OPINION

for the competition for the academic position of Associate Professor in the field of higher education: **5. Technical Sciences**, professional field: **5.2. Electrical Engineering, Electronics and Automation**,
scientific specialty: **"Elements and Devices of Automation and Computing Technology"** (Application of Additive Technologies in Education), announced in State Gazette No. 39/13.05.2025, for the needs of the **Laboratory of Unmanned Robotic Systems (URS)** at the **Institute of Robotics – BAS.**

Reviewer: Prof. Dr. Maya Ignatova, Institute of Robotics – BAS

1. General Information and Biographical Data

The sole candidate in the competition is **Senior Assistant Dr. Neda Venelinova Chehlarova**. She completed her secondary education in 2013 at 125 Secondary School "Prof. Boyan Penev" in Sofia, with a specialization in English language.

Between 2013 and 2018, she studied at the **University of Forestry, Sofia**, earning consecutively the following qualifications:

- **Bachelor's Degree** in Business Administration, specialization "Management of Enterprises in Forestry";
- **Professional teaching qualification** in Economics, Administration, and Management;
- **Master's Degree** in Business Administration, specialization "Management of Enterprises in the Forest Industry".

In 2019–2022, she was a full-time PhD student at the same university, in professional field 3.7. Administration and Management, obtaining the academic degree **Doctor** with the dissertation titled "Application of Computer Technologies in Economics".

Since **June 23, 2023**, she has held the position of **Senior Assistant** in the **URS Laboratory at the Institute of Robotics – BAS.**

2. Overview of the Submitted Materials

Dr. Chehlarova participates in the competition with:
- **1 independent monograph**;
- **13 scientific publications**, including:
  - **5 articles** in journals with **SJR** indexing (2 in **Q2**, 3 in **Q4**);
  - **5 publications** in peer-reviewed journals indexed in international scientific databases;
  - **8 publications** in non-indexed peer-reviewed journals or edited collective volumes.

In 10 of the articles, she is the **first author**, and in 3 – the **second author**. None of the submitted publications duplicate those used for the award of the doctoral degree.

A list of **7 citations** across **4 scientific works** is also provided, all of which are indexed in internationally recognized scientific databases.

Compliance with National Minimum Requirements:

Group	Indicator	Minimum Requirement	Candidate's Achievement
A	PhD Thesis	50 points	50 points
B	Habilitation Work (Monograph)	100 points	100 points
C	Scientific Publications	200 points	216.7 points
D	Citations	50 points	70 points

The data show that Dr. Chehlarova **meets and exceeds** all minimum national requirements as defined by the Act for the Development of Academic Staff in the Republic of Bulgaria (ADASRB) and its regulations.

Her submitted works are in fields that are highly relevant to both science and practice. Upon in-depth review, it is evident that she applies **modern methods and tools** to solve scientific problems and achieve the outlined goals.

3. Scientific and Applied Contributions

Dr. Chehlarova has outlined **four scientific-applied contributions**, which demonstrate a **high degree of interdisciplinarity**. These contributions relate to:
- **Analysis and implementation of additive manufacturing (3D printing)**;
- **Educational applications** of technology, with emphasis on **inclusive**, **STEM**, and **informal education**;
- **Bibliometric and terminological studies** that support strategic and scientific planning.

A unifying feature across all contributions is the **integration of scientific analysis, technological innovation, and practical educational implementation**. I accept these contributions as **well-founded, innovative, and applicable in a modern educational and scientific context**.

4. Significance of the Contributions for Science and Practice

The candidate's contributions showcase:

- Effective combination of **theoretical expertise and practical execution**;
- Commitment to **social responsibility** through inclusive education;
- Emphasis on **interdisciplinarity**, necessary for preparing future professionals in the digital era.

The contributions are suitable for:

- **Scientific dissemination**, and
- Support for **projects, programs**, and **innovative educational practices**.

In particular:

- The **bibliometric analysis of additive manufacturing** provides a valuable basis for guiding research strategies and resource allocation;
- The development of **3D-printed educational materials for the visually impaired** supports both learning and social inclusion, with potential for replication;
- The design of **STEAM scenarios** with additive technologies is applicable to **teacher training** and **educational innovation**;
- The **3D modeling of educational content** helps develop essential 21st-century competencies such as digital skills, creativity, and engineering thinking.

These contributions have received **recognition by both national and international scientific communities**.

5. Final Remarks and Recommendations

Based on the submitted materials, I consider Dr. Chehlarova to have fulfilled the **national academic requirements** for the position. The inclusion of **13 articles**, of which 5 are in SJR-indexed journals (Q2 and Q4), and the total point score exceeding the minimum thresholds, reflects a consistent and valuable academic output.

I recommend that Dr. Chehlarova:

- **Intensify her publication activity** in high-impact journals;

- Begin supervising **PhD students** to further contribute to academic development.

CONCLUSION

Based on my review of the submitted materials, the relevance of the research, and the significance of the contributions, I **recommend that the Scientific Council of the Institute of Robotics – BAS** appoint **Senior Assistant Dr. Neda Venelinova Chehlarova** to the **academic position of Associate Professor** in the field of higher education **5. Technical Sciences**, professional field **5.2. Electrical Engineering, Electronics and Automation**, scientific specialty **"Elements and Devices of Automation and Computing Technology"** (Application of Additive Technologies in Education), for the needs of the **URS Laboratory at IR-BAS**.

Date: 01 September[i] 2025   **Member of the Scientific Jury**
Sofia