

REVIEW

by

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Regarding

the application for the academic position of Associate Professor, announced in the State Gazette, issue 87/09.10.2020, Area of Higher Education 4. Natural Sciences, Mathematics and Informatics, Professional Field 4.2 Chemical Sciences (Analytical Chemistry with Instrumental Methods) for the needs of the Department of Chemistry, Konstantin Preslavsky University of Shumen.

By order № ПД 16-180 from 26.11.2020 signed by the Rector of Konstantin Preslavsky University of Shumen I'm appointed as a member of the scientific jury. At its first meeting on 14th December 2020 I was chosen to be chairman of the jury, and to write a review, which is in accordance with Art. 69 (§2 and § 3) stated in The Regulation on the Terms and Procedure for Acquisition of Academic Degrees and the Occupation of Academic Jobs at Shumen University.

Brief Biographical Data

Sen. Lect. Ismail Ismailov, PhD is the sole applicant for the academic position of Associate Professor. The procedure is announced in the State Gazette, issue 87/09.10.2020, Area of Higher Education 4. Natural Sciences, Mathematics and Informatics, Professional Field 4.2 Chemical Sciences (Analytical Chemistry with Instrumental Methods). The submitted reference is in compliance with Art. 57a, § 2 stated in The Regulation on the Terms and Procedure for Acquisition of Academic Degrees. I have received electronically all materials for the competition.

Ismail Ismailov, PhD was awarded a Master Degree in Biology and Chemistry in 2001 by the Faculty of Natural Sciences at *Konstantin Preslavsky* University of Shumen. Between 2005 – 2008 г. the applicant was enrolled as a Master student in Management of Protected Territories and Resources major. Within these two master's programs he gained a deep

knowledge in the fields of inorganic-, organic-, analytical-, bio-, and physical- chemistry. He also gradually enhanced his interest in modern instrumental methods of analysis.

Since 2011 he is part of the academic staff of the Department of Organic Chemistry and Technologies at the Faculty of Natural Sciences, *Konstantin Preslavsky* University of Shumen. In 2015 he was awarded with a Doctoral Degree in Organic Chemistry. His PhD dissertation was on *Synthesis and Reactions of Electrophilic Cyclization and Cycloisomerization of Phosphorylated Alpha- and Beta- Hydroxyalenes*. Since 2015 Dr. Ismail Ismailov is a Sen. Lect. at the Department of Chemistry at the Faculty of Natural Sciences.

Teaching Activities

The submitted reference shows that his activities significantly exceed the teaching workload at Shumen University of **360 hours** per academic year. Last year (2019-2020) his teaching workload was of **540 hours**. Sen. Lect. Ismail Ismailov, PhD delivers lectures to Bachelor Degree Students in: Analytical Chemistry with Instrumental Methods, Instrumental Methods for Analyses, Analysis of Medicinal Substances, Instrumental Methods in Chemistry, Molecular Spectroscopy and etc. He also lead several courses for Master Degree Students in all three Master Degree programs leading by Dept. of Chemistry, i.e. Organic Chemistry, Ecological Chemistry and Medical Chemistry. The total teaching experience of Chief Assistant Dr. Ismail Ismailov exceeds 10 years.

Scientific Activities

Sine 2011 Sen. Lect. Ismail Ismailov, PhD published **46** articles in international journals with IF, **23** of them are articles published in international journals with IF, **32** of them are published in national and international scientific annuals. Sen. Lect. Ismail Ismailov has participated in 41 international conferences or forums with international participation in Bulgaria with posters and reports, 21 of them in the last 5 years.

The scientific interests of Sen. Lect. Ismail Ismailov are in the field of: Instrumental analysis; Application of ICS for qualitative and quantitative analysis; Organic chemistry; Organic synthesis; Chemistry of organometallic compounds; Synthesis of new heteroatom-(phosphorus, sulfur, selenium, silicon, etc.) substituted unsaturated compounds (alenes, 1,3-dienes, vinylalenes, propargyls, allyls, etc.) and their application for the synthesis of carbonyl and heterocyclic compounds; Synthesis and electrophilic cyclization reactions of phosphorylated allenes; Synthesis and electrophilic cyclization reactions of phosphorylated 2-

chloro-1,3-alkadienes; Synthesis and electrophilic cyclization reactions of bifunctionalized allenes; Cycloisomerization reactions of functionalized allenes; Nucleophilic cyclization reactions initiated by metal ions or complexes; Synthesis and electrophilic cyclization reactions of functionalized vinylalenes; Diels-Alder reaction to functionalized vinylalenes; Reactions of heterotropic addition of sulfur dioxide to functionalized vinylalenes; Toxicology.

