

# IVARS KALVIŅŠ

**President of the Latvian Academy of Sciences**

*Curriculum vitae*

Born June 2, 1947 in Riga, Latvia

## **Education and Academic Qualifications**

2021 – Honorary Professor of Tashkent Pharmaceutical Institute  
2012 – Full Member of European Academy of Sciences and Arts  
1994 – Full Member of Latvian Academy of Sciences  
1994 – Full Professor, Latvian Institute of Organic Synthesis  
1988 – Doctor *habilitus* in chemistry, State University of Leningrad, Faculty of Chemistry, Department of Organic Chemistry  
1979–1980 Postdoctoral studies, University of Munich (Germany), Institute of Organic Chemistry, research leader Prof. R.Huisgen  
1977 – Doctor of sciences in chemistry, Latvian Academy of Sciences, Institute of Organic Synthesis  
1969 – Master of Sciences of Latvian State University, Faculty of Chemistry, Department of Organic Chemistry, speciality chemist.



## **Awards and scholarships**

- 2017 – Latvian State Ministry for Education and Science Letter of Acknowledgment for contribution to the development of IOS.
- 2016 – Latvian Academy of Sciences and JSC “Grindex” Golden Owl Award for the development of novel cardioprotective medicines and evaluation of the mechanism of action.
- 2015 – Medal “100th Anniversary of Prof. A.N.Kost”, awarded for outstanding achievements in heterocyclic chemistry.
- 2015 – The Walter Zapp Medal for outstanding inventions in medicinal chemistry and rise of Latvian prestige in the world.
- 2014 – Certificate of Recognition of Cabinet of Ministers (Latvia).
- 2014 – Cicero’s Award for “Outstanding contribution to the development of world class medicines”.
- 2010 – Latvian Academy of Sciences and Riga City Award.
- 2009 – Grand Medal of the Latvian Academy of Sciences for creation of new competitive medicinal preparation and strengthening of innovative orientation in the Latvian Institute of Organic Synthesis.
- 2006 – The Order of the Three Stars (4<sup>th</sup> Class), Latvia, awarded to people for meritorious service on behalf of the Fatherland.
- 2005 – WIPO Award Certificate and Golden Medal for long-term and highly productive work as an inventor.
- 2004 – St.George Medal (awarded by International rating Academy “Golden Fortune”).
- 2002 – The Gustavs Vanags Prize of Latvian Academy of Sciences for a cycle of papers “Synthesis and Trials of Bioactive Low-molecular NO-inductors and Donors”.
- 1997 – The Solomon Hiller’s Medal for contribution to the development of medicinal preparations.
- 1996 – The David Hieronymus Grindel Medal for merits in the synthesis and trials of drugs.
- 1988 – Latvian State Prize in Science and Technology.

### **Nominations – winners of the Latvian Academy of Sciences' Competition “The Best Scientific Achievement of the Year”:**

2021 - Integration of reliable technologies for protection against Covid-19 in healthcare and high-risk areas. LAS Full member Tālis Juhna, Dr.sc.ing. Linda Mežule, LAS Full member Ivars Kalviņš, LAS Full member Juris Purāns, LAS Full member Andris Šutka, Dr.sc.ing. Inga Dāboliņa, Dr.sc.ing. Inese Filīpova, Dr.biol. Ilze Irbe, Dr.med. Ivars Vanadziņš, LAS Corresponding member Atis Elsts, Mg.iur. Andreta Slavinska, Dr.biol. Anna Zajakina, Dr.sc.ing. Andris Martinovs, Dr.phys. Atis Skudra, LAS Corresponding member Gita Rēvalde, Dr.sc.ing. Agris Ņikitenko, Dr.chem. Kārlis Pajuste, Mg.sc.ing. Aleksandrs Ļevinskis. Rīga Technical University, Latvian Institute of Organic Synthesis, Institute of Solid State Physics, University of Latvia, Latvian Biomedical Research and Study Centre, Rīga Stradiņš University, Institute of Atomic Physics and Spectroscopy, University of Latvia, Rēzekne Academy of Technologies, Latvian State Institute of Wood Chemistry, Institute of Electronics and Computer Science.

