



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

### Masaryk University

#### Faculty

Faculty of Science

#### Procedure field

Geological Sciences

#### Applicant

Doc. Jaromír Leichmann, PhD

#### Applicant's home unit, institution

Department of Geological Sciences, Faculty of Science,  
Masaryk University

### Board members

#### Chair

Prof. Jiří Kalvoda, CSc.  
*Faculty of Science, Masaryk University*

#### Members

Prof. Dr. Friedrich Koller  
*Universität Wien*  
Prof. Shah Wali Faryad, CSc.  
*Faculty of Science, Charles University, Praha*  
RNDr. Igor Broska, DrSc.  
*Slovak Academy of Sciences, Bratislava*  
Prof. Milan Novák, CSc.  
*Faculty of Science, Masaryk University*

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

Dr Leichmann graduated in geology from the Faculty of Science of the Masaryk University (MU) in 1987. He started the professional carrier as a mining geologist in former Uranium mine in Dolní Rožínka. This short experience influenced strongly his future scientific aiming. From the 1988 he got the position of assistant professor at the Department of Geology and Palaeontology at MU Brno. In 1992 he won a stipend from the Austrian Ministry of Education to study three years at the Paris-Lodron University in Salzburg. Here he defended a Phd theses in Geology and Geophysics under supervision of prof. Hoeck in 1996. In the years 2003-2004 he spent another year in Salzburg as a PostDoc working on project funded by Fomd zur Foerderung der wissenschaftlichen Forschung (FWF) concerning prospection of raw materials in the Aegean sea. After the return he focused the research on petrology, particularly on application of optical and cathodoluminescence microscopy. Dr. J. Leichmann applied these methods in the very broad spectrum of disciplines including magmatic and metamorphic petrology, origin of uranium and gold deposits, palaeontology, archaeology and applied sciences. He is the author of 27 articles listed in WoS database, 33 articles in Scopus database, 23 in Czech peer-reviewed journals, 11 scholarly book chapters and 86 conference abstracts. In total 379 citations in WOS, H index 10 in WoS and 13 in Scopus. In WoS 1

paper is published in the first decile, 6 papers in first quartile. 1 paper belongs to the 1% of mostly cited articles in the field of Geochemistry and Geophysics in WOS. He presented 8 invited lectures on various topics. He is therefore an internationally recognised scientist. Besides the broad interdisciplinary scientific activities, he paid attention to applied research aimed at the uranium deposits and gas storage mainly and presented 22 research reports financed by industrial companies. The cooperation with the mining companies indicated that the acceptance of mining activities, storage of spent nuclear fuel and other interferences in the Earth crust is of the same importance as geological problems. These issues were addressed together with colleagues from the Faculty of Social Studies of the Masaryk University within two joint interdisciplinary projects of the Grant agency of the MU and Norwegian Funds. He participated in many international and national (Grant agency ČR, Ministry of education, Ministry of industry, Grant agency of MU) projects. He was also a coordinator of CEEPUS network, which was 3 times declared as the best network in CR. His further activities include the position of the principal investigator of Norway Grants Project dealing with CCS technology and the coordination of many bilateral Action and Kontakt projects together with colleagues from Austria, Slovakia, Poland and Germany.

He is a member of the Society of Economic Geologists (SEG) and Society for CL microscopy and organised many international and national conferences and excursions.

The broad interdisciplinary orientation of Dr. J. Leichmann is documented in the close cooperation with archaeologist from different institutions. It resulted in a joint GACR project coordinated by Department on Egyptology, Charles University dealing with raw materials from Old Kingdom in Egypt and close cooperation with colleagues from Ústav archeologické památkové péče aimed at raw materials used in the La Tene period.

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

### **Evaluation of the applicant's pedagogical experience**

Dr. J. Leichmann is very active also in teaching. He presents both very basic lectures for the first semester students and highly specialised methodological lectures for Ms and PhD students.

Very basic and informative lecture for the students in the first semester give a general information about the geology, department, faculty and university, motivate them, and lower the drop-out at the beginning of the study. The basic lecture in petrology is aimed at the Bc students and two more specialized lectures are aimed at Ms students. He is managing two labs – cathodoluminescence and gamaspectrometry – which are used by students to acquire data for Ms and PhD theses, and teach these two subjects including real demonstrations.

He successfully supervised 30 Bc and 40 Ms students. The themes for significant part of these theses were prepared together with experts outside of the university. He had three PhD graduates and 7 active PhD students. The majority of them work on the themes, which are closely related to their employment.



The teaching activities are positively evaluated by students in the survey in IS of MU. Dr. Leichmann is also coordinator of educational courses Lifelong learning for teachers. He prepares the teaching materials for the course participants which are then used during the classes related to geology and raw materials in the primary and secondary schools.

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

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

Dr. J. Leichmann is an excellent expert with broad scope of knowledge which combines methods of basic and applied research with excellent organizational abilities. He participated in 11 large research projects and was a head of an international project Earth Sciences in Middle and Eastern Europe, and principal investigator of project funded by Norway grants. He supervises currently two project funded by SURAO (Radioactive waste repository authority) concerning the final deposition of spent nuclear fuel. He acts as co-supervisor of the project funded by Innogy dealing with gas storage. He submits two OP VVV projects recently. The first one, in collaboration with Austrian Geological Survey and Austrian Geophysical Survey, is looking into geothermal energy. The second project, together with DIAMO state enterprise and SURAO, concerns usage of abandoned uranium mine for research of U-behaviour in the nuclear waste repository. These current scientific activities clearly demonstrate that Dr Leichmann is an internationally recognised researcher, which is sought-after by colleagues to participate on research projects.

Apart from the scientific and teaching abilities, Dr Leichmann possess the organizational abilities, which could be documented by his functions as head of faculty senate, head of the Department of Geology, dean of Faculty of Sciences. Now he is a vice-dean of the faculty.

**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 field of scholarship or research.

**Secret vote results**

Number of board members		5.
Number of votes cast		5.
of which	in favour	5.
	against	0.
	invalid	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 geological sciences

terminate the procedure.

In Brno on 19.4. 2018

Prof. Shah Wali Faryad, CSc.

Prof. Dr. Friedrich Koller

Dr. Igor Broska, DrSc.

Prof. Milan Novák, CSc.

Prof. Jiří Kalvoda, CSc.