Associate Professors in the Faculty of Chemistry, UAM. Professor Paszyc's lectures in chemical physics (mostly molecular spectroscopy and photochemistry) are very popular with and well attended by students of chemistry.

Paszyc is the author or coauthor of numerous publications. His total research output amounts to about 90 publications. He is also the author of two editions of the first textbook in Polish on photochemistry entitled "Principles of Photochemistry" [16]. Paszyc has broad scientific contacts around the world; he has been invited as a visiting professor and speaker to many countries: USA, Canada, Germany and Bulgaria. He has been coorganizer of several international conferences under the auspices of the European Photochemistry Association (EPA), IUPAC and other scientific institutions, and has attended numerous international scientific meetings. Since 1974, he has been on the Editorial Board of the *Journal of Photochemistry*, later the *Journal of Photochemistry and Photobiology A: Chemistry*. He is a member of the EPA, and in 1984–1988 was a member of the EPA Standing Committee. Professor Paszyc was vice president of the Polish Chemical Society between 1988 and 1991.

Professor Paszyc is partial to Anglo-Saxon belles-lettres in original languages. Working in his small garden and in the company of his family he takes his "relaxation time".

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