### **OPINION**

by Assoc. Prof. Dr. Eng. Marin Neykov Marinov,

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of the materials submitted for participation in a competition for the academic position of

# "Associate Professor" at the Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences (IOCCP, BAS)

in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.2. Chemical Sciences, scientific specialty "Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances"

Chief Assist. Prof. Dr. Manol Hristov Ognyanov, Laboratory of Bioactive Substances – Plovdiv (LBAS-Plovdiv), IOCCP, BAS participating as the only candidate in the competition for "Associate Professor", announced in the State Gazette, issue 53 of 25.06.2021 and on the website of IOCCP, BAS.

### **1.** General presentation of the candidate and the procedure

Manol Hristov Ognyanov was born on November 20, 1985 in the city of Varna. He acquired his higher education (specialty "Biotechnology", professional qualification "Engineer") at the University of Food Technology (UFT) in Plovdiv, as follows: Bachelor's degree (2005-2009) and Master's degree (2009-2010).

He prepared a PhD thesis at IOCCP, BAS (2011-2016) on "Preparation and enzyme modification of biologically active pectic polysaccharides", with supervisors Assoc. Prof. Dr. M. G. Kratchanova and Prof. DSc Sv. D. Simova. He successfully defended his dissertation in 2016, as a result of which he acquired the educational and scientific degree "Doctor" in the scientific specialty "Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances".

Dr. M. Ognyanov's experience includes holding the following positions: engineer-technologist at LBAS-Plovdiv, IOCCP, BAS (2009-2010); engineer-technologist (2010-2012) and chemist-analyst (2012-2019) at ITC-Innovative-Technological Center Ltd., Plovdiv; Assist. Prof. at IOCCP, BAS, LBAS-Plovdiv (2014-2017); part-time lecturer in the discipline "Biochemistry Part 2" (laboratory exercises with students from the Bachelor's degree) at the UFT, Plovdiv (2017-2018); Chief Assist. Prof. at IOCCP, BAS, LBAS-Plovdiv (from 2017 to the present).

Documents and materials presented by Dr. M. Ognyanov related to this competition (SG, issue 53 of 25.06.2021) fully cover the criteria for holding the academic position of "Associate Professor", in accordance with the Act for the development of the academic staff in the Republic of Bulgaria (ADASRB) and the Regulations for the conditions and the order for acquiring scientific degrees and for holding academic positions in IOCCP, BAS.

Chief Assist. Prof. Dr. M. Ognyanov is participating in the competition for "Associate Professor" with 20 scientific papers published after his doctoral dissertation, which are subject to review. The presented articles are grouped as follows:

- Indicator "C" 3 papers in Q1, 1 paper in Q2 and 1 paper with SJR without IF;
- Indicator "D" 3 papers in Q1, 3 papers in Q2, 1 paper in Q3 and 8 papers with SJR without IF.

The personal participation of the candidate in the mentioned publications is summarized as follows: first author -4 papers; second author -6 papers; third and next author -10 papers; author for correspondence -6 papers.

According to the habilitation report on the candidate's scientific contributions, 5 of the scientific publications ( $N_{2}$  1, 2, 5-7) are equated to habilitation work (indicator "C") and are related to the study of the chemical composition and properties of polysaccharides. The other 15 publications ( $N_{2}$  3, 4, 8-20; indicator "D") focus on the study of the chemical composition of plant products.

Part of the results obtained by Dr. M. Ognyanov, included in 16 publications, have found an appropriate response in the international scientific community in the form of 109 citations in publications, referenced and indexed in world databases of scientific information (Web of Science and Scopus). Indicative in this direction is the *h*-index attained by the candidate: 7.

The minimum points required by groups of indicators for holding the academic position "Associate Professor", according to the Regulations for the conditions and the order for acquiring scientific degrees and for holding academic positions in IOCCP, BAS and scientific metrics of Dr. M. Ognyanov are summarized in the table below. The data submitted by the applicant fully cover the specific requirements of IOCCP, BAS, according to ADASRB.

Indicator group	Content	Minimum points required by IOCCP, BAS for holding the academic position "Associate Professor", Professional field 4.2. Chemical Sciences	Scientific metrics of Chief Assist. Prof. Dr. Manol Hristov Ognyanov
А	Indicator 1	50	50
С	Indicator 3 or 4	100	105
D	Sum of indicators from 5 to 10	220	230
Е	Sum of points in indicator 11	70	218
G	H – factor	≥5	7

#### 2. General characteristics of the candidate's activity

The scientific interests of Dr. M. Ognyanov (in the field of Bioorganic Chemistry and Chemistry of Natural Substances) are directed in the following areas:

1. Study of the chemical composition, structure, functional and biological properties of polysaccharides isolated from various plant objects, such as: mountain tea (*Sideritis scardica* Griseb.), leek (*Allium ampeloprasum* var. *Porrum* L.), purslane (*Portulaca oleracea* L.), flowers of linden (*Tilia tomentosa* Moench), lavender (*Lavandula angustifolia* Mill.), fumaria (*Fumaria officinalis* L.), locust bean flour (*Ceratonia siliqua* L.) and marigold (*Calendula officinalis*). The results obtained from the conducted researches are included in publications  $N_{0}$  1-7, according to the presented habilitation reference for the scientific contributions of the candidate.

2. Study of the chemical composition, stability and antioxidant activity of a number of fruits, vegetables and medicinal plants, namely: rosehip, aronia, cornelian cherry, whitebeam, pepper, nettle, tansy, bladder campion, water pepper and common centaury. The scope of this area also includes the analyzes of wastes from the essential oil and brewing industry, such as: defatted milk thistle, rose, lavender, lemon balm, basil and yeasts. According to the habilitation report, the data from the above studies are presented in publications  $N_{2}$  8-20.

Indicative of the active research activity of Dr. M. Ognyanov are the participations in 41 national and international scientific conferences mentioned in this competition, at which 22 oral and 31 poster papers were presented. It should be noted that the candidate was the lead of 2 graduates, as well as 7 trainees/interns from the UFT, Plovdiv. The large number (27) of research and applied research projects in which Dr. M. Ognyanov has participated is impressive, where 2 of these are under his leadership. During 2016-2021 he is a reviewer of 108 scientific publications. The high profile of the scientific work of the candidate is distinguished with 6 awards received, where the most notable of all is the award of BAS "Professor Marin Drinov" for young scientists up to 35 years, awarded to Chief Assist. Prof. Dr. M. Ognyanov in 2019 for achievements in the scientific field "Biomedicine and quality of life".

### CONCLUSION

1. The analysis of the documents and materials examined shows that the candidacy of Dr. M. Ognyanov to hold the academic position of "Associate Professor" meets the requirements of ADASRB, the Regulations for application of the ADASRB and the Regulations for the conditions and the order for acquiring scientific degrees and for holding academic positions in IOCCP, BAS.

2. The scientific work of Dr. M. Ognyanov is related to contemporary topics developed in the field of bioorganic chemistry and chemistry of natural and physiologically active substances, which is in accordance with the announced competition for the academic position of "Associate Professor".

3. The scientific metrics of Dr. M. Ognyanov exceed the requirements of IOCCP, BAS for holding the academic position of "Associate Professor".

4. The attached list of citations of the publications of Dr. M. Ognyanov unequivocally shows the importance of the research, as well as the interest of the international scientific community in them.

5. The fundamental and applied results presented by Dr. M. Ognyanov, define him as an established scientist in the field of bioorganic chemistry and chemistry of natural and physiologically active substances.

All this is giving me reason to evaluate positively the overall activity of Chief Assist. Prof. Dr. M. Ognyanov.

I would allow myself to propose to the Scientific Jury to confirm my assessment and to prepare a report to the Scientific Council of IOCCP, BAS, with a proposal to elect Chief Assist. Prof. Dr. Manol Hristov Ognyanov for "Associate Professor" in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.2. Chemical Sciences (Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances).

**Opinion prepared by:** .....

(Assoc. Prof. Dr. Eng. Marin Marinov)

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