Participation in Scientific Projects

Sen. Lect. Ismail Ismailov has contributed to the development and implementation of many research projects of Shumen University. He is a member of 11 projects funded by the Scientific Research Fund at *Konstantin Preslavsky* University of Shumen. Sen. Lect. Ismailov, PhD has participated as a researcher in two national projects. He participated under the Project intended to provide access of students, doctoral students and young Scientists to the National Center for MRI Spectroscopy named "Development of the National Laboratory of NMR Spectroscopy in an Effective Research Infrastructure for NMR Analysis of Bio- and Nanomaterials ". The second project was Enhancement and Sustainable Development of Doctoral Students, Postdoctoral Students and Young Scientists in the Field of Natural, Technical and Mathematical Sciences". Shumen University.2012. Since 2020 Sen. Lect. Ismailov is a member of scientific team of project CoE "Universities for Science, Informatics and Technologies in e-Society (UNITE) BG05M2OP001-1.001-0004" supported by the European Regional Development Fund within the Operational Programme "Science and Education for Smart Growth 2014-2020"

Meeting the Minimum National Requirement

The set of electronic materials submitted is in compliance with The Regulation on the Terms and Procedure for Acquisition of Academic Degrees and the Habilitation Procedure at Shumen University and includes all administrative and scientific documents required.

Group A Indicators presents the applicant's PhD dissertation on Synthesis and Reactions of Electrophilic Cyclization and Cycloisomerization of Phosphorylated Alpha- and Beta-Hydroxyalenes (**50 points**)

In Group B a monograph is presented: I. Ismailov, Functionalized allenes – Reactions of Cyclization. Regioselective Synthesis and Research on the Cycloisomerization Reaction of Phosphorylated 1-hydroxyalkylalenes. ISBN 978-619-201-416-2, Konstantin Preslavsky University Publishing House, 2020, p. 196 (**100 points**)

In Group Γ Sen. Lect. Ismail Ismailov, PhD submits for the completion a total list of 13 publications (Web of Science и Scopus).

According to the regulations procedures in professional field 4.2 Chemical sciences involve quartiles Q1, Q2, Q3 and Q4 according to the metrics SJR, In this regard, Ismail Ismailov submitted 13 publications in scientific journals divided as follows: 1 publication Q1; 3 publications Q2; 4 publications Q3; 4 publications Q4 и 1 publication with SJR – total **203** т.

Group Δ consists of 25 citations presented (Web of Science и Scopus)*- **50 points**.

The minimum number of points in each group of indicators required for the academic position of "Associate Professor" in the professional field 4.2 Chemical Sciences, according to the Regulations for the development of the academic staff of Konstantin Preslavsky University of Shumen are met.

Group Indicators	Minimal National Requirements	Minimal Requirements according to the Regulations of Konstantin Preslavsky University of Shumen	Total points achieved by Ismail Ismailov, PhD
A	50	50	50
Б	-	-	-
B	100	100	100
Γ	200	200	203
Δ	50	50	50
E	-	-	-
Total Number of Points	400	400	403

CONSLUSION

Once I have read the materials and scientific publications submitted and have made an analysis of their significance and the scientific contributions contained in them, I think that the sole candidate: Sen. Lect. Ismail Ismailov, Ph.D. has accomplished all the minimal national requirements set in the Development of Academic Staff in the Republic of Bulgaria Act, The Regulation on the Terms and Procedure for Acquisition of Academic Degrees and the Occupation of Academic Jobs at Shumen University and all other relative normative documents. I find it worthwhile **to give my positive assessment** and to recommend to the Scientific Jury to make a report to the Faculty Council of the Faculty of Natural Sciences to ask them to grant the academic rank **Associate Professor to Sen. Lect. Ismail Ismailov, Ph.D.** at Konstantin Preslavsky University of Shumen in the Area of Higher Education 4.

Natural Sciences, Mathematics and Informatics, Professional Field 4.2 Chemical Sciences
(Analytical Chemistry with Instrumental Methods).

16.01.2021

Scientific Jury Member:



(Prof. Christomir Christov)