REVIEW

On the materials for participation in a competition for the academic position "professor", in the field of higher education 5. "Technical sciences", professional direction (PD) 5.7. "Architecture, civil engineering and geodesy", scientific specialty "Photogrammetry and remote sensing", in academic discipline "Photogrammetry and remote sensing" announced by University of Forestry in SG no. No. 102/08.12.2023 with a two-month period, procedure code FOR-P-1123-111.

<u>**Candidates for participation in the competition are:**</u>

1. Assoc. professor Eng. Maria Tsankova Asenova, PhD;

The review is prepared by: Doctor of Sciences (DS) Andrey Ivanov Andreev, Professor of PD 5.7. "Architecture, civil engineering and geodesy" from "Vasil Levsky" National Military University.

1. Brief biographical data about the candidate

Assoc. Prof. Eng. Maria Asenova, PhD was born on 02.07. 1962 in Pernik. In 1987, she completed higher education at the University of Architecture, civil engineering and geodesy – Sofia, majoring in Geodesy, Photogrammetry and Cartography. In 2014, she obtained Ph.D. in specialty "Photogrammetry and remote sensing". In 2017, after a competition, she acquired the academic position of "Associate Professor" in the scientific specialty "Photogrammetry and remote sensing" at University of Forestry (UF). Her career began in 1987 as a research engineer. In 1989, she was appointed as an assistant at UF and over time passed through various academic positions. Since 2022, she has held the position of "Head of Department" at the department "Forestry and management" in the Faculty of Forestry at UF.

2. Compliance of the candidate's submitted documents and materials with those required according to the Regulations for RASD at UF.

The presented Certificate of compliance of the scientific production with the minimum national requirements according to Art. 26 of the DASRBA and Art. 2a, paragraph 1 of the RAS in UF for Assoc. prof. Eng. Maria Asenova, PhD for the

participation in the competition for the academic position "professor" in scientific field 5. Technical sciences, PD 5.7. Architecture, civil engineering and geodesy shows that all indicators are met and even exceed the required minimum (Indicators - D (626.99), E (169), F (158.33) (bg. Г (626.99), Д (169), Е (158.33))

3. Evaluation of the candidate's educational and teaching experience

Assoc. Prof. M. Asenova, PhD has conducted lectures, exercises and educational practices in 3 faculties in 4 specialties in the disciplines - "Photogrammetry and remote sensing ", "Geographic information systems (GIS)", "GIS and remote sensing", "Geodesy", "Geodesy and Vertical Planning".

Thanks to her rich pedagogical experience, Assoc. prof. Eng. M. Asenova, PhD has contributed to the training of highly qualified staff at UF. For this activity, she received many awards from UF.

4. Evaluation of the candidate's scientific, applied scientific and publication activities

4.1. Participation in scientific, scientific-applied and educational projects

International projects – 1 (E19.1. 2023-2024 FirEUrusk "FIREURISK - DEVELOPING A HOLISTIC, RISK-WISE STRATEGY FOR EUROPEAN WILDFIRE MANAGEMENT – member of the team.

National project - 1 pc. (E18.1. 2017 BG05M2OP001-2.009-0034 "Support for the development of scientific capacity at UF". Contract: BG05M2OP001-2.009-0034. Funded by the Operational Program "Science and Education for Smart Growth" 2014 - 2020, co-financed by the European Union through the European Structural and Investment Funds) - Member of the team.

National project financed by SRF - 1 pc. (E18.6. 2021-2024 Project financed by the National Institute of Scientific Research. Contract: No. KP-06-H56/7 of 2021 and Contract under SRF-F-1180/2021.) - Member of the team.

Internal university projects – 7 pcs. (E18.2 – E18.8 - team member.) (E20.1 – supervisor)

4.2. Characteristics of published scientific results

TOTAL NUMBER – 39 (after AP "Assoc. Prof.")

- Articles in foreign magazines - ;

- Reports in proceedings of international scientific forums – 19;

- Articles in national magazines – 14;

Language in which they are published:

- In Bulgarian – 25;

- In English – 14;

Number of co-authors:

- Independent – 16;

- With one co-author – 12;

- With two co-authors – 8;

- With three or more co-authors – 3.