2017 – A new compound E1R has been developed to improve memory processes and treat epilepsy. Dr.med. Līga Zvejniece, Dr.pharm. Edijs Vāvers, Dr.pharm. Baiba Švalbe, Dr.chem. Maksims Vorona, LAS academician Maija Dambrova, LAS academician Grigorijs Veinberg, LAS academician Ivars Kalviņš, Latvian Institute of Organic Synthesis, Dr.biol. Ilga Misāne, Dr.med. Ilmārs Stonāns, JSC “Grindeks”.

2014 – An active anti-cancer drug *Belinostat* containing a compound developed by scientists of the Latvian Institute of Organic Synthesis has received US Food and Drug Administration (FDA) approval for clinical medical use for treatment of peripheral T-cell lymphoma. LAS academician Ivars Kalviņš, Dr.chem. Einārs Loža, Dr.chem. Klāra Dikovska, Latvian Institute of Organic Synthesis.

2013 – Accomplishment of chemical and experimental study of a new original cardioprotective drug candidate allowing to proceed with clinical trials of this substance. LAS academician Maija Dambrova, Dr.chem. Solveiga Grīnberga, LAS academician Ivars Kalviņš, Dr.pharm. Jānis Kūka, Dr.pharm. Edgars Liepiņš, Dr.chem. Daina Loža, Dr.chem. Einārs Loža, LAS Corresponding Member Osvalds Pugovičs, Dr.pharm. Reinis Vilšķērsts, Latvian Institute of Organic Synthesis; Dr.med. Ilmārs Stonāns, JSC „Grindeks”.

2011 – Successful implementation of the first round of clinical trials of a new therapeutic substance applicable in the treatment of late complications of Parkinson's disease. PhD Juris Fotins, Dr.chem. Aleksandrs Gutcaits, LAS academician Ivars Kalviņš, PhD Ronalds Zemribo, LAS Corresponding Member Valerjans Kauss, Latvian Institute of Organic Synthesis in cooperation with “Merz Pharmaceuticals”, Germany.

2007 – Mildronate has been demonstrated to have the ability to regulate mitochondrial processes that opens new possibilities in the treatment of neurodegenerative disorders. LAS academician Vija Kluša, LAS academician Ivars Kalviņš, Faculty of Medicine, University of Latvia, Latvian Institute of Organic Synthesis.

### **Research experience**

- R&D of novel physiologically active substances for the treatment of CNS, cardiovascular and malignant diseases, organic chemistry of heterocyclic compounds and amino acid analogues, investigation of biochemical mechanisms of action of new medicines, immunochemistry.
- I.Kalviņš with his team is an originator of the approved anti-ischemic drug Mildronate (meldonium), antitumor immunomodulator Leakadine, as well as novel meldonium containing pharmaceutical combinations (Kapicor, Mildronate GX.). Together with colleagues I. Kalviņš is discoverer of active pharmaceutical ingredient of FDA approved antitumor medicine belinostat as well as of meldonium-like cardioprotective drug under development.
- More than 450 scientific articles published (175 Scopus), 5 books, and more than 200 international conference proceedings.
- I.Kalviņš with his team is the originator of more than 250 inventions (protected by over 1350 patents, patent applications and author's testimonies).

### **Main Research projects (2011– 2020)**

- Head of the Project, Latvian State Research Program, 2020.
- Head of the Project “Isoform selective PDI inhibitor: design, synthesis and SAR” (2018–2020).
- Co-Head of the Project “Development of novel medicines for treatment and prophylaxes of diseases, diagnostic methods and kits, biomedical technologies for improvement of public health” of Latvian State Research Program “Public Health” (2010– 2013).
- Head of the Project “Molecular mechanisms, pharmacogenetics and novel medicines for complications treatment of diabetes and cardiovascular diseases” of Latvian State Research Program “Biomedicine for Public Health” (2014–2017).
- Co-head of Latvian State Research Program “Biomedicine for Public Health” (2014– 2017).

