

OPINION

on the basis of Order №RD – 16-090/15.09.2020 of the Rector of the University of Shumen

by member of the scientific jury Associate Professor Dr. Eng. Penka Yordanova Kastreva,

Subject: The materials submitted for participation in a competition for the academic position "Associate Professor" in the specialty general, higher and applied geodesy, professional direction 5.7. Architecture, civil engineering and geodesy, Higher Education District 5. Technical sciences

In the competition for associate professor, announced in the State Gazette, issue 63 of 17 July 2020 and on the website of the University of Shumen (<https://www.shu.bg/razvitiie-as/konkursi/konkursi-obnarodvani-v-dv-br-63-17-07-2020-g/>) for the needs of the Department of Geodesy at the Faculty of Technical Sciences, as the only candidate is **Chief assist. Dr. Eng. Kiril Filipov Yanchev**.

The competition was opened after decision No PD-02-12 of 22.06.2020 (point 8.1) of the Faculty Council of the Faculty of Technical Sciences and presented a reference by the Head of the Department of Geodesy Associate professor Dr. Eng. Plamen Mihaylov for a workload of 510 hours in exercises in nine disciplines, led so far by chief assist. Dr. Eng. Kiril Filipov Yanchev.

1. Brief biographical data of the candidate

Chief assist. Dr. Eng. Kiril Filipov Yanchev graduated in 2013 from the University of Shumen, Specialty: Geodesy.

In 2017 he defended his dissertation on the topic: "Study of the influence of geodynamic processes on geodetic measurements and networks" as a result of which the scientific and educational degree "Doctor" in the scientific specialty "General, higher and applied geodesy" was awarded. From 2019 to now he holds the academic position of "Chief Assistant" in the Department of "Geodesy".

Since 1993 he has worked in a family geodetic company, where he acquired knowledge and skills in the field of geodesy, cadastre and investment design, and later in administration and management of the company.

2. General description of the materials presented

The candidate Chief Assist. Dr. Eng. Kiril Filipov Yanchev participates in the competition with:

- **Monograph - 1 piece** entitled "Geodetic activities for monitoring and studying modern movements of the Earth's crust"; ISBN 978-619-201-414-8, University Publishing House "Bishop Konstantin Preslavski" Shumen, 2020. (pursuant to article 53(3));
- **Publications** – a total of 11 pieces (from 2014, 2019 and 2020). Of these are:
 - published articles in magazines **5 ps.** (2 are published in " Geodesy, Cartography, Land Management", and for 3 a document for acceptance for printing is presented);
 - published conference reports - **1 pc.** and
 - Yearbooks of the Faculty of Technical Sciences Shumen University – **5 ps.**
- **Reference to the minimum national requirements** – **1 pc.** (document №8)

- **Reference to the original scientific contributions – 1 pc.** (document № 9)

3. Evaluation of the applicant, according to the terms and conditions for taking up the academic position "Associate Professor" of the Regulations implementing the Law on The Development of Academic staff in the Republic of Bulgaria

3.1. General characteristics and educational and pedagogical activity of the applicant

Chief Assist. Dr. Eng. Kiril Filipov Yanchev has acquired an educational and scientific degree "Doctor" in the same specialty "General, Higher and Applied Geodesy" in July 2017.

According to biographical data, the applicant started his teaching activity as a head assistant in February 2017, and from October 2019 as chief assistant.

In his teaching activity Chief Assist. Dr. Eng. K. Yanchev was scientific head of graduates and reviewed student thesis.

Since January 1, 1993 he has worked and continues to work as a specialist in geodetic practice and has proven achievements with the implementation of a number of geodetic projects in the field of cadastre, geodesy and investment design.

3.2. Scientific and scientific application

3.2.1 Monographic work

The presented monograph was printed and published by the University Publishing House "Bishop Konstantin Preslavski" and can be found in the National Library as such in the COBISS system. It was reviewed by two reviewers and a scientific editor.

The topic addressed in the monograph is relevant in terms of the ever-intensifying natural disasters associated with the movements of the Earth's crust. The monograph looks at geodynamic processes classified at global, regional and local level, modern geodetic methods for their observation, including GNSS and remote methods. The geodetic networks built for the needs of nuclear power plants and mathematical modeling and interpretation of the results of these observations are also considered.

