SUPPLEMENT 2
TO THE CALL FOR PAPERS
38TH OTDK
Physics, Earth Sciences and Mathematics Section

Dear Students, dear Colleagues,

Between **April 6–9, 2027,** the Obuda University will organize the final of the ***38th National Student Research Conference Physics, Earth Sciences and Mathematics Section (FiFöMa)***.

In its new strategy, the National Association for Student Research has decided to open up the OTDK system to talent development in high schools. Accordingly, the ***FiFöMa High School Student Conference*** will be held in parallel with the OTDK. Our aim is to build on the experience of the OTDK movement, which has been operating for almost 70 years, to help talents to be identified and develop as quickly as possible, and to develop talents based on discovery and in line with students' interests. While we recognize the achievements of high school students, please note that **participation in the *FiFöMa High School Student Conference* does not count as participation in the OTDK; therefore, its placements and awards do not form part of the panel results of the OTDK conference.**

In support of young talent, as organizers of the OTDK at Obuda University, we are organizing the FiFöMa High School Student Conference as a supplementary program and hereby announce the following call for applications for students in grades 10–12:

We welcome

- students interested in any area of physics, geography/earth sciences, mathematics
- and their teachers who are or would like to be involved in talent development or preparing students for scientific competitions.

Eligibility Criteria:

- ***Joint consultation*** between a lecturer of the TDK community of a higher education institution in the Carpathian Basin and the applicant secondary school student and their supervising teacher (the list of contact TDK leaders can be found on the website under the heading “For High School Students”).
- **Preparation of an application** on a freely chosen topic in the above-mentioned scientific fields in one of the specified application categories
- *Applications can be submitted in subjects that lie in the intersection of physics, geography (natural and social geography), mathematics, mineralogy, astronomy, biology, chemistry, meteorology, cartography or even history. It is important to emphasize that there are no strict boundaries; any phenomenon, formation, or process — potentially linking the above-mentioned scientific fields — can also be explored if it involves observation, examination, or modelling of past or current environmental and/or social changes occurring on Earth or in the universe.*
- *As applications must be submitted in digital format only, the essay may also use innovative methods (e.g. video embedding, animation, etc.*).
- ***Indication of interest to participate*** at the link below: https://fifoma.uni-obuda.hu

We will then prepare your access code for the event's online system.

Important deadlines:

February 6, 2027. (Saturday)
Registering your interest with the necessary details, uploading a parental statement for applicants under 16. (The statement template can be downloaded from our website.)

March 1, 2027. (Monday)
Uploading the application to the event's online system.

Application categories:

Essay: Maximum of 25 A4 pages (due to the specificities of the disciplines, the maximum length is recommended only) on a topic related to one of the three disciplines. Applicants should present a natural scientific, environmental or social phenomenon or problem they have observed. The focus is on the topicality of the subject, the applicant's own ideas and creativity, taking into account the professional documentation of the literature used.

Experimental presentation: Experimental modelling and presentation of a selected physical, mathematical or earth science phenomenon *in the form of a maximum 10-minute video*.
The application must be accompanied by a one-page abstract, including a brief description of the natural phenomenon to be presented and the experiment to be carried out, as well as the experimental equipment and materials.

Micro-teaching**:** formulating and presenting an innovative teaching idea on a public education topic in one of the three scientific fields in *the form of a maximum 10-minute video*. In this case, the application should also include a lesson plan of at least one page, in which the student presents the steps of the teaching process for the topic, the tools and methods used, and, in the case of using ICT tools, the URL link.

Animation**:** The applicant should present a scientific or environmental phenomenon or problem *in the form of a maximum 10-minute self-created computer animation.* The submitted application should include the completed animation, which presents the given phenomenon in a freely chosen format (text, audio, drawing, film, accompanying description).

Each application can have a maximum of two participants! In this case, please register both authors on the event website.

Evaluation and presentation:
TDK papers in **essay** form will be assessed in advance by a professional Section Panel. Afterwards, in the conference sessions for high school students, participants will give a 10-minute presentation of their main findings. The presentation will be followed by a 5–10-minute professional discussion. After summing up the written and oral results, the Section Panel ranks the applications. The results will be announced at the official award ceremony.

Applications submitted in the form of **experimental demonstrations, microteaching, and animations** will be evaluated and ranked by a professional Section Panel in advance. The results will be announced at the official award ceremony. The video entries will be screened during the

event. Based on votes cast by the audience in person, the three entries with the most votes will receive valuable prizes.

Why it is worth applying:
We hope that the applicants will find it an interesting challenge to participate in the long tradition of TDK activity! During the conference, we will provide students and their teachers with access to all professional forums and leisure programs, as well as to our online programs specifically organized for them. Successful participation in the competition will provide valuable extra points for students in future higher education applications (e.g. the University Excellence Scholarship Program). The closer relationships established between high schools and higher education institutions in this way can help support the dedicated talent development efforts of high school teachers in the long term.

For more information, please contact the organizer of the high school section at the email address oe.fifoma2027@uni-obuda.hu or on the event website: https://fifoma.uni-obuda.hu

Budapest, 21 April 2026.

Sincerely:

Dr. Attila István Bencze
OTDK Secretary of the Organizing Committee

Dr. Tibor Lenner
FiFöMa Vice-President of the Organizing Committee for High School Education