- Coordinator of EU RegPot project InnovaBalt: “Strengthening the research and innovative capacities of the Latvian Institute of Organic Synthesis” (2013–2016).
- Head of the Project “Aziridin-2-carbonic acid derivatives as pH sensitive hybrid anticancer drugs”, Latvian Institute of Organic Synthesis (2016).

### **Professional Occupation**

2020–present President of the Latvian Academy of Sciences  
 2014–present Head of Laboratory of Carbofunctional Compounds, senior researcher, Latvian Institute of Organic Synthesis  
 2015–2018 Chairman of Scientific Council, Latvian Institute of Organic Synthesis  
 2003–2015 Director, Latvian Institute of Organic Synthesis  
 1992–2014 Head of Department of Medicinal chemistry, Institute of Organic Synthesis  
 1987–2003 Vice Director, Institute of Organic Synthesis  
 1986–2014 Head of Laboratory, Institute of Organic Synthesis  
 1981 Head of the Team, Institute of Organic Synthesis  
 1979 Principal Scientist, Institute of Organic Synthesis  
 1975 Junior Scientist, Institute of Organic Synthesis.  
 1996–1997, and since 2001 Professor, Riga Technical University

### **Pedagogical work**

1997, and since 2001 – lecture course “Medicinal chemistry” and “Technology of API” for MSc and PhD students Riga Technical University and Riga Stradiņš University. Supervisor of 6 PhD student qualification works.

### **Participation in scientific and public bodies**

University of Latvia Council (Member, since 2022)  
 Latvian Academy of Sciences (President, since 2020)  
 Latvian Academy of Sciences (Full Member, since 1994, Senator, since 2004)  
 European Academy of Sciences and Arts (Full Member, since 2012)  
 Scientific Council of Latvia (Member, 1994–2001, 2010–2016, expert – since 2006)  
 Research and Innovation Strategy Council of Latvia (Member, since 2014)  
 Latvian Ministry of Economics, (Council “Pharmacy and Biomedicine”, Chairman, since 2016)  
 Latvian State Drug Agency (Steering Committee, Member, 1994–2002)  
 Liepāja University (Chairman of the Advisory Board, since 2013)  
 Riga Stradiņš University (Council for Promotion in Pharmacy, Chairman, since 2006, Member of the Advisory Board, since 2012)  
 Riga Technical University (Member of the Advisory Board, since 2013, Member of the Advisory Board of Faculty of Materials Science and Applied Chemistry, since 2007)  
 Latvian Union of Scientists (Chairman of the Council, since 2007)  
 Latvian Chemical Society (President, 1994–2000)  
 Association of Latvian Innovators (Chairman of the Board, since 2009)  
 Association of Latvian State Scientific Institutes (Chairman of the Board, 2009–2015)  
 Baltic Institute of Research, Technology and Innovation, BIRTI (Chairman of the Council 2012–2013, Member of the Council, since 2013)  
 Open public foundation “Taiho Latvian Fund” (Chairman of the Board, since 2011)  
 Journal “Chemistry of Heterocyclic Compounds” (Editor-in-Chief, 2010–2019)  
 Journal of Synthetic Organic Chemistry and Natural Products “Molecules” (Regional Editor, since 2006)  
 World Applied Sciences Journal (Member of the Editorial Board, since 2006)  
 Latvian Journal of Chemistry (Member of the Editorial Board, since 1996)  
 Journal “Proceedings of the Estonian Academy of Sciences” (Member of the Editorial Board, since 2006)

### **Contacts**

Latvian Academy of Sciences  
 1 Akadēmijas Square, LV-1050,  
 Riga, Latvia  
 Phone: +371 67225361  
 Fax: + 371 67821153  
 E-mail: lza@lza.lv