OPINION

by Prof. D.Sc. Tsvetan Atanasov Semerdzhiev,

Part-time professor at the Faculty of Mathematics and Informatics (FMI)

at Sofia University, "St. Kliment Ohridski", Sofia, Bulgaria,

in reference to competition procedure for holding academic position "Associate Professor" in higher education field: 4. Natural Sciences, Mathematics and Informatics, professional field: 4.6 Informatics and Computer Science, announced by Sofia University "St. Kliment Ohridski" – Faculty of Mathematics and Informatics (FMI)

with one candidate: Chief Assistant Prof. Dr. Ioannis Patias, PhD

This scientific opinion is based on Order of the Rector of Sofia University "St. Kliment Ohridski" № VO 38-497 / 19.10.2020 for appointment of a scientific jury to conduct the competition procedure for holding academic position of associate professor in professional field 4.6. Informatics and Computer Science (Embedded Autonomous Systems), published in the State Gazette ("Darzhaven Vestnik"), № 74 from 21.08.2020.

The opinion is submitted to the FMI on both hardcopy (on paper) and digital copy, in accordance with the legislation, prior to the expiration of the three-month period specified in Art. 32 (1) of the Regulations for Implementation of the Act for the Development of the Academic Staff in the Republic of Bulgaria (RIADASRB).

All the legal requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for Implementation of the Act for the Development of the Academic Staff in the Republic of Bulgaria (RIADASRB) and the Regulations on the Terms and Conditions for Acquiring Scientific Degrees and Holding Academic Positions at Sofia University "St. Kliment Ohridski" were met, when writing the opinion.

As a member of the Scientific Jury, I have received the Order of the Rector № VO 38-497 / 19.10.2020 and the required set of documents of the participant in the competition.

1. GENERAL DESCRIPTION OF THE SUBMITTED MATERIALS

Chief Assist. Prof. Dr. Ioannis Patias, PhD has presented the required by ADASRB documents and materials. They prove that the candidate meets the requirements of Art. 53 (1) of RILDASRB, namely: (1) has acquired educational and scientific degree "doctor"; (2) has held the academic position of "chief assistant professor" at the same higher education institution for at least 2 years; (3) presented a published monographic work; (4) meets the respective minimum national requirements and the requirements under Art. 1a of RILDASRB; (5) there is no legally proven plagiarism in the presented scientific works.

The scientific papers presented for evaluation are as follows: 1 habilitation monograph; 2 co-authored monographs (which are not presented as a habilitation thesis); 6 publications, that are referenced and indexed in the world databases with scientific information; 2 chapters of books published in co-authorship.

All papers are issued after the candidate has received a Doctoral degree/ (an educational and scientific degree "Doctor"). They meet the requirements and standards for academic publications, and I have accepted them for evaluation.

Hereby, I declare that I do not have joint publications with the candidate.

According to the submitted Reference for citations with a complete bibliographic description, the submitted scientific works meet the Minimum requirements for scientific and teaching activities of the candidates for holding the academic position "Associate Professor" in professional field 4.6. Informatics and computer science.

2. GENERAL CHARACTERISTICS OF THE CANDIDATE'S SCIENTIFIC WORK, TEACHING AND SCIENTIFIC-APPLIED ACTIVITIES

The candidate has worked and continues to work in professional field 4.6. Informatics and computer science. He has established himself as an authoritative lecturer with significant scientific experience and research practice. He has shown excellent pedagogical skills. He was the scientific supervisor of 7 graduates. He has gained significant experience as a lecturer, group exercise leader and scientific supervisor of graduates. According to the submitted references, in accordance with Art. 107, para. 1 of the "Regulations for the conditions and the order for acquiring scientific degrees and holding academic positions in Sofia University Kliment Ohridski", he fulfills the conditions under Art. 105, para. 1 for teaching workload, under the same regulations, and meets the requirements for holding the academic position "Associate Professor".

