

REPORT

on the competition for occupying the academic position Associate Professor in the professional field 4.2. Chemical Sciences (Structural Analysis and Physicochemical Characterization of Small Organic Molecules) for the needs of the Institute of Mineralogy and Crystallography "Acad. Ivan Kostov - BAS. **announced** in the State Newspaper 95, from 14.11.2023, p. 104.

applicant assistant professor Rusi Ivanov Rusev

member of the academic jury prof. Rositsa Nikolova

The following report has been prepared on the basis of Order № 26PD09 of 10.01.2024 issued by the Director of the Institute of Mineralogy and Crystallography "Acad. Ivan Kostov" and the decision of the scientific jury from 25.01.2024. The report meets the requirements of the Academic Staff Development Act in the Republic of Bulgaria (ASDA), the Regulations for its Implementation (RAPASRB) and the Regulations of the Institute of Mineralogy and Crystallography "Acad. Ivan Kostov - Bulgarian Academy of Sciences.

Assistant Professor Rusev participate in the competition for occupying the academic position " associate professor " with 21 scientific articles in journals indexed in WoS and SCOPUS and published in the period 2015-2023. Eleven of the scientific papers were published before 2022, when the candidate in the current competition was elected to the academic position of "assistant professor". All publications are co-authored, with the candidate being first author on one and corresponding author on fourone. As of 6.03.2024, according to the information available in the WoS database, Assistant Professor Rusev is a co-author of 17 scientific publications, and according to SCOPUS she is a co-author of 23 scientific publications, cited 89 times (SCOPUS without citations of all co-authors) and has h-index of 4. In the period 2015-2023, the candidate has reported the scientific results of her research at 5 international scientific forums. For the last ten years, assistant professor Rusev has been a leader of one research project and a member of the scientific teams of five others, financially supported by National Science Fund of Bulgaria. The candidate is part of the team of competence center PERIMED, financed by the European Structural Funds, and within the framework of this project he carried out a six-month specialization in one of the leading laboratories for the synthesis of porous materials in Caen, France (Laboratoire Catalyse & Spectrochimie University of Caen Normandie).

Assistant professor Rusev meets the requirements for occupying the academic position "assistant professor ", published in ASDA (Chapter 3, Section III) and in the Regulations for its implementation namely: Dr. Rusev is registered in the Nacional Center for Information and Documentation – (NaCID) (<https://ras.nacid.bg/dissertation-preview/69320>), where his doctoral degree and academic rank "assistant professor" are recognized; according to the data published in NaCID Dr. Rusev gained the academic position "assistant professor" in 2022 (25.01.2022) and have occupied this position for more than two years - the period required by the normative documents; the publications and citations submitted for the competition do not repeat the ones presented for the PhD degree; there is no evidence of plagiarism in the scientific works, presented by Dr. Rusev for participation in the current competition; Dr. Rusev has submitted for participation in the competition detailed information about his scientific activities. Under indicator 4 of group B, 4 publications are included, giving **100 points for group B**. For group D, indicator 7, 17 articles give **273 points for group D**. The presented 66 citations give **132 points for group E**. The total number of points calculated from the presented documents is **555**, which exceeds the number of 430 points which are required by the Regulations on the Conditions and Procedure for the Acquisition of Scientific Degrees and for the Occupation of Academic Positions in the BAS.

In the author's reference Dr. Rusev describes his scientific contributions in carrying out physicochemical characterization of organic and inorganic crystal phases through the use of X-ray powder phase, single crystal X-ray structural, thermal and spectroscopic analyses. The brief description presented by the applicant does not reveal his scientific experience in obtaining new or modified crystalline materials with predefined properties. As a part of the team of the scientific department "Structural crystallography and material science", Assoc. Rusev develops research topics related to the design and synthesis of small bioactive molecules and molecules with predefined structures suitable for use in the preparation of porous metal-organic materials. I have known the candidate and his scientific work since he joined our institute. Dr Rusev plans and carries out synthetic and analytical research with great precision. He develops his own topics, participates in the scientific teams of projects funded by the National Research Fund and is a leader of one project. He has solved crystal structures and deposited crystallographic data for more than 50 new organic and inorganic compounds in the international Cambridge structural database (CSD). Assistant Professor Rusev has experience in the use of a wide range of analytical methods, and is familiar with the details of the theoretical basis of the methods as well as the technical characteristics of the analytical instrumentation. This makes him one of the sought-after specialists for training young colleagues in the use of scientific instruments and the interpretation of the results.

In conclusion, I can confirm that the materials presented by Dr Rusi Rusev show that he meets the requirements of the normative documents for acceptance the academic position of "Associate Professor". Dr. Rusev is a specialist in the field of crystallography, has skills in formulating and experience in solving scientific problems. He trains young specialists and is responsible for the maintenance of some of the analytical equipment in IMC-BAS. His work is an important part of the scientific research of the "Structural Crystallography and Materials Science" Department at IMC-BAS. Dr Rusev's participation in scientific teams working on projects of national and European importance and his responsibility for the training of young scientists suggest that in the future he will contribute to the development of scientific topics related to the synthesis of biologically active molecules and the study of their crystal structures and physicochemical properties. That is why I suggest to the respected members of the scientific jury to vote FOR the election of Assistant Professor Rusev for the academic position "Associate Professor" in professional field 4.2. Chemical Sciences (Structural Analysis and Physicochemical Characterization of Small Organic Molecules)

On the basis of the said-above, I would like to recommend to the Scientific Council of IMC to support the election of Assistant Prof. Rusi Rusev PhD at the academic position of a "Associate Professor".

24.07.2023

Member of the academic Jury: Prof. Rositsa Nikolova