

OPINION

on the competition for acquiring the academic position "Professor"
in professional field 4. Natural sciences, mathematics and informatics,
professional area: 4.5. Mathematics (Mathematical analysis)
at Konstantin Preslavsky University of Shumen

By: Prof. Nikola Petkov Zyapkov, PhD

The competition was published in „State Gazette” issue 55/12.07.2019 after a decision of Academic Council of University of Shumen. The only candidate for this position is associated professor Sevdzhan Ahmedov Hakkaev, DSc.

He has masters degree in Mathematics from the Faculty of Mathematics and Informatics (FMI), Konstantin Preslavsky University of Shumen issued in 1993 with a graduate degree in Mathematical analysis.

During the period 1998-2002 he was a doctoral student of Konstantin Preslavsky University of Shumen. In 2004 after defending a thesis „Orbital stability and instability of some classical nonlinear partial differential equations” he acquired the educational and scientific degree PhD in professional field 4. Natural sciences, mathematics and informatics, professional area: 4.5. Mathematics (Mathematical analysis). In 2010 he successfully has defended a thesis entitled „Nonlinear equations solitons and running-waves” acquiring the scientific degree of Doctor of Science (DSc) in professional field 4. Natural sciences, mathematics and informatics, professional area: 4.5. Mathematics (Mathematical analysis).

During the periods 1995-1998 and 2002-2007 he was an assistant professor at the „Mathematical analysis” department at FMI, Konstantin Preslavsky University of Shumen. Since 2007 he has been an associated professor at the same department.

For this competition assoc. prof. Hakkaev has presented 12 scientific papers and one textbook. The above publications do not repeat the ones submitted for the educational and scientific degree PhD and the scientific degree of Doctor of Science as well as the competition for acquiring the academic position of associated professor. All publications are in scientific journals with impact-factor (JCR) with a total impact-factor of 14,5. According to the list of publications (all publications are co-authored) assoc. prof. Hakkaev is the principal author of 8 publications, second author of 3 and third author of one publication. This information presents assoc. prof. Hakkaev as the lead author in these publications.

According to the attached list for meeting the minimal national requirements in accordance to art. 2b, para. 2 and 3 of LDASRB (A law for the development of the academic staff in the Republic of Bulgaria), assoc. prof. Hakkaev has a total of 1514 pts., thus fully fulfilling the requirements for acquiring the academic position of professor.

Assoc. prof. Hakkaev's scientific research is in the following areas of mathematical analysis: stability of solitary and periodic waves, nonlinear equations, and inverse spectral problem. The results of the research are published in the above mentioned 12 scientific papers.

There are 82 citations of assoc. prof. Hakkaev's publications which are presented for this competition. Most of these citations are in impact-factor or impact rank journals.

Assoc. prof. Hakkaev was the scientific adviser of one graduate student of FMI and currently is a thesis advisor of two doctoral students also of FMI, Konstantin Preslavsky University of Shumen.

Assoc. prof. Hakkaev is publishing regularly brief synopsys for journal articles in the referative journal Mathematical Reviews (USA). He is a peer-review associate of the following journals: Journal of Differential Equation; Journal of Mathematical Analysis and Applications; Nonlinear Analysis, TMA; Physics Letters A.; Discrete and Continuous Dynamical Systems-Series A; Nonlinear Analysis, RWA; Applicable Analysis; Mathematical Modeling and Analysis; Abstract and Applied Analysis; Journal of Inequalities and Applications; Mathematical Biosciences; Computer Physics Communications.

Currently assoc. prof. Hakkaev is a member of the scientific team to Contract 1403/04 (Bulgarian Ministry of Education and Science). He was the principal investigator in Contract DVU_10_0338 (2010-2012) of Science research fund, Bulgarian ministry of education and science. He was a team member in the project FAPESP/Brazil Research Grant (2007-2008).

Assoc. prof. Hakkaev has presented the following conference talks:

1. "Decay and nonlinear scattering of solutions for a dispersive system" (with V. Milanov, R. Nickolov, Zh. Zhelev), Proceedings of the Second ACRMS Conference 2005, 16-22
2. S. Hakkaev, "Existence of solitary waves for fifth-order generalized Camassa-Holm equation via Concentration Compactness", Jubilee International Conference 60 years Institute of Mathematics and Informatics Bulgarian Academy of Sciences, 2007
3. S. Hakkaev, "On the ill-posedness for nonlinear dispersive equations", Nonlinear Dispersive Equations, Bosphorus University, Turkey, August 25-28, 2008
4. S. Hakkaev, "On the stability of periodic traveling waves for the BBM system", 38 International Conference Appl. Math. Eng. Econ., June 8-13, 2012, Sozopol, Bulgaria

The textbook which was included in the candidate's documents, named „Lectures on ordinary differential equations“ (with a co-author Ognian Hristov) is very well written and is understandable for students.

Assoc. prof. Hakkaev has lectured and is still lecturing the courses "Mathematical analysis" parts I, II, III, and IV; "Complex analysis", "Ordinary differential equations", "Functional analysis", and "General topology" for FMI students. He was a guest lecturer in the following universities: University of Kansas and University of Yeditepe.

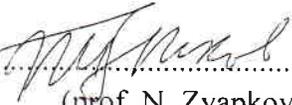
As is evident from the notes above, assoc. prof. Sevdzhan Hakkaev is active in research and teaching.

All documents and materials presented by assoc. prof. Hakkaev meet the requirements of the Law for the development of the academic staff in the Republic of Bulgaria (LDASRB), the rules about the application of LDASRB as well as the rules for development of academic staff at the Konstantin Preslavsky University of Shumen.

All mentioned above forms the basis for me to recommend to the distinguished scientific jury for this competition to vote **POSSITIVE** and to propose to the Faculty Council of FMI to award **assoc. prof. Sevdzhan Hakkaev, DSc** the academic position of **Professor** in professional field 4. Natural sciences, mathematics and informatics, professional area: 4.5. Mathematics (Mathematical analysis) in the Faculty of mathematics and informatics of Konstantin Preslavsky University of Shumen.

Shumen

8.10.2019₂

Signature: .....

(prof. N. Zyapkov, PhD)