

## REVIEW

for Chief Assist. Magdalena Asenova Veselinova, PhD  
in a competition for the academic position of "Associate Professor"  
by professional field 4.6 Informatics and Computer Science (Information Security)

**Reviewer: Acad. Ivan Petkov Popchev**

By order No. PД-24-388 Plovdiv, 16.02.2024 of the Rector of the Plovdiv University "Paisii Hilendarski" Prof. Rumen Mladenov, PhD in connection with the announced competition for the **academic position "Associate Professor"** in SG no. 96/17.11.2023 in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.6 Informatics and Computer Science (Information Security) and report No. PД-300/15.02.2024 by Prof. Angel Atanasov Golev, PhD - Dean of the Faculty of Mathematics and Informatics I have been appointed an internal member of the Plovdiv University by a Scientific Panel, approved by a decision of the Faculty of Mathematics and Informatics, Protocol No. 3/24.01.2024.

As a reviewer, I have received all included in the application 18 documents to the Rector for admission to participate in the competition.

According to ADASRB, Regulation of application of the ADASRB (RAADASRB) and Additional requirements for the academic position of "Associate Professor" of the Faculty of Mathematics and Informatics (FMI), candidates for associate professor must meet certain conditions and requirements.

**Art. 24 (1) The applicants to occupy the academic position of Associate Professor must meet the following conditions:**

1. to have been awarded the educational and scientific degree of Doctor...;
2. for minimum two years:
  - a) to have occupies the academic position of Assistant, Chief Assistant.
3. to have presented a published monograph or equivalent publications in specialized scientific issued or ..., which do not reproduce those presented for awarding the educational and scientific degree of Doctor and for awarding of the scientific degree of Doctor of Science.
4. to meet the minimum national refinements under Art.2b, Para. 2 and 3, respectively the requirements under Art. 2b, Para. 5.
5. to have no plagiarism proven as per the legally established order in the scientific works.

(2) The academic position of Associate Professor shall be occupied on the basis of a competition and election.

(3) A competition for occupying the academic position of Associate Professor shall be opened, if it is possible the relevant teaching and research load to be provided, according to the relevant rules of procedure of the higher school or scientific organization.

Art. 26 (1) The candidates shall submit a reference on the fulfillment of the minimum national requirements under Art. 2b, Paras. 2 and 3, the requirements under Art. 2b, Para. 5, respectively, and a reference of the original scientific contributions to which shall be attached the relevant evidence laid down in this Act, in the Regulations for its implementation, and the Regulations of the higher schools and of the scientific organizations.

Additional faculty requirements of FMI at the University of Plovdiv:

- at least 10 publications that must not have been submitted for acquiring the educational and scientific degree of "Doctor", the scientific degree "Doctor of Science", and for occupying the academic position "Chief Assistant Professor";

- at least 5 of the submitted publications must be in journals;

- at least 10 of the submitted publications must be in journals;

- at least 1 textbook or teaching aid;

- evidence of at least 5 citations.

Ch. Assis. Magdalena Veselinova, PhD **meets the requirements of Art.24 (1).1** as she is a 'Doctor'. She holds Diploma No. 1000245, issued February 24, 2017.

Ch. Assis. Magdalena Veselinova, PhD **meets the requirements of Art. 24 (1).2a** because with a certificate ex. No. PД-38-16/12.01.2024, signed by the Rector Prof. Rumen Mladenov, PHD certifies that Magdalena Veselinova works at the University on a basic employment contract with order No. P34-6/03.01.2017 and was awarded the Ch. Assis 6 years, 02 months and 28 days ago.

Ch. Assist. Magdalena Asenova Veselinova, PhD **meets the requirements of Art. 24 (1).3** as she has presented 3 publications in specialized scientific issues, which do not repeat the ones presented a published monograph.

In the documents for the competition there is a "List of all publications of the candidate - 25 pcs., and "List of scientific papers for participation in the competition" – 15 pcs.

The brief analysis of the **15 publications** submitted for participation in the competition shows the following:

- 1 publication is a **monograph** (No. 15);

- 1 publication is in a **journal with IF** (No. 5);

- 7 publications are in journals or conference proceedings with SJR (NNo. 3, 7, 8, 11, 12, 13 and 14);

- 1 publication is in a journal (No. 6);

- 4 publications are in conference proceedings (Nos. 1, 4, 7, 9, and 10);

- 1 publication is a teaching aid (No. 2);

**All publications are co-authored.**

The "**Citation List**" includes **34 citations of 7 publications**.

