



OPINION

by Prof. DSci. Krasimir Ivanov Ivanov - Department of General Chemistry of the Agricultural University, Plovdiv (now retired), on the materials submitted for participation in a competition for the academic position of "professor" at the Agricultural University - Plovdiv

By order No. RD-16-967 of 22.06.2026 of the Rector of the Agricultural University - Plovdiv (AU), I have been appointed as a member of the scientific jury in a competition for the academic position of "professor" at the AU in professional field 4.2. "Chemical Sciences", scientific specialty "Organic Chemistry", announced for the needs of the Department of "Chemistry, Phytopharmacy and Environmental Protection" of the AU - Plovdiv.

1. Brief presentation of the candidate:

The only candidate in the competition for the academic position of "professor", announced in the Newspaper of State No. 48 of 26.05.2026 and on the website of the Academy of Sciences, is Assoc. Prof. Dr. Marin Neykov Marinov. His teaching and pedagogical activity began after defending his doctoral dissertation (2004) and being elected as a senior assistant at the "Paisiy Hilendarski" University (2006). From 27.09.2010 he has been a senior assistant, and since 2013, an associate professor at the Agricultural University - Plovdiv, where he is the head of the organic part in the Department of "Chemistry, Phytopharmacy and Environmental Protection". My personal impressions of Assoc. Prof. Dr. Marinov are from his work as a lecturer at the "Paisiy Hilendarski" University, and later in the Department of "General Chemistry" of the AU. I am left with the impression of a well-prepared and organized scientist with a clear vision for his future as a teacher and researcher.

2. General description of the scientific production.

The set of materials presented by Assoc. Prof. Marinov is in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations of the Agrarian University. The total list of publications of Assoc. Prof. Marinov includes 117 titles, of which 110 scientific publications, 2 monographs, one textbook and 4 teaching aids. To participate in the competition, the candidate has applied a total of 22 publications - all in the nomenclature speciality. Of these, 19 are published in journals with an impact factor (1 with a quartile Q2, the rest - with quartiles Q3 and Q4), and 3 are in materials from scientific conferences, reflected in SJR. In accordance with the requirements of the Bulgarian Academy of Sciences and Humanities, Assoc. Prof. Marinov has presented a Habilitation thesis - a monograph (co-authored) and a book based on the defended dissertation. I would like to recommend him to be a little more courageous and publish in Q1 journals, which will make his contribution to the scientometrics of the Bulgarian Academy of Sciences even greater.

3. Scientific and applied scientific contributions

Dr. Marinov's scientific research is of a purposeful, fundamental nature with strong expectations for achieving indicators that allow for their practical application. The common thread uniting all research is the synthesis and structural characterization of new heterocyclic organic compounds with potential biological activity. The candidate's scientific achievements are described in detail in the attached reference, which I fully accept.

The first group of studies (publications No. 2, 5, 6, 14, 16, 17-19) are of a purely scientific nature and are related to the synthesis of heterocyclic organic compounds and their structural characterization using modern research equipment (^1H NMR, ^{13}C NMR and IR spectroscopy) and approaches (optimization of structures using density functional theory (DFT) methods). A good correspondence was established between the theoretically predicted and experimentally measured IR and NMR spectra.

The second group of studies (publications No. 3, 7, 9-12, 15, 20-22) builds on the purely synthetic work by studying the biological activity of the synthesized heterocyclic organic compounds. In this case, modern research methods were also used (UV-Vis, IR, Raman, ^1H NMR, ^{13}C NMR, ^1H - ^1H COSY, HMQC and HMBC spectroscopy), and their scope is extended. The results obtained show that most of the synthesized compounds exhibit activity against the tested Gram-positive and Gram-negative bacteria, yeasts and molds.

The third group of studies (publications No. 1, 4, 8, 13) is devoted to the synthesis, structural characterisation and study of the biological activity of organometallic coordination compounds. The structure of the isolated products was confirmed by elemental analysis, UV-Vis, IR and ATR spectroscopy. New organic complexes of Pt(IV), Ru(III), Cu(II) and Ni(II) were synthesized and a probable structure was proposed. The antimicrobial activity against Gram-positive bacteria, Gram-negative bacteria and yeasts of most of them was evaluated. The cytotoxic effect of some of the compounds was evaluated against the human tumor cell line A2058 by WST-1 test (Roche Applied Science).