3. CONTENT ANALYSIS OF THE SCIENTIFIC AND SCIENTIFIC-APPLIED ACHIEVEMENTS OF THE CANDIDATE

According to the requirements of Art. 53, item 3 of RIADASRB, for his participation in the competition, the candidate has submitted a habilitation thesis-monograph: Ioannis Patias, Application Models of the Embedded Systems Software Architecture in Modern Entrepreneurship, 2020, ISBN: 978-954-07, University Publishing House "St. Kliment Ohridski ", Bulgaria, 120 p.

The main scientific contributions of the candidate are in professional field 4.6. Informatics and Computer Science. The Reference for original scientific contributions. submitted by the candidate describes them sufficiently and completely, accurately, and concretely. I evaluate them as new knowledge in the existing scientific field, obtained in the form of scientifically based descriptions, explanations, proofs, algorithms, conclusions, and recommendations, that give original new solutions and open new opportunities for practical applications.

In the works of the candidate, that I have gotten acquainted with, in reference with the current procedure, I have not found claims or representation for his own works, of publications and/or scientific works entirely or partially written or created by another author, or the use of scientific results published by another scientist, without reference or citation. I am not aware of any claims against the candidate and his scientific works, for incorrect use of the literature, by other authors or of any reports on the publications of the candidate for plagiarism of an anonymous or non-anonymous nature. The co-authored publications are correctly presented.

4. REFLECTION OF THE CANDIDATE'S RESULTS IN THE WORKS OF OTHER AUTHORS

According to the submitted Reference for citations with full bibliographic description, the obtained results and scientific contributions in the scientific works and publications of the candidate have received the necessary publicity and meet the Minimum requirements for scientific and teaching activities of candidates for the academic position of "Associate Professor" in professional field 4.6. Informatics and Computer Science. The report shows that they are discovered, accepted, understood, and used by those working on the same topic.

5. CONTRIBUTION OF THE CANDIDATE TO COLLECTIVE/JOINT PUBLICATIONS

The candidate's contribution to the co-authored books is clearly distinguishable and indisputable. They are written in an easily distinguishable author's style and way of presentation. The scientific results described in them are obtained through continuous accumulation of observations, experimentation, modeling, and thorough research.

There is no information, in the documents submitted by the applicant, which would reveal his contribution to the co-authored articles that are referenced and indexed in the world-famous databases of scientific information. Therefore, I accept that the main ideas, results, and contributions in them are his, since he is the first author.

6. CRITICAL NOTES

The candidate did not provide sufficient, detailed and comprehensive description of his personal contribution to the collective publications.

There is a lack of detailed separate description of the contributions in the habilitation work and in the chapters in the co-authored books.

I recommend to the candidate to expand the field of his research and to intensify his work with doctoral students.

7. PERSONAL IMPRESSIONS

I do not know the candidate personally and I have no impressions of his scientific and teaching activities at FMI. My evaluation is formed entirely on the

basis of the presented scientific production and the documents for participation of the candidate in the current competition.

CONCLUSION

The candidate meets the requirements and conditions for holding the academic position "Associate Professor", defined in Art. 53 of RIADASRB, and in accordance with the results of the presented under Art. 54, para. 1 references.

My overall introduction to his teaching and research activities allows me to draw the following conclusions:

- The candidate skillfully organizes, plans, conducts and manages the learning/teaching processes and research work at a modern methodological level.
- He is the author of original publications and research developments in the professional field of the announced competition, which expand and further develop the certain knowledge in the scientific field.
- The presented publications provide the necessary publicity of the obtained results and enable the scientific community to get acquainted with them, as well as to critically evaluate the contributions received in them.

CANDIDATE ASSESSMENT AND ELECTION

In accordance with Art. 57 of RIADASRB and having in mind the criteria, related to the teaching and research activities of the candidate (classroom and extracurricular activities, teaching methods, activities in a practical environment and joint scientific work in research projects), I give <u>a positive assessment</u> of the candidate Chief Assistant Prof. Ioannis Patias, PhD.

I recommend to the distinguished members of the Scientific Jury and the honorable Scientific Council of FMI <u>to elect</u> Chief Assistant Prof. Ioannis Patias, PhD to be appointed to the academic position of Associate Professor in professional field 4.6. Informatics and Computer Science.

Scientific Jury member: _____

(Prof. D.Sc. T. Semerdzhiev)

Sofia, November 19, 2020