The reviewer considers that Ch. Assist. Magdalena Veselinova, PhD **fulfills the requirement of Art. 24 (1).4** as he meets the **minimum national requirements** under Art. 2

b, para. 2 and 3, the requirements under Art. 2b, para. 5 and the **additional requirements of FMI**. According to **Art. 24 (1).5** there is no plagiarism in the scientific works proved according to the legally established order.

In accordance with Art. 65 of PRASPU it is presented "**Abstract of scientific works for participation in contest for the academic position of "Associate Professor "**" in Bulgarian and English.

According to Art. 26 ADASRB "... the candidate submits information about the original scientific contributions ...". Such a reference is not presented, but "Academic reference for scientific contributions in the works for participation in the competitions in 4 directions is given.

**The contributions of Ch. Assist. Magdalena Veselinova, PhD** assuming equal participation in co-author publications briefly can be summarized as follows:

1. **Methods** for secure storage and recovery of data after incidents or failures (NNo. 2, 6, 10 and 15).
2. **Methods** for effectively data recovery after different types of attack (NNo. 4/2,7SJR, 8 SJR/1.9, 11SJR, 13 SJR and 15).
3. Various **sufficient conditions are guaranteeing** finite-time stability of solutions for delayed linear-fractional differential system with distributed delays and Caputo-type derivatives with rationally incommensurable orders of differentiations are established (No. 5IF, SJR).
4. The existence of a weak derivative and equivalently the existence of **a weak solution** of the same mixed problem for a suitably considered parabolic equation with integer-order derivative **is proved** (No. 3SJR/4).
5. An **integrated representation of the solutions** of the Cauchy problem for a linear fractional differential system with distributed delays and Caputo-type derivatives with rationally incommensurable orders of differentiations and locally integrable Lebegh initial functions is obtained (No. 14SJR).
6. **A system architecture** that aims to automate backup processes in container environments, improving the reliability and manageability of backup and restore operations (No. 12SJR).

There are presented "**Documents for educational work**" with **3** references: in bachelor's programs and 1 discipline in master's program and she has participated in 1 teaching aids and successfully defended

- curricular and extracurricular employment;
- activity with students and PHD students;
- published textbooks and teaching aids.

The references were prepared by Ch. Assis. M. Veselinova, PhD and are signed by Prof. Angel Golev, PhD. Briefly these references note that Ch. Assis. Magdalena Veselinova, PhD has led exercises in 4 disciplines and lectures in 4 disciplines, 6 graduates, reviewer of 2 diploma theses of students, participated in State commissions for exams and defence of diploma theses.

There are also presented "**Research Documents**" with 3 references:

- in scientific research activity - 25 scientific publications;
- in 4 research and educational project;

- with reports at 11 international scientific forums.

It is included an "Official Note" Ex. No. NPD 011/16.01.2024 for participation in 4 projects.

Generalized "**scientometric image**" of Ch. Assist. Prof. Magdalena Asenova Veselinova, PhD can be based on information from world scientific bases:

- Scopus: 19 documents, 38 citations, h-index – 6;
- Web of Science: 11 total publications, 85 citations; h-index – 5;
- Scholar.google: 167 citations, h-index 6, i10-6;
- Research Gate: RG Score: 238.5, citations 125, h-index-6.

The "**scientometric image**" shows successful and productive activity.

The generalized "**scientometric image**" deserves to be the subject of careful and critical **self-analysis** and is a sufficient basis for further **independent publication activity in IF journals**.

## CONCLUSION

All requirements, conditions and criteria according to ADASRB, RAADASRB and the Additional requirements of FMI are fulfilled and I give a categorically **positive conclusion** for the election of Ch. Assist. Magdalena Asenova Veselinova, PhD in a competition for the academic position of "Associate Professor" in the professional field 4.6 Informatics and Computer Science (Information Security).

**I propose that the Scientific Panel unanimously vote on a proposal to the Faculty of Mathematics and Informatics to elect Ch. Assist. Magdalena Asenova Veselinova, PhD for the academic position of "Associate Professor" in the professional field 4.6 Informatics and Computer Science (Information Security).**

15.03.2024 r.

Reviewer: .....

Acad. Ivan Petkov Popchev