



OPINION

in a competition for the academic position of ' Associate Professor" at the Institute of Robotics – BAS (Sofia), Professional field 5.2 Electrical engineering, electronics and automation, Specialty: "Elements and Devices of Automation and Computing Technology," on the topic "Magnetic Field Sensors", for the needs of the "SMTRM" Section, announced in the State Gazette (SG) No. 51 of June 5, 2026.

Member of the Scientific Jury: Assoc. Prof. Nedæ Venelinova Chehlarova, PhD, Institute of Robotics – BAS

According to order № 94/29.07.2026 of the Director of the Institute of Robotics - BAS and decision of the Scientific Council of the IR-BAS – Protocol No. 7/28.07.2026, p.1.1. I have been appointed as an internal member of the Scientific Jury for the procedure to fill the academic position of "Associate Professor."

1. General description of the submitted materials and professional profile of the candidate

Only one candidate submitted documents for the announced competition - Chief Ass. Svetoslav Atanassov Noykov, Eng. PhD. In accordance with the minutes of the scientific jury's first meeting, I was designated to prepare an opinion. I have received all the necessary competition documents, which have been meticulously prepared.

Svetoslav Noykov, Eng. PhD., completed his higher education in 1992 at the Tula Polytechnic Institute, qualifying as an Electromechanical Engineer (Master's degree) specializing in Automatic Control Systems. In 2004, he obtained his PhD degree from the Institute of Management and Systems Studies – Bulgarian Academy of Sciences (IMSS-BAS), specializing in "Elements and Devices of Automation and Computing Technology" with a dissertation titled "Hardware and Software Tools for Processing Sensor Information During Environmental Exploration Using a Class of Mobile Robots". Noykov's, Eng. PhD., professional career is closely linked to the academic institutes of the Bulgarian Academy of Sciences (IMSS, ISER and IR-BAS). For many years, he has combined research activities with engineering work in the service and maintenance of medical electronic equipment and devices for radiation and dosimetry monitoring.

2. Fulfillment of the minimum national and institutional requirements

The report on the fulfillment of the minimum national requirements for Area 5. Technical Sciences and the additional criteria of the Institute of Robotics - BAS, proves that the candidate Svetoslav Noykov, Eng. PhD., fulfills (exceeds) all the requirements in Article 24(1) of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its Application and the specific requirements of the IR-BAS:

Report on fulfillment with the national minimum requirements for acquiring the academic position of Associate Professor in the field of 5.2 Electrical Engineering, Electronics, and Automation by Dr. Eng. Svetoslav Atanasov Noykov			
Group of indicators	Indicator	Required number of points	Candidate's points
A	A1. Dissertation for the award of the educational and scientific degree of Doctor	50	50
B	B4. Habilitation thesis – scientific publications (at least 10) in journals refereed and indexed in internationally renowned scientific databases	100	169
Г	Г7. Scientific publication in editions that are peer-reviewed and indexed in internationally renowned scientific databases. Г8. Scientific publication in non-indexed peer-reviewed journals or in edited collective volumes	200	259,7
Д	Д12. Citations or reviews in scientific publications refereed and indexed in internationally renowned scientific databases, or in monographs and edited volumes	50	220
E	E26. Accepted application for a utility model, patent, or author's certificate	--	320
Total		400	1018,7

In accordance with indicator B4 of the Act on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations of the IR-BAS, Svetoslav Noykov, Eng. PhD., is participating in the competition with 10 scientific publications — equivalent to a monograph (habilitation thesis) — which yield a total of 169 points. All of them have been published in journals indexed in Web of Science or Scopus. Notably, half of these publications fall within the top quartiles, with four of the works appearing in the Q1 quartile.

