

Attitude

of Associate professor PhD Dimitar Stefanov Kozuharov, Department of General and Applied Hydrobiology, Biological Faculty, University of Sofia "St. Kliment Ohridski" .

Member of the Scientific Jury by Order No. RD-38-611/15.11.2022 of the Rector of SU "St. Kliment Ohridski" -About competition for the academic position "professor" in the professional direction 4.3 Biological Science (Ichthyology and Aquaculture) for the needs of department "General and applied Hydrobiology" announced in State Newspaper N 82 – 14.10.2022.

In present competition the only candidate is Assoc. prof. PhD Eliza Uzunova. The candidate has submitted all the necessary documents in accordance with the requirements of the Act on Development of the Academic Staff in Republic of Bulgaria – (ADASRB), the Rules for the Implementation of the ACT, and the Rules for the Terms and Procedures for Acquiring Scientific Degrees and Holding Academic Positions in Sofia University "St. Kliment Ohridski". The submitted documentation of the candidate in the competition is given in way that summarize candidate's academic activity and achievements.

Biographical remarks about the candidate

Assoc. prof. Uzunova graduated in the Faculty of Biology of the Sofia University "St. Kliment Ohridski" as a master degree in specialization of "Fishery and Ichthyology" in 1994. In 2004 she obtained the scientific and educational degree - "Doctor of Philosophy" (PhD). Assoc. prof. Uzunova has more then 25 years of teaching experience at Sofia University. Most of them were at academic position – assistant and associate professor. She took in 1996 position of assistant in the Department of "General and Applied Hydrobiology". From 2004 she was elected at the position of chief assistant. Since 2013, she takes the position of Associate professor in the department. The academic development and professional qualifications of the candidate correspond to the subject of the announced competition of the professorship in the Department of "General and Applied Hydrobiology".

Teaching activity.

The teaching activity of Assoc. prof. Uzunova is significant. It includes lecturing in several courses and practical exercises for students from various specialties in bachelor and master degree at the Faculty of Biology of the University of Sofia. Assoc. prof. Uzunova leads the lecture courses in Hydrobiology for speciality of Ecology and Nature conservation for bachelour degree students. She also givs lecturing in Aquaculture, Ichthyology and conservation of fish resources, Ichthyology and sustainable management of fish resources, also practical exercises and Summer field practices in hydrobiology and aquaculture. Her average year teaching load is calculated as 436 hours.

Assoc. prof. Uzunova was the scientific supervisor of 20 graduate students who successfully defended their diploma thesis. She was also supervisor of two successfully graduated PhD students, second one a month ago.

I can say that teaching and learning activity of Assoc. prof. Eliza Uzunova, is more than needed for such type of competitions.

Research activities of the candidate.

The main research topic of Assoc. prof. Uzunova is in the field of research on alien and invasive fish species. She works also with rare and endangered fish species, evaluation of river connectivity restoration and aquaculture. Assoc. prof. Uzunova has a total of 72 publications such as scientific articles, published conference reports, chapters of books and two books.

For participation in the current competition for professor are presented 13 scientific articles in international scientific publications, referenced and indexed in WoS/SCOPUS, 2 books and 5 book chapters are submitted for participation in the current competition for a professorship. The articles are distributed in different quartiles as follows: Q2 – 5 articles, Q3 – 5 articles, Q4 – 3 articles. Assoc. prof. Uzunova is the first author in 7 of the 13 scientific articles submitted for the competition. In 5 book chapters, and in 3 other articles she is the second co-author. There is a published monograph like university textbook - Practical Guide for Exercises in Ichthyology what was not included in the procedure of habilitation. The work with co-authors in scientific publications shows abilities for cooperation with colleagues, specialists in ichthyology and hydrobiology. The candidate participated in 34 international and 14 national scientific conferences. Proof of the interest about her publications is the number of citations. The candidate gives list of 162 citations of her scientific papers. Many of them are publications referenced and indexed in Scopus and Web of Science, h-index: 8 (Scopus).

