

ANNIVERSARIES AND DATES



GUNARS DUBURS – seventieth birthday

Gunars Duburs – prominent scientist, organizer, and member of the Editorial Board of our journal – celebrated his seventieth birthday on June 12.

Gunars Duburs was born in Riga on June 12, 1934 into a family of white-collar workers. In 1957 he finished at the chemical faculty of Latvian State University. Already from his first courses he worked in the students' scientific society under the leadership of leading organic chemist G. Vanags. He continued to work under the latter's leadership and in 1961 defended a candidate's thesis on "The synthesis and properties of dibenzoylidenedihydropyridines and dibenzoylneopyridines." In 1979 he defended a doctoral thesis on "1,4-Dihydropyridines, their reactivity and biological characteristics". (In 1991 this degree was equated to the degree of habilitated doctor of chemical sciences of the Latvian Republic.)

Wide-ranging interests and activities of Gunars Duburs include: Heterocyclic chemistry (partially hydrogenated azines and their polycyclic derivatives, including dihydro- and tetrahydropyridines, pyridones, pyridinethiones, indenopyridines, indolizines, pyridazinopyridines, and thiazolopyridines, and study of their chemical, physicochemical, and biological characteristics); medical chemistry (synthesis and study of compounds with neurotropic, cardiovascular, antioxidant, membrane-protecting, radioprotective, UV-protective, and peptidomimetic activity); synthesis and study of agents for the transfection of genes.

From 1957 Duburs was on the scientific staff of the Institute of Organic Synthesis, Academy of Sciences of the Latvian SSR, which was established at this time, and from 1964 he headed the laboratory of purines, pyridines, and coenzymes at this institute. (In 1972 this laboratory was merged with the laboratory of diketones, founded by Prof. G. Vanags, into the laboratory of membrane-active compounds and β -diketones.) From 1980 to 2003 Duburs was Deputy Director for scientific work.

The laboratory of purines, pyridines, and coenzymes contributed to the development of the Olaine Biochemical Reagents Plant and developed methods for the production of a series of compounds. In time the main subject matter of the laboratory developed and included the chemistry of the dihydro derivatives of pyridines and, later, partially hydrogenated six-membered heterocycles, their biological characteristics, and prospective use in medicine and agriculture. The antioxidant activity of 1,4-dihydropyridines (1,4-DHP) was discovered, and the antiradical activity of 1,4-DHP in homogeneous and heterogeneous media (emulsions, liposomes, biomembranes) was studied. The original antioxidant diludine – a stabilizer of carotin and a growth stimulant for farm animals – was developed and brought into production and agricultural practise (1974).

New antagonists and agonists of calcium ions were synthesized, and the original antihypertensive product foridone (riodipine) was introduced into production and medical practise (1987). The selective radioprotector diethone was developed (1986) and was brought into medical practise for the protection of normal tissues during radioactive exposure of patients in oncological clinics.

In 1988 Duburs was made professor, in 1990 he was elected corresponding member of the Latvian Academy of Sciences, and in 1992 he was elected full member of the Latvian Academy of Sciences. Since 1992 Prof. Duburs has been Deputy Chairman of the Division of Chemical, Biological, and Medical Sciences of the Latvian Academy of Sciences.

G. Duburs is member of the Scientific Council of the Latvian Institute of Organic Synthesis, the Library Council of the Latvian Academy of Sciences, and since 1999 member of the Council of habilitation and promotions of the Chemical Faculty of Latvian University. He is a member of the editorial boards of the journals "Chemistry of Heterocyclic Compounds" and "International Journal of Molecular Science". Duburs is an expert on the Council of Science of Latvia in the Commission on chemistry, and since 1999 he has been a member of the Chemical Technical Committee of European Cooperation in the field of Scientific and Technical Research (COST).

Gunars Duburs belongs to the International Society of the Chemistry of Heterocyclic Compounds, Latvian Chemical Society, the Union of Scientists of Latvia, the Latvian Society of Biochemists, and the Latvian Association of Medical Chemistry.

Duburs was awarded the State Prize of the Latvian SSR for a cycle of investigations on the "Creation and introduction of diludine – a new effective antioxidant and growth stimulant for farm animals", the G. Vanags Prize for a cycle of investigations on "The synthesis and investigation of dihydropyridines" in 1984, the prize of the Council of Ministers of Latvia (1990), and five prizes of the Presidium of the Academy of Sciences of the Latvian SSR (from 1970 to 1984). In 1999 he was awarded a prize of the Cabinet of Ministers of the Latvian Republic, and he was also awarded the S. Hiller (1991), D. H. Grindel (1996), and O. Shmideberg (2001) medals and also the P. Walden award (1994).

Duburs has appeared as plenary lecturer presenting papers at many international conferences: The 5th, 6th, and 7th FEICHEM conferences on heterocycles in bioorganic chemistry (1988, 1990, 1993), the 12th and 16th International Symposia on Medical Chemistry (1992, 2000), the 14th Congress on Heterocyclic Chemistry (1993), the International Conference on "Trends in Neuroprotective Drugs: Design, Pharmacology, and Clinics" (1997), NATO ASI (1998), the 2nd European Conference of Pharmacology (1999), the 1st and 2nd Worldwide Congresses of Latvian Scientists (1991, 2001), and others.

Duburs has published 465 scientific papers, received 65 patents and 105 inventor's certificates of the USSR, has been author and coauthor of 375 abstracts of papers, and has supervised the preparation of 17 dissertations.

On the occasion of his birthday we wish him happiness, sound health, and many years of fruitful work for the good of chemical science and his native land, many new ideas, and many new achievements.

THE PRINCIPAL PUBLICATIONS OF PROF. G. DUBURS OVER THE LAST 10 YEARS

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