3.2.2 Publications

The candidate presents eight publications published in Bulgarian journals, scientific collections and yearbooks of the University. All articles and reports are related to the specialty in which an associate professorate procedure was opened. The topics concern the measurement, processing and analysis of geodynamic networks.

For the last three of the list of publications, official notes have been submitted for their acceptance for printing.

3.2.3. Compliance with minimum national requirements for the scientific field "Technical Sciences"

A report submitted reflects the applicant's achievements in the following indicators::

- Group A – Protected dissertation work – 50 points;
- Group B – Monographic work – 100 points;
- Group G - Scientific publication in unreferenced journals with scientific review or in edited collective volumes – 200 points;
- Group D - Citations in monographs and collective volumes with scientific review – 51 points.

A total of **17 citations** from Bulgarian authors of two publications by Chief Assist. Dr. Eng. K. Yanchev are known. All citations are from scientific publications from yearbooks of the Faculty of Technical Sciences, Shumen University.

The citations are described by the applicant in the Citation Report (document №6).

Total points – 401 points.

3.2. 4. Contributions (document № 9)

The applicant's overall research activity referred to in the document presented №9 cites the contributions achieved mainly in the field of geodynamic processes and geodetic measurements related to their research.

The scientific contributions that stand out in the publications submitted for the competition have a theoretic and methodological nature. Theoretical and methodical contributions mainly concern: (1) analysis and summaries (related to geodetic networks used to monitor geodynamic processes.), 2) proving by new means already existing scientific fields problems, theories and technologies related to geodetic science (use of GNSS technology).

The scientific and applied activity of Chief Assist. Dr. Eng. Kiril Filipov Yanchev is mainly related to the practice of the specialty, conducted above all in the company in which he works.

3.2.5 Additional indicators applicable to the area concerned (document № 7.1)

- **related to learning activities** – according to the document, the applicant leads lecture courses for the specialty of Geodesy, regular training in: Vertical Planning Part I and II, Regulations and Exercises on: Device of urbanized territories, Vertical planning, Geoid modeling, Training practice in geodesy Part I, Geodesy II part, Geodesy IV part and working with students in the development of course projects;
- **research-related activities:** Member of the Chamber of Engineers in Investment Design (Certificate of Full Design Capacity, Part Geodesy Reg. number 14028)
- **participation in scientific projects**

During the short period of work as a lecturer in a scientific unit, the candidate participated as a member of the team in an internal research project on the topic: "Research of the application of remote methods and technologies in the mapping of spatial objects".

4. Critical Notes

The candidate to step up the work of publishing scientific works in publications that are referenced and indexed in world-renowned databases of scientific information. To strengthen its participation in serious scientific for a at national and international level.

5. Personal impressions

Chief Assist. Dr. Eng. Kiril Yanchev stands out as an aspiring colleague in the field of science and educator, whose name is known among the scientific circles at the university where he works.

At the national level, it is more familiar with the activities that were carried out on the creation of cadastral maps and registers throughout the country. With this activity, he gained high professional and administrative competence.

I believe that the professional and scientific achievements of Chief Assistant Professor Kiril Filipov Yanchev are at a sufficient level to take up the scientific position "Associate Professor" in the Department of Geodesy of the Shumen University.

6. Conclusion:

In accordance with the terms and conditions for the appointment of the academic position "Associate Professor" referred to in Articles 53(1) to 4 and of the Rules of Application of the Law on the Development of Academic Staff in the Republic of Bulgaria and in accordance with the results of the references referred to in Article 54(1). **I have identified the following:**

1. required materials are available;
2. the monograph has been peer-reviewed and published;
3. minimum national requirements for associate professor were achieved by a total of 401 points;

4. In accordance with the requirements of Article 53(5), plagiarism has been checked with Advego Plagiatus software 1.3.1.7* in scientific papers and has not been established.

In view of the above, I propose that Chief Assistant Doctor Engineer Kiril Filipov Yanchev be selected as an "associate professor" of General, higher and applied geodesy, in professional field 5.7 Architecture, civil engineering and geodesy, District of higher education 5. Technical sciences.

15.10.2020

Member of the jury:

