

OPINION

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Regarding: Competition for taking up the academic position "Associate Professor" in
"Chemistry",

field of higher education 4. Natural sciences, mathematics and informatics;
professional field 4.2 Chemical Sciences;
for the needs of the Medical College, Trakia University - Stara Zagora,
promulgated in SG, 13 / 15.02.2022

Information about the procedure

I present this standpoint as a member of the academic panel, according to the Order of the Rector of the Thracian University - Stara Zagora (№ 1030 /12.04.2022) and the decision of the academic panel from 21.04.2022.

The only candidate in this competition is M.Pharm. Hristo Plamenov Varbanov, PhD.

Brief information about the candidate

Dr. Hristo Varbanov was born in 1984 in Sofia. In 2005 he graduated as a Master of Pharmacy from the Faculty of Pharmacy of the Medical University - Sofia. In the period 2009 - 2013 he was a PhD student in Medicinal Chemistry at the Institute of Inorganic Chemistry, University of Vienna, Austria, where in 2013 he defended with honors his theses on "Novel antineoplastic platinum(IV) complexes: synthesis, characterization, biological investigations and structure-activity relationships" and acquired a PhD degree (recognized by NACID).

Dr. Hristo Varbanov's research career is as follows:

- Researcher at the Institute of Chemistry, Karl-Franzens-Universität Graz, Austria;
- Postdoc /Researcher at the Institute of Chemical Sciences, EPFL, Switzerland;
- Senior Postdoc /Researcher - Institute of Inorganic Chemistry, University of Vienna;
- Senior Postdoc /Researcher - Institute of Chemistry, Karl-Franzens-Universität Graz, Austria.

Hristo Varbanov has specialized in leading laboratories and universities:

- Separation of biologically active chiral substances by HPLC, Institute of Pharmaceutical Sciences, Karl-Franzens-Universität Graz, Austria - 2008;
- Theoretical research of antineoplastic platinum complexes and development of QSAR models, Institute of Chemistry, Aarhus University, Denmark - 2011;
- European Project Management, FH Joanneum, Graz, Austria – 2021.

Since February 2022 until now he has been a part-time lecturer in Analytical Chemistry at the Medical College at the Trakia University - Stara Zagora.

Scientific research activity

In the competition for the academic position "Associate Professor" Dr. Hristo Varbanov participates with a dissertation for the educational and scientific degree "Doctor", 24 scholarly publications in specialized scientific journals and 13 participations in international scientific forums. All research works are in the scientific field of the announced competition. The scholarly publications of Hristo Varbanov are in journals with SJR and IF, with a total impact factor of 77.491. Most of the candidate's scholarly papers have been published in prestigious international peer-reviewed journals. In 9 of the presented publications the candidate is the first author, and in 6 of them he is the corresponding author.

Hristo Varbanov's scholarly publications have been cited many times in reputable journals. For the current competition Dr. Varbanov presents a total of 454 citations in international sources (without auto-citations). His *h*-index is 15 according to Scopus and 18 according to Google Scholar.

Hristo Varbanov's research activity is mainly focused on the design, synthesis and characterization of metal complexes with biological activity as potential drugs.

The scientific contributions of the presented works (according to candidate's information) are grouped thematically in the following areas:

I. Development of new approaches to improve chemotherapy of hard-to-treat neoplasms. Design of multifunctional Pt(IV) prodrugs.

II. Investigation of the influence of the coordination sphere on the physicochemical properties and biological activity of cytotoxic Pt(IV) complexes.

III. Development of methods for determination and models for prediction of lipophilicity of metal complexes with biological activity. Relationships between lipophilicity, cellular accumulation and cytotoxicity.

IV. Design and development of tungsten-based radiocontrast agents to improve the X-ray diagnosis of cancer and pulmonary diseases.

As an additional scholarly activity of Dr. Hristo Varbanov should be noted his participation in 5 important international scientific projects.

Compliance with minimum national requirements for the academic position "Associate Professor"

The information about the fulfilment of the minimum national requirements for the academic position "Associate Professor" in Professional Area 4.2 is shown in the following table:

| Indicator | Content | Minimum national requirements | Dr. Hristo Varbanov |
|--|--|-------------------------------|---------------------|
| A1: Dissertation for the award of educational and scientific degree "Doctor" | "Novel antineoplastic platinum(IV) complexes: synthesis, characterization, biological investigations and structure-activity relationships", 2013, University of Vienna (Austria) | 50 points | 50 points |

| | | | |
|--|---|------------|------------|
| B3: Habilitation work - Scientific publications in journals, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus) | Topic: Development of new strategies to improve chemotherapy for hard-to-treat malignancies. Design of multifunctional Pt(IV) prodrugs. 8 articles, of which: 5 papers with Q1 2 papers with Q2 1 paper with Q3 | 100 points | 180 points |
| Г7: Scientific publications in journals, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus), not included in the habilitation work | 16 articles, of which: 7 papers with Q1 7 papers with Q2 1 paper with Q3 | 200 points | 345 points |
| Д11: Citations in scientific journals, monographs and collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus) | 33 citations | 50 points | 908 points |

The comparison between the minimum national requirements and those achieved by Dr. Hristo Varbanov shows that the presented scholarly production covers and in many respects significantly exceeds the requirements for the academic position of "Associate Professor".

CONCLUSION

The review and analysis of the presented by M.Pharm. Hristo Plamenov Varbanov, PhD documents and materials on the announced competition show that they meet all requirements for taking up the academic position of "Associate Professor".

Based on the above, I give my positive evaluation and propose to the members of the academic panel to award Dr. Hristo Varbanov the academic position "Associate Professor" in professional field 4.2 Chemical Sciences, for the needs of the Medical College, Trakia University - Stara Zagora.

26.05.2022



Prof. Angelina Stoyanova, PhD