

OPINION

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Member of the Scientific Jury appointed with Order № RD-266/15.09.2022
of the Rector of the University "Prof. Dr. Asen Zlatarov"

Regarding the call for the academic position "Associate Professor",
Area of Higher Education 4. Natural sciences, Mathematics and Informatics, Professional
Field 4.2. Chemical sciences (Biochemistry)
for the needs of the University "Prof. Dr. Asen Zlatarov"
published in the State Gazette issue 45 dated 17 June 2022

Review of the presented materials

In the call for the academic position "Associate Professor", there is a single applicant – Chief Assist. Prof. Yordan Nikolaev Georgiev, PhD. The set of materials provided by the applicant is in accordance with the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations on its implementation, and the Internal rules of the University "Prof. Dr. Asen Zlatarov".

General presentation of the career development of the candidate

Yordan Georgiev graduated from the University of Food Technologies – Plovdiv in 2011 with a Bachelor degree in Biotechnology. In 2013 he was awarded Master degree in Biopharmaceutical chemistry from Plovdiv University "Paisii Hilendarski". His scientific career so far has mainly advanced at the Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences (BAS), Laboratory of Bioactive Substances. In 2018 he defended PhD and afterwards he has been appointed as a Chief Assist. Prof. in the same laboratory.

In parallel with his scientific career Dr. Georgiev has been involved in active teaching – since 2018 he has been appointed as a part-time lecturer at the Medical University – Plovdiv where his teaching activities include seminars and laboratory exercises in Medicinal Biochemistry for Bulgarian and foreign students.

Another positive aspect of his professional advancement is the active international cooperation – joint Master thesis with Humboldt University of Berlin, participation in doctoral mobility programs, short term scientific visits and trainings. This has been undoubtedly very helpful for his development as an advanced, ambitious young researcher.

Evaluation of the applicant's research profile

Evaluation of the scientific metrics

Dr. Yordan Georgiev participates in the current call for the academic position "Associate Professor" with 19 publications, which have not been used in the previous scientific advancement calls. They are distributed among the criteria of the Regulations for implementation of ADASRB in the following way – 6 in Criterion C4 (all referenced and indexed in the world scientific information databases Web of Science and Scopus) and 13 in Criterion D7. In the list of

publications, 12 are published in Q1 journals, 4 – in Q2 journals, and 3 – in Q4 journals. Therefore I conclude that the results are published in recognisable and well-established journals, which is a positive indication about the quality of the performed research. The publications have been produced in a short period between 2018 and 2022. Furthermore the publications for 2022 are already eight, that is indicative for the high present scientific commitment of the applicant. The publications in Criterion C4 clearly demonstrate the leading role of the applicant in the particular scientific field and his intention to publish in leading journals – in four of the six papers he is a first/corresponding author; all publications are in journals with impact factor; five of the six publications are in journals with impact factor above 4. In the period 2018-2022 Yordan Georgiev had 234 citations on his publications, all in journals referenced and indexed in Web of Science and Scopus. Furthermore, there is positive trend in their increase: 39 in 2020, 83 in 2021, and 78 in 2022 (so far). It should be mentioned that nearly half of the citations are on publications included in the current procedure. This is an indication for significant and sustainable interest among the scientific community in the field.

According to the presented CV, the whole scientific production of Dr. Georgiev includes 33 scientific publications, 363 citations have been spotted, and the Hirsch Index according to Scopus, after exclusion of self-citations of all authors, is 9 (reference from 07.11.2022). These values are a good indicator of the applicant's scientific recognition. It has undoubtedly been positively influenced also by the active dissemination of the scientific results through more than 30 participations in scientific forums.

Teaching activities

Dr. Yordan Georgiev has been involved in significant teaching activities after his appointment on the academic position "Chief Assistant Professor", summarized below:

- Conducting laboratory exercises and seminars in Biochemistry for Bulgarian and foreign students at the Medical University – Plovdiv
- Authoring a teaching textbook
- Supervision of Master thesis (defended)

It is valuable that in the set of materials, the applicant has also presented a detailed vision for his future teaching work, which is intended to be focused on lecture courses, laboratory exercises and seminars in Biochemistry.

Participation in research projects

An essential component of the scientific work is the participation in research projects. Dr. Georgiev has demonstrated intensive project activities – he has been a participant in ten national and international research projects and a coordinator of two national projects as well as a coordinator of the Bulgarian team in an international research project in the Frame of the bilateral cooperation between BAS and the Czech Academy of Sciences.