The reference on the fulfillment of the minimum national requirements by the applicant under Art. 2b of the ADASRB for professional direction 4.3. Biological Sciences shows range of points that cover and in many cases exceed the required minimum number of points for the criteria. For example - PhD thesis – 50 points, habilitation – 100 points, publications 346 points – (minimum of 200 points.), citations – 324 points – (minimum of 100p), scientific projects – 557 – (minimum of 150p).

The scientific researches of Assoc. prof. Eliza Uzunova are contemporary and have high scientific and applied-science values. The studies used different modern methods of analysis. After the review of the presented scientific publications I can say that the candidate's personal contribution to the research and its analysis are enough for the participation in the present competition.

The presented reference of the contributions in the papers of Assoc. prof. Uzunova, can be separate in four main fields of Biological investigations:

1. Alien and invasive hydrobiont species.

In this scientific field of research she was focused on alien and invasive fish species in Bulgaria. The main characteristics of local populations of various dangerous alien and invasive species have been described and studied. The adaptation characteristics of the invasive populations have been studied in connection with invaded water bodies. Identifier of 46 invasive alien animal species of high importance for the countries in EU has been published. It contains information and newly found data about water invasive species for the country. During the research software application of 32 language instrument/programme for the support of decision taking about invasiveness of the species (AS-ISK) has been developed too.

2. Rare and endangered fish species.

For the first time, research has been conducted and data on length-weight relationships (LWR), Fulton coefficient (K) and relative fat factor (Krel) for several Danube sturgeon species have been presented. The food spectrum of four sturgeon species such as *Huso huso*, *Acipenser ruthenus*, *A. stellatus* and *A. gueldenstaedtii* have been studied. That provides the first comparative data for more than fifty years period of the changes in the food spectrum of sturgeon fish in the Bulgarian Danube river sector. In these studies, for the first time in Bulgaria a non-lethal and microinvasive approach of investigations was applied for the study of fish nutrition spectrum.

3. Approaches to provide and restore river connectivity.

From my point of view very interesting and with high significance, are the investigations on river streams fragmentation structures and their influence on the inhabiting fish populations. Some proposals about possible measures for reduce the negative impact of water power plants on the river streams has been developed. All measures were systematized according to the target groups – such as fragmentation, taking of water quantities, decreasing of water quality and landscape changes. Methodology for information and possibly objective assessment of the admissibility for the construction of new water power plants was proposed. Proposals for restoration of river continuity has been defined too.

4. Study of aquaculture

In some papers first analysis of the development of the Aquaculture farming in Bulgaria has been provided. The try for identifying the main reasons for the low production and value of aquaculture in the country was prepared. The reasons for the low consumption of fish and fish products in comparison with such in other European countries were examine too. All aspects of aquaculture production that can have negative effects on the environment and which need to be subject for control and prevention were summarized. Original methodology for determining the places, quantities and ways of stocking with trout fish was proposed.

Assoc. prof. Uzunova have participate in 15 national and 6 international scientific granted projects. They were financed by national and international fundings. She was head of 10 projects with national grants. Assoc. prof. Uzunova participated in the preparation of practical assessments and reports on the impacts of hydroelectric power plants on river streams and the proposal of mitigating measures to reduce their negative impact on the environment. All this facts shows her active scientific, expert activity and her ability for team investigations and scientific work.

Conclusion

On the base of research and teaching activities of Assoc. prof. Dr. Eliza Uzunova, I thing that she positively covers the requirements of the academic position "professor" according to the Law of Development of the Academic Staff in the Republic of Bulgaria. The Regulations for the realization of ADASRB, and the Regulations for the terms and conditions for acquiring scientific degrees and academic positions at SU "St. Kliment Ohridski". This gives me the reason, as a member of the Scientific Jury for the announced competition, to give a positive assessment and to recommend to the members of the Faculty Council of the Biological Faculty to vote positively for the election of Assoc. prof. Dr. Eliza Uzunova for the position - "professor" in professional direction 4.3. Biological Sciences (Ichthyology and Aquaculture).

8.02.2023

(assoc. prof. PhD Dimitar Kozuharov)