

REPORT
by Assoc. Prof. Albena Detcheva-Tchakarova
IGIC-BAS
concerning competition for a Full Professor position in
professional field 4.2. Chemical Sciences (Analytical Chemistry)
for the needs of Faculty of Chemistry and Pharmacy at Sofia University “St. Kliment
Ohridski”, published in „State Gazette”, issue 57/26.06.2020

The only applicant in the competition is Assoc. Prof. Dr. *Ivayla Nedyalkova Pantcheva-Kadreva* from the Faculty of Chemistry and Pharmacy at Sofia University “St. Kliment Ohridski”, Department Analytical Chemistry.

Assoc. Prof. Dr. *Ivayla Nedyalkova Pantcheva-Kadreva* has provided all necessary documents in accordance with the Regulations for the implementation of the Law on development of the academic staff in Republic of Bulgaria. The set of documents is prepared carefully and provides clear information about the results of her scientific research and pedagogical activity.

Ivayla Pantcheva graduated from the Faculty of Chemistry at Sofia University “St. Kliment Ohridski” (present Faculty of Chemistry and Pharmacy) in 1993 as a Master of Inorganic and Analytical Chemistry, and in 2001 successfully defended her PhD-Thesis at the same institution. She works as a lecturer and researcher at Department Analytical Chemistry occupying consequently the positions Assistant Professor (1997-2006), Head Assistant Professor (2006-2011) and Associate Professor (since 2011). During the period 2011-2019 she is Vice-Dean of the Faculty of Chemistry and Pharmacy at Sofia University “St. Kliment Ohridski”, responsible for the PhD-Theses, scientific research, project financing, accreditation, and Erasmus+ program coordination.

The applicant has presented a list of altogether 53 scientific works, including her PhD-Thesis and her Habilitation thesis for the Associate Professor position. Assoc. Prof. *Ivayla Pantcheva* is co-author of 44 publications in scientific journals (33 of them - in SCOPUS database) and 7 publications in conference proceedings. A list of more than 100 participations in national and international scientific meetings is also presented.

The results, obtained and published by Assoc. Prof. *Ivayla Pantcheva* have found good response in scientific references. The total citation number (excluding self-citations of all co-authors) is 340 (255 from them in SCOPUS). The H-index of Assoc. Prof. *Ivayla Pantcheva* is 9.

For the application in the present competition, Assoc. Prof. ***Ivayla Pantcheva*** has presented a Habilitation thesis entitled “Diversity in the in the Properties of the Natural Antibiotic Monensin” based on six of her scientific publications. The candidate applies for the present position with 22 scientific publications which are not included in her PhD-Thesis (in 2001) as well as in her application for Associate Professor position (in 2011). The publication list includes 19 scientific articles in peer-reviewed journals with Impact factor and Quartiles and three scientific full-text papers published in conference proceedings with Editor/Publisher for the period 2011-2020. On these publications are observed 40 citations (28 from them in SCOPUS). For the application in the present competition 69 citations are presented, which are not included in her application for Associate Professor position. The participations of Assoc. Prof. ***Ivayla Pantcheva*** in national and international scientific meetings since 2011 include altogether 46 reports and the results of her research activity are presented as follows: 20 oral and 26 poster presentations; 16 reports at national, 30 reports at international scientific meetings.

Among the journals, where the applicant has published her scientific works on the subject of the present competition, are the renowned *RSC Advances* (Q1, SCOPUS), *Forensic Science International* (Q1, SCOPUS), *Chirality* (Q2, SCOPUS), *Central European Journal of Chemistry* (Q2, SCOPUS) etc. The investigations are in the field of bio-coordination and bio-analytical chemistry, and especially in modifying of biologically active compounds via complexation thus enhancing their therapeutic properties. More specifically, her investigations and achievements could be grouped into the following domains:

1. Bio-coordination chemistry

- 1.1. Complexes of natural biologically active compounds
- 1.2. Biologic activity of metal complexes of natural antibiotics
- 1.3. Complexation of ionophorous antibiotics in solution
- 1.4. Metal complexes of acetylcholinesterase reactivators

2. Bio-analytical chemistry

- 2.1. Properties of phospholipase A2 isolated from Vipoxin
- 2.2. Oral fluid investigations for forensic toxicology
- 2.3. Anesthetics and psychoactive substances

Fulfilling of minimal requirements according to the Recommended criteria of the Faculty of Chemistry and Pharmacy – Sofia University “St. Kliment Ohridski” by Assoc. Prof. *Ivayla Pantcheva*:

According to indexes group **A(1): 50** points (required 50 points);

According to indexes group **B(4): 115** points (required 100 points);
According to indexes group **Г(7,8): 251** points (required 220 points);
According to indexes group **Д(11): 138** points (required 120 points);
According to indexes group **Е(13,14,15,16,18): 209** points (required 150 points);
According to indexes group **Ж(21,22,23,25): 180** points (required 120 points).

Assoc. Prof. ***Ivayla Pantcheva*** is fluent in Russian and English languages. She is university lecturer in analytical chemistry for BSc and MSc programs, in Bulgarian, and in foreign language as well. For the period 2012-2020 she has participated in altogether 10 research projects and was a project leader of three of them. For the same period, under her supervision/co-supervision, were successfully defended six MSc-Theses and two PhD-Theses. At the moment she is supervisor of another PhD-student. She participated in international collaboration with Denmark (Aarhus University) and Hungary (Szeged University) – project EU Calipso and Erasmus+ Program, respectively. She is Editorial board member of *The Scientific World Journal* (Inorganic Chemistry).

The above gives me the reason to estimate highly the scientific and professional level of Assoc. Prof. ***Ivayla Pantcheva*** even more that her scientific works are peer-reviewed in renowned journals. The publications provided by the applicant represent original investigations with significant contribution to the field of bio-coordination and bio-analytical chemistry.

Conclusion: The only candidate in the competition Assoc. Prof. Dr. ***Ivayla Nedyalkova Pantcheva-Kadreva*** meets and exceeds the minimal requirements of the Law on Development of the Academic Staff in Republic of Bulgaria, as well as the enhanced criteria of the Faculty of Chemistry and Pharmacy – Sofia University “St. Kliment Ohridski” for acquiring the Full Professor position. This gives me the reason to recommend Assoc. Prof. Dr. ***Ivayla Nedyalkova Pantcheva-Kadreva*** to be elected as a Full Professor in the professional field 4.2 Chemical Sciences (Analytical Chemistry).

Sofia, 13.10.2020

Reviewer:

/ Assoc. Prof. Albena Detcheva-Tchakarova /