Expert activities

Yordan Georgiev has been a reviewer for more then seven scientific journals. Particularly impressive is his significant contribution as a reviewer of the journal Carbohydrate Polymers – a reputable scientific journal with an impact factor 10.723 (for 2021). This is particularly commented in the opinion of Prof. Paulsen, who is one of the journal Editors.

Fulfilment of the minimal national requirements and those of the University "Prof. Dr. Asen Zlatarov"

The comparative analysis on the fulfilment of the minimal national requirements for holding the academic position "Associate Professor", as well as the requirements of the University "Prof. Dr. Asen Zlatarov" in the Area of Higher Education 4; Professional Field 4.2, is summarised in the table below:

Criterion	Minimal national requirements	Requirements of the University "Prof. Dr. Asen Zlatarov"	Applicant's scores
A	50	50	50
B	-	-	
C	100	100	145 (C4)
D	200	200	265 т. (G7)
E	50	100	468 т. - 234 citations (WoS/Scopus))
F	-	100	230т. - 20 т. (Published teaching textbook) - 210 т. (Project activities)
Total	400	550	1158

The analysis above has indicated that the applicant fulfils the minimal national requirements and those of the University "Prof. Dr. Asen Zlatarov" and exceeds them more than twice.

Evaluation of the scientific contributions

The author has submitted two reports on his scientific contributions, respectively for the two groups of publications included in this call. Based on these documents, as well as the author's publications, I estimate the research conducted by Dr. Georgiev as fundamental, interdisciplinary, focused primarily on the development of functional products with potential biomedical applications based on immunomodulatory polysaccharides and antioxidant metabolites in Bulgarian medicinal plants, poorly studied cyanobacteria, Antarctic yeast and traditional agriculture. The main contributions of his research refer to chemical characterization and evaluation of the immunomodulatory action of polysaccharides and oligosaccharides isolated from natural products.

Studies on phytochemical characterization and analysis of antioxidant activity of extracts of berries, vegetables and medicinal plants are also an important part of the applicant's work to develop new functional products with biomedical applications. A valuable focus in the research is the study of opportunities to utilise bioactive compounds remaining in the waste products after processing.

Given the potential pharmacological effects of the compounds and natural products studied, the conducted research is undoubtedly extremely promising. This is well reflected in the presented vision for future research. It envisages wide international cooperation; potential project schemes to implement the planned research are already identified.

Personal impressions

As a Member/Chairman of the Commission for Young Scientists at the 7th/8th General Assembly of BAS I have met Dr. Georgiev in events within the programs related to young scientists at BAS. In particular Dr. Georgiev participated with a research project in the "Program for the Support of Young Scientists and PhD students at BAS – 2017". Among the 362 project proposals participating in the call, 183 were funded. In the end of Program 41 young scientists and PhD students were awarded for significant fundamental and applied scientific results and contributions. Among the winning participants in this extremely competitive procedure was Yordan Georgiev. In 2022, Dr. Georgiev was awarded the prestigious award for young scientists "Prof. Marin Drinov "of BAS for achievements in the research field " Biomedicine and quality of life". In addition I have had a pleasure to attend together with Dr. Georgiev scientific forums. I was impressed by the professional attitude during his presentations, as well as his active participation in the scientific discussions during these forums.

Conclusion

The materials submitted for participation in this call meet and significantly exceed the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations on its implementation and the Internal Rules of the University "Prof. Dr. Asen Zlatarov".

The set of materials as well as my personal impressions from Dr. Yordan Georgiev, give me the reason to conclude that he is a well-established researcher with high academic standards and significant scientific achievements, which will essentially contribute to the investigations in the field of Biochemistry in the University "Prof. Dr. Asen Zlatarov".

Based on what has been previously said, I give a positive assessment and strongly recommend to the respected members of the Scientific Jury to vote for the appointment of Chief Assistant Professor Yordan Nikolaev Georgiev, PhD, as an Associate Professor in the Area of Higher Education 4. Natural sciences, Mathematics and Informatics; Professional Field 4.2. Chemical Sciences (Biochemistry) for the needs of the University "Prof. Dr. Asen Zlatarov".

11 November 2022

Member of the Scientific Jury:

/Prof. Ivanka Tsakovska, PhD/