Under the group of indicators "Г" Noykov, Eng. PhD., has submitted a total of 27 scientific works — distinct from those in group B4 — with a combined value of 259.7 points, exceeding the required 200 points. He is the first co-author on eight of these publications, which attests to his personal contribution. Some of the publications in this group have appeared in

prestigious specialized journals such as “Sensors and Actuators A: Physical” (Q1 quartile) and “Comptes rendus de l'Académie bulgare des Sciences”.

Evidence of the significant international impact and importance of the candidate's work is provided by the 22 citations in the global databases Web of Science and Scopus, yielding 220 points — well above the 50 points required for indicator group "Д".

Although there are no requirements regarding the indicators in Group "E", the candidate has submitted 8 granted patents for inventions, the total of which is 320 points.

He has also participated in the preparation, coordination, and implementation of 29 research and applied projects and tasks at IMSS, ISER, and IR of the Bulgarian Academy of Sciences, of which he was the head/ coordinator for four.

According to the reference submitted by the candidate, all works submitted in this competition differ from the publications in his competition for the acquisition of the scientific degree "doctor". I have not noticed any plagiarism in the submitted works.

3. Research activity and assessment of the candidate's contributions

I accept the formulated contributions in the scientific production of Svetoslav Noykov, Eng. PhD., which are in the field of magnetic field sensors and automation elements, focused on the creation of innovative 2D and 3D magnetometers based on the Hall effect. Through original circuit designs for interface electronics and dynamic compensation, high measurement accuracy, spatial resolution, and reliability have been achieved to meet the needs of modern automated systems. Additionally, application-specific devices and algorithms for processing sensor data have been implemented for use in the control of autonomous systems and mobile robotics. Collectively, these developments enrich the scientific and applied-science foundation of magnetic sensing, offering solutions with potential applications in robotics, mechatronics, instrumentation, and other sensor-based information systems. The contribution of Svetoslav Noykov, Eng. PhD., to engineering sciences and industry is also confirmed by 8 patents for inventions. These works demonstrate the high practical applicability of the candidate's scientific results and his standing as an inventor, recognized with several Certificates of Inventive Achievement from the Institute of System Engineering and Robotics (ISER-BAS), (2015, 2016, 2017). The combination of these theoretical innovations with their practical integration into robotics and industrial micro-transducers confirms the candidate's role as a scientist and inventor in the field of modern sensor technology.

4. Scientific-organizational, expert, and educational activities

The candidate holds a Diploma of Pedagogical Qualification and has proven experience in training young scientific personnel. In the period 2010 - 2012 he was the scientific supervisor of a successfully defended doctoral student. He participated in examination committees for admission and conducting doctoral exams, as well as in extended scientific units for pre-defense and dismissal of doctoral students. Svetoslav Noykov, Eng. Ph.D., has served as a member of the Scientific Council of IMSS-BAS (2010), a member of the "ICT" Problem Council under the BAS Governing Board (2009-2010), a member of a BAS Attestation Commission, and the chair of expert committees evaluating scientific projects for the Ministry of Education, Youth and Science.

5. Critical notes, recommendations and questions

I have no shared publications, financial or other relationships with the candidate in this competition. I recommend the candidate to continue active work on creating new inventions and sensor devices and I encourage his participation in attracting and guiding new doctoral students and young scientists to the Institute of robotics - BAS.

6. Conclusion

Based on the submitted scientific publications, patents, and citations, the candidate, Chief Assistant Svetoslav Atanassov Noykov, Eng. Ph.D., fully satisfies the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for holding academic positions at the IR- BAS. Based on the above, I give **my categorical POSITIVE EVALUATION and confidently recommend to the esteemed Scientific Jury to vote to award the academic position of "Associate Professor" to Svetoslav Atanassov Noykov, Eng. Ph.D.,** in professional field 5.2. Electrical Engineering, Electronics, and Automation, scientific specialty "Elements and Devices of Automation and Computing Technology," for the needs of the Institute of robotics – BAS.

Date: 02.10.2026

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/ Assoc. Prof. Neda Chehlarova /