

**Application forms – Part 1**

**„COMPETITION FOR FINANCIAL SUPPORT FOR PROJECT OF JUNIOR BASIC RESEARCHERS AND  
POSTDOCS – 2023”**

**Administrative description of the project**

<b><i>Competition:</i></b>
Competition for financial support for projects of junior basic researchers and postdocs – 2023
<b><i>Main research/thematic area of the project:</i></b>
Technical sciences
<b><i>Additional research/thematic area – for interdisciplinary projects:</i></b>
Social sciences
<b><i>Project title:</i></b>
" Empowering educators: revival of Suggestopedia method through new neuropsychological insights"
<b><i>Type of the planned research (financial support can be provided only for fundamental research):</i></b>
Fundamental scientific research
<b><i>Applying organization:</i></b>
Institute of Robotics, Bulgarian Academy of Sciences (IR-BAS)
<b><i>Coordinator of the research team (academic position and degree, name):</i></b>
Dr. Paulina Tsvetanova Tsvetkova
<b><i>Coordinator's address (postal, electronic, phone):</i></b>
Sofia 1113, "Acad. G. Bonchev" street, Bl.2, Mailbox 79 p.tsvetkova.ir@gmail.com
<b><i>Requested budget for accomplishment of the project (in BGN, 1.00 EUR = 1.95583 BGN):</i></b>
40 000 lv.

***Abstract of the project:***

The European Trade Union Committee for Education (ETUCE) alerted in its 2023 report to the European Commission that the teaching profession is among the most affected by psychosocial risks (such as work-related stress), which reduce the attractiveness of the profession and lead to retention issues in educational systems across Europe. At the same time, teachers practicing the Bulgarian pedagogical method of Suggestopedia find satisfaction in teaching because Suggestopedia is a synthesis of pedagogy, psychology, and art. The principles of Suggestopedia are based on the ideas of love and gratitude, which have been found to have a stimulating effect on motivation and the brain's reward system.

The current project proposal will, for the first time, experimentally investigate the factors contributing to a more gentle and motivating teaching practice using the principles of Suggestopedia. To achieve this goal, innovative Brain-Machine Interface (BMI) technology, based on the principle of Electroencephalography (EEG), and carefully selected psychological tests will be employed to combine quantitative and qualitative analysis optimally.

The project will enable an analysis of the development of the Bulgarian pedagogical method of Suggestopedia and the neuro-psychological approaches used to study stress, fatigue, and demotivation in individuals. Within the project's framework, the scientific potential of the team will be enhanced, linked to the results of the research, ultimately leading to their career growth.

The overall goal of the project is to revive the Bulgarian pedagogical method of Suggestopedia to assist teachers through new neuro-psychological knowledge that will improve teaching practice and help overcome the negative consequences associated with teaching, such as long-term stress, fatigue, low motivation, and job dissatisfaction. The project addresses three specific objectives within a 24-month research program: Goal 1: To design, develop, and implement an EEG-based BMI for recording and processing the brain activity of various suggestopedagogues teaching in different classrooms. Software for the analysis of the recorded EEG data will be developed to provide a quantitative assessment of the suggestopedagogue's state; Goal 2: To conduct a psychodiagnostic assessment by optimally combining psychological tests with the results of pilot EEG studies. The collected data will then be processed using statistical software to provide a qualitative assessment of the suggestopedagogue's state; Goal 3: To widely disseminate the conducted neuro-psychological analyses and their results to demonstrate the positive effects of Suggestopedia in educational practice. This aims to popularize and integrate some of the suggestopedic methods into mass education.

The conduct of scientific and experimental research will lead to a real possibility of introducing innovation into the Bulgarian educational system. It is assumed that the more stable neuropsychological condition of suggestopedic educators will prove the effectiveness of Suggestopedia principles both internationally and nationally. This will create a real opportunity for a positive change in teaching methods and improvement of teaching practices, promoting creative inspiration and fostering respect from students and parents.

***Total amount of project implementation (in BGN):***

***40 000 lv.***

## Members of the research team

<i>Organizations/team members<sup>1</sup></i>	<i>Note<sup>2</sup></i>
<b><i>Applying organization:</i></b>	
Institute of Robotics, Bulgarian Academy of Sciences	
<b><i>Coordinator of the research team</i></b>	
Assist.prof. Paulina Tsvetkova	
<b><i>Team members:</i></b>	
<ol style="list-style-type: none"> <li>1. Assist. Prof. Paulina Tsvetkova - IR</li> <li>2. Assist. Prof. Pancho Dachkinov - IR</li> <li>3. Gagandeep Kaur - IR</li> <li>4. Borislava Kostova - IR</li> <li>5. Svetlana Kabanova – suggestopedic house “7 keys”</li> <li>6. Yana Kalaidzieva – suggestopedic house “7 keys”</li> </ol>	postdoctorate postdoctorate PhD student PhD student student student

<sup>1</sup> Please, include the academic position and degree of each team member. Signatures are not required in this table.

<sup>2</sup> Please, include the following notes: junior researchers, post-doc, PhD student, student.