

BOOK REVIEW

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Vladimir Prelog i hrvatska kemija
[Vladimir Prelog and Croatian Chemistry]

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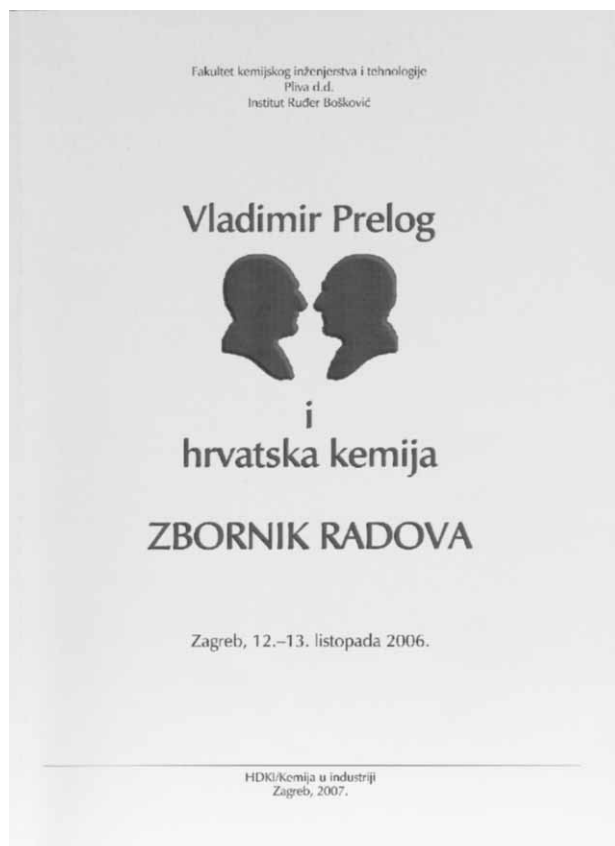
This booklet is a collection of nine papers previously published in the journal *Kemija u industriji* (Zagreb). The papers are based on lectures delivered at the symposium entitled *Vladimir Prelog and Croatian Chemistry*, held last year (October 12–13, 2006) in Zagreb. The symposium commemorated the 100th anniversary of Vladimir Prelog's birth. Vladimir Prelog, Nobel Prize laureate in chemistry (he won the Nobel Prize in 1975), was born on July 23,

1906 in Sarajevo and died on January 7, 1998 in Zürich. He taught organic chemistry from 1935 to 1941 at the Department of Chemical Technology of the Technical Faculty in Zagreb. After that, as professor of organic chemistry at the Eidgenössische Technische Hochschule in Zürich, he had a number of predoctoral and postdoctoral students from Zagreb. Thus, his influence on Croatian chemistry extends to the present day, since the last generation of his Croatian co-workers is still active.

The symposium *Vladimir Prelog and Croatian Chemistry* was organized by the Faculty of Chemical Engineering and Technology (former Department of Chemical Technology), Pharmaceutical Company Pliva (while Prelog was in Zagreb, his research was supported by Kaštel d.d., a small pharmaceutical company, predecessor of Pliva) and the Rugjer Bošković Institute (the leading research institution in Croatia). The Symposium was held at the Faculty of Chemical Engineering and Technology and at Pliva.

The papers in the booklet may be thematically classified into three groups. The first group consists of three papers describing Prelog's influence on Croatian chemistry, the second group consists of five papers containing reviews of the authors' research and the third group contains a single paper reporting the preparation and application of nitro-compounds at Pliva. All papers are in Croatian with extended summaries in English.

In the first group of papers, the first paper, entitled *Vladimir Prelog and Organic Chemistry in the Past Century*, is by Dionis Sunko, who as the first-year student attended the last series of Prelog's lectures delivered at the Department of Chemical Technology in the autumn of 1941. In his article, Sunko highlights the changes in the development of organic chemistry in the 20th century and the role of Prelog as one of the leading European chemists in these changes. The second article, entitled *Vladimir Prelog and the Department of Organic Chemistry*, is by Krešimir Jakopčić, who was professor of organic chemistry at the Department of Organic Chemistry and who also graduated in chemical technology. In this article, Jakopčić gives a brief history of the Department of Organic Chemistry from 1922 (the year when the Department was established) to 1970 (when the then professor of organic chemistry Victor Hahn died) and describes Prelog's role in setting high standards in research,



application and teaching of organic chemistry. The third paper, entitled *Nobelprize Winner Vladimir Prelog – Teacher of Croatian Chemists*, is by Krunoslav Kovačević, who spent 15 months with Prelog as his predoctoral student. Prelog also presided the examining board when Kovačević was defending his PhD thesis in Zagreb. In his article, Kovačević presents three generations of Prelog's Croatian collaborators. Kovačević himself belongs to the third generation.

The second group of papers contains reviews of the authors' research interest in organic chemistry. Štefica Horvat (The Rugjer Bošković Institute, Zagreb) contributed the paper entitled *Synthetic Glycoconjugates: Models for Studying Interactions in Biomolecular Recognition and Sugar-Induced Modifications of Peptides/Proteins*, which covers the methods for glycoconjugate assembly and biological activity screening. Ivan Butula and Branka Zorc (Faculty of Pharmacy and Biochemistry, University of Zagreb) contributed the paper entitled *The Curious Molecule Benzotriazole* in which they review a variety of reactions in which benzotriazole participates. Irena Škorić and Marija Šindler-Kulyk (Department of Organic Chemistry, Faculty of Chemical Engineering and Technology, University of Zagreb) contributed the paper entitled *To Hetero-polycyclic Compounds by Light; Reactions of Substituted Furostilbenes*, in which the photochemical preparation of polycyclic structures with oxygen from *o*-substituted furan heterostilbenes is discussed. Kata Mlinarić-Majerski and Ines Vujasinović (The Rugjer Bošković Institute, Zagreb) contributed the paper entitled *Adamantane, the Building Block in the Construction of Macrocyclic Systems*, reviewing the preparation of adamantane-functionalized oxa-, aza- and thia-crown ethers and their complexation abilities for metal cations.

It should be noted that adamantane was first prepared in 1941 by Prelog and Rativoj Seiwerth (1916–2000) in Zagreb. The last paper in this group, entitled *Heterocyclic Aromatic Compounds and Their Antitumor Activity* is by Grace Karminski-Zamola (Department of Organic Chemistry, Faculty of Chemical Engineering and Technology, University of Zagreb) and Kristina Starčević (GSK Research Center, Zagreb). The paper consists of two parts. In the first part, the photochemical preparation of condensed polycyclic heteroaromatic compounds and their antitumor activity is presented and in the second part, the photochemical preparation of polycondensed heterocyclic aromatic quinolones and their antitumor activity is discussed.

In the third group, we find only one paper, *Nitro Compounds as Solvents, Drugs, Intermediates and Explosives* by Stjepan Mutak, who belongs to the third generation of Prelog's Croatian collaborators. He used to work in Pliva, but is now a consultant for medicinal chemistry and chemical process development. The authors in his article review the various uses of nitro compounds in pharmaceutical industry, but also describe the work at Pliva on the development and production of explosives from nitro compounds that were to be used in the defense of Croatia in the Patriotic War 1991–1995.

This booklet will be useful to people interested in the history of Croatian chemistry, but also as a document of activities of Croatian organic chemists in the last decades of the 20th century. However, its impact will be restricted by the language used – I wonder why the articles were not translated into English and the booklet prepared as a bilingual publication?

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