

### Masaryk University

#### Faculty

Faculty of Science

#### Procedure field

Organic Chemistry

#### Applicant

doc. Mgr. Kamil Paruch, Ph.D.

#### Applicant's home unit, institution

Faculty of Science, Masaryk University

#### Board members

##### Chair

prof. RNDr. Petr Klán, Ph.D.

*Faculty of Science, Masaryk University*

##### Members

prof. Ing. Vladimír Šindelář, Ph.D.

*Faculty of Science, Masaryk University*

prof. RNDr. Martin Katora, CSc.

*PřF Univerzita Karlova v Praze*

prof. RNDr. Milan Pour, Ph.D.

*Department of Inorganic and Organic Chemistry, Faculty of Pharmacy Hradec Kralove, Charles University*

Prof. Dr. Dalibor Sameš

*Columbia University, New York, USA*

### Evaluation of the applicant's scholarly/artistic qualifications

doc. Mgr. Kamil Paruch, Ph.D. has built a distinguished career in organic and medicinal chemistry spanning academia, pharmaceutical research, and translational biomedical science. Over more than thirty years, he has made important contributions to higher education as well as fundamental and applied research.

doc. Paruch received his education at Masaryk University (M.S., 1995) and Columbia University (Ph.D., 2000) and subsequently spent almost a decade at the Schering-Plough Research Institute in the USA. During this period, he worked on several drug discovery programs focused primarily on oncology and contributed to the development of highly potent kinase inhibitors.

Among his most important achievements from that period are the discovery and optimization of inhibitors targeting CDK2, CHK1, and other medically relevant kinases. He was the first to synthesize the CDK inhibitor SCH727965, which later advanced to phase III clinical development, and the CHK1 inhibitor SCH789638, which entered clinical evaluation. His work resulted in numerous patents and demonstrated a strong ability to translate synthetic chemistry into compounds with therapeutic potential.

After returning to the Czech Republic, he established an independent medicinal chemistry group at Masaryk University and later became Head of Medicinal Chemistry at the International Clinical Research Center (ICRC) in Brno. His research has focused on the design and synthesis of selective inhibitors of protein kinases and other biologically important enzymes.

He discovered several widely used chemical probes, targeting the kinases CLK, CK1, ALK1/2, and Haspin. These compounds were selected by the Structural Genomics Consortium as high-quality chemical biology probes. He also discovered and patented several new classes of kinase inhibitors based on furo[3,2-b]pyridine and thieno[3,2-b]pyridine scaffolds, and several other PIM kinases.

A notable aspect of his work has been the successful translation of academic research into innovation. He is a co-founder and Head of Chemistry of CasInvent Pharma, where he leads the development of selective CK1 kinase inhibitors toward clinical candidates. He has also established collaborations with international partners, including Artios Pharma and the EU-OPENSREEN network.

Overall, doc. Paruch's research combines synthetic organic chemistry, medicinal chemistry, and chemical biology and has resulted in over 50 high-impact peer-reviewed publications in highly respected journals such as *Nature*, *Nature Comm.*, *JACS*, and *Angew. Chem.* (H-index ~25), 11 patents, and several internationally recognized discoveries.

In addition to his personal research achievements, doc. Paruch has demonstrated strong leadership abilities. He built and managed independent research groups at both Masaryk University and ICRC and coordinated research activities within the Center of Biomolecular and Cellular Engineering.

Since 2015, he has served as Coordinator and Steering Committee Member of the national research infrastructure CZ-OPENSREEN, where he is responsible for medicinal chemistry activities and contributes to cooperation with the European infrastructure EU-OPENSREEN. Through these activities, he has helped strengthen the position of Czech chemical biology and drug discovery research within the European scientific community.

Conclusion: The applicant's scholarly capabilities meet the requirements expected of applicants participating in a professor appointment procedure in the field of organic chemistry.

**Conclusion:** The applicant's scholarly/artistic capabilities meet the requirements expected of applicants participating in a professor appointment procedure in the field of Organic Chemistry.

### Evaluation of the applicant's pedagogical experience

Teaching and mentoring have been an important part of doc. Paruch's career. Since joining Masaryk University, he supervised 30 bachelor and master theses, and 7 doctoral theses in organic and medicinal chemistry. He has taught a range of courses, supervised student research projects, and incorporated modern concepts of medicinal chemistry and drug discovery into teaching.

A particularly important contribution is his development of teaching materials. He prepared complete lecture presentations and related teaching resources for courses C2021, C3050, CC4450, and CORE122, producing more than 1,000 original teaching slides together with examination and assessment materials. These resources continue to support chemistry education at Masaryk University.

He has also been active in science outreach. For many years he has regularly delivered popular science lectures for secondary school students and has served as a member of the Scientific Board of the BIOSKOP educational program at Masaryk University. He is also one of the main organizers of the prestigious Mendel Lectures. In addition, he used research funding to acquire chemistry textbooks and specialized literature for the university library, improving access to educational resources for students and young researchers.

Conclusion: The applicant's pedagogical capabilities meet the requirements expected of applicants participating in a professor appointment procedure in the field of organic chemistry.

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### Evaluation of the applicant as a respected and recognized scholarly or artistic figure in a given field

doc. Kamil Paruch has established an internationally respected career in medicinal chemistry and chemical biology. His work has contributed to the discovery of important chemical probes, drug candidates, and patented technologies, while also strengthening research infrastructure and collaboration in the Czech Republic and abroad. In addition, he has maintained a sustained commitment to teaching, mentoring, curriculum development, and science outreach. Strong letters of recommendation provided by Prof. Dr. Marc Nazare, Leibniz-Forschungsinstitut für Molekulare Pharmakologie in Berlin and prof. Dr. Stefan Knapp, Goethe University in Frankfurt am Main, highlight this recognition.

Conclusion: The applicant is a respected and recognized scholarly figure in his field. The applicant has made a significant contribution to the development of his field. The applicant constitutes a leading figure in his/her field of scholarship or research.

### Board decision

Based on the outcome of the secret vote and following an evaluation of the applicant's scholarly or artistic qualifications, pedagogical experience and role as a respected and recognized scholarly or artistic figure, the board hereby submits a proposal to the scientific board of the Faculty of Science of Masaryk University to appoint the applicant professor of organic chemistry.

**Conclusion:** The applicant **is** a respected and recognized scholarly figure in his/her field. The applicant **has** made a significant contribution to the development of his/her field. The applicant **constitutes** a leading figure in his/her field of scholarship or research.

## Evaluation Board Decision on the Nomination for Appointment to Professor

### Secret vote results

Voting took place: electronically

|                         |           |   |
|-------------------------|-----------|---|
| Number of board members |           | 5 |
| Number of votes cast    |           | 4 |
| of which                | in favour | 4 |
|                         | against   | 0 |

### Board decision

Based on the outcome of the secret vote and following an evaluation of the applicant's scholarly or artistic qualifications, pedagogical experience and role as a respected and recognized scholarly or artistic figure, the board hereby submits a proposal to the Scientific Board of the Faculty of Science of Masaryk University to **appoint the applicant professor** of Organic Chemistry.

In Brno on 03.10.2026

prof. RNDr. Petr Klán, Ph.D.