4. Teaching activity:

In the period between the two habilitations, Assoc. Prof. Marinov has managed to develop an active teaching and pedagogical activity, including:

- Co-author of a textbook on organic chemistry for students of non-chemical specialties and author (2 issues) and co-author (1 issue) in writing 3 teaching aids, one of which has been supplemented and republished;
- Co-supervisor of two successfully defended doctoral students and three in the process of training.
- Assoc. Prof. Marinov is a leading lecturer in the organic direction of the Department of Chemistry, Phytopharmacy and Environmental Protection. During the evaluated period, he delivered lecture courses and practical exercises in "Organic Chemistry", "General Chemistry" and "Chemistry" with the organic part included in all specialties of full-time and part-time education at the AU, as well as specialized courses in "Polymers in Plant Protection", "Polymers in Agroecosystems", "Operational Materials in Agricultural Machinery" and "Anti-Corrosion Coatings". Under the Erasmus program, he delivered lectures and exercises in organic chemistry.

5. Project activity:

Dr. Marinov's activity related to the development of various projects, including those with a pronounced applied nature, is impressive. The total number of projects with his participation is 17 (4 through the PU, 3 of which with the National Science Foundation, 4 through the Scientific Research Fund of the AU and 7 through the Scientific Research Fund of the University of Ruse) in which 7 is the leader and one with the Ministry of Education and Science for support of publication activities. Assoc. Prof. Marinov is also a participant in an international project administered by the Faculty of Chemistry, University of Vienna.

6. Impact in the scientific literature:

The total number of noticed citations of publications with the participation of Assoc. Prof. Marinov is 75, all in journals with an impact factor or impact rank and all from foreign journals. According to "Scopus" data, his Hirsch index (h-index) is 8 (13th in the list of the AU since statistics have been kept) with potential for growth.

7. Assessment of the candidate's personal contribution

The active publication activity of Assoc. Prof. Marinov began in 1999 under the guidance of Prof. St. Minchev, and in the first publication with an impact factor he was already the lead author. In 13 of the publications for participation in the competition, Dr. Marinov is the first author (60%), which is a high assessment by the co-authors for his personal contribution. All this, as well as my personal observations, gives me reason to assume that the contribution of Assoc. Prof. Marinov in the publications submitted for participation in the competition is indisputable.

8. Critical remarks and recommendations

Undoubtedly, Assoc. Prof. Dr. Marinov is a well-established researcher and lecturer with his own subject matter and serious scientific contributions, and I have no remarks or recommendations in this area. His contribution to the scientometrics of the Department of Chemistry, Phytopharmacy and Environmental Protection is undeniable. In recent years, some of his research has been in line with the priorities of the Faculty of Plant Protection (supervision of three new doctoral students in the field of plant protection). I would recommend that he make more active use of the capacity of the scientists in the department and create a strong scientific group oriented towards the problems of the Agricultural University.

Conclusion:

The documents and materials submitted by Assoc. Prof. Dr. Marinov meet all the requirements of the Law for the development of the academic staff in the Republic of Bulgaria (LDASRB) and the Regulations for its application in the Agrarian University - Plovdiv. The candidate in the competition has presented a sufficient number of scientific publications published after the materials used in the defense of the scientific degree "Doctor" and his election to the academic position "associate professor". The presented publications contain original scientific contributions, and the significant part of them have been published in reputable journals with an impact factor or impact rank. All this gives me reason to give my **positive** assessment and to confidently recommend to the Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Plant Protection and Agroecology for the **election** of Assoc. Prof. Dr. Marin Neykov Marinov as a "professor" at the Academy in professional field 4.2. "Chemical Sciences", scientific specialty "Organic Chemistry".

Date: 10.09.2026
City of Plovdiv

Prepared by:

(Prof. Krasimir Ivanov)