Publications submitted for participation in the competition have been reviewed and printed in our established and refereed journals or in publications of international forums.

4.3. Reflection of the candidate's scientific activity in the literature (capability)

1. Citations or reviews in scientific publications referenced and indexed in world-renowned databases of scientific information or in monographs and collective volumes.

6 works by 10 authors are cited, of which 9 are foreigners;

2. Citations in monographs and peer-reviewed collective volumes.

6 works by 7 authors are cited.

3. Citations or reviews in non-refereed peer-reviewed journals.

20 works by 24 authors, of which 5 foreigners, were cited.

4.4. Contributions in the candidate's works (scientific, scientific-applied, applied)

The submitted publications and scientific works for participation in the competition are in a wide range of topics, united in four main areas:

Monographs: 1

• printed and on electronic media – 1 (B3.1);

Published books/chapters of monographs: 2

• printed and on electronic media – 2 (G6.1; G9.1);

Issued textbooks and study aids: 3

• printed and on electronic media – 2 (E23.1; E24.1) under print – 1 (E24.2)

Publications in refereed and indexed scientific journals, series and conference proceedings in Web of Science and SCOPUS: 15

• in Bulgarian refereed journals – 5 (D 7.6, D 7.7, D 7.10, D 7.13, D 7.15);

• proceedings of international scientific forums – 10 (D 7.1, D 7.2, D 7.3, D 7.4, D 7.5, D 7.8, D 7.9, D 7.11, D 7.12, D 7.14).

Publications in scientific journals, series and conference proceedings, referenced and indexed outside the Web of Science and SCOPUS databases: 18

• in Bulgarian peer-reviewed journals – 9 (D8.1, D8.2, D8.6, D8.8, D8.10, D8.14, D8.16, D8.17, D8.18);

• Proceedings of international scientific forums with peer review – 9 (D8.3, D8.4, D8.5, D8.7, D8.9, D8.11, D8.12, D8.13, D8.15).

Publications in scientific journals: 14

• Publications in journals with an impact factor -;

• In foreign referred -;

• In Bulgarian refereed – 5;

• In unreferenced – 9;

Publications in collections of scientific forums: 19

• National – ;

• International – 19;

Place of publication:

• *Photogrammetry and remote sensing (FPS) with applications to forestry* (D7.1, D7.2, D7.7, D7.8, D7.9, D7.10, D7.11, D7.12, D8.1, D8.8, D8.10, D8.12, D9.1);

• *Geographic information systems (GIS) for forests* (B3.1, G7.14, G7,15, G8.3, G8.5, G8.6, G8.7, G8.9, G8.12, G8.13, D8.15, D8.18);

• *GIS and their applications in other areas* (7.3, 7.4, 7.6, 7.13, 8.2, 8.13);

• *Training.*

Thus formulated a total of **19 nos.** contributions could be classified as **scientific-applied** and **applied**.

5. Evaluation of the candidate's personal contribution

I believe that the presented works and the indicated contributions are the personal work of the candidate, Assoc. Ph.D. Eng. M. Asenova.

6. Critical notes and recommendations

I have no substantive criticisms. I recommend the candidate to maintain her creative activity even after obtaining the academic position of "professor".

7. Personal impressions

I know the candidate, Assoc. Ph.D. Eng. M. Asenova, as a prominent scientist in the field of Photogrammetry and remote sensing and GIS. With his dedication and ability to work, she has earned the appreciation of her colleagues and trainees. She is highly appreciated at home and abroad.

8. Conclusion

Bearing in mind the above, I SUGGEST the candidate Assoc. Professor Eng. Maria Tsankova, PhD to obtain the academic position "professor", in discipline "Photogrammetry and remote sensing" in the field of higher education 5. "Technical sciences", PD 5.7. "Architecture, civil engineering and geodesy".

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The Review is prepared by:

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DS Prof. Eng. Andrey Andreev

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