

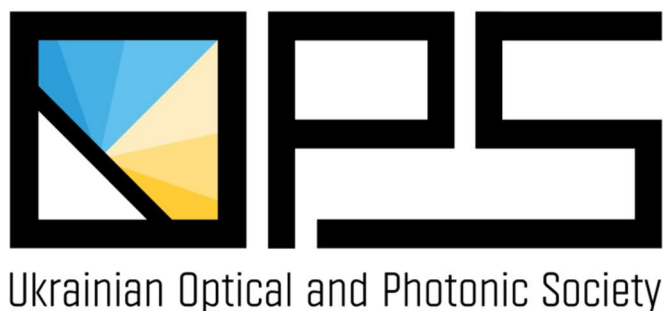
Photonics School 2026

“Meta-Antennas”



5-9 May 2026

Chernivtsi, Ukraine



May 10, 2026

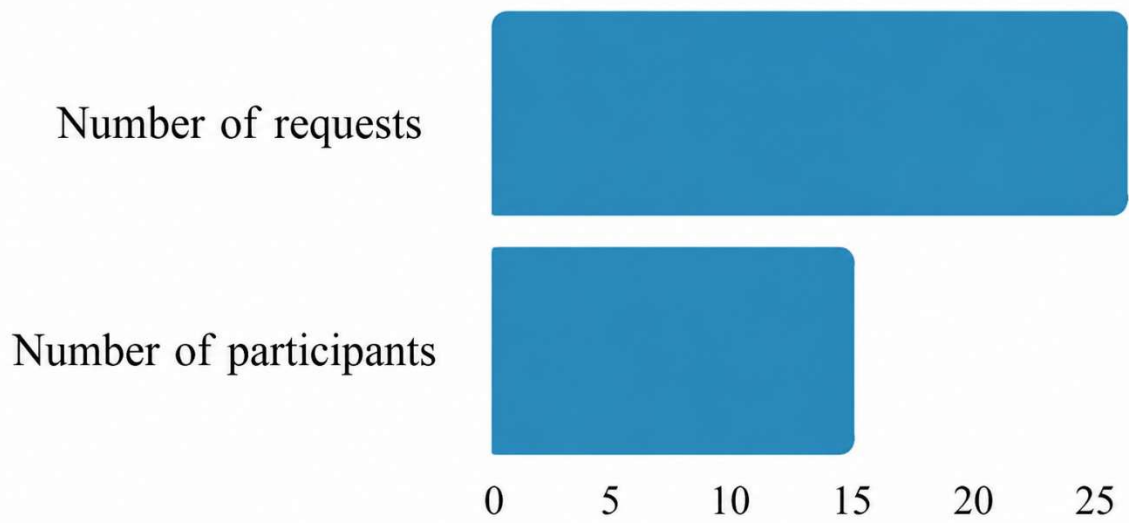
Our third edition of Photonics School was held in Chernivtsi from 5 to 9 May, 2026. The school gathered 16 participants from four universities across Ukraine. Five participants from Lviv, Kharkiv and Sumy received financial support in the form of a travel grant. In total, we held three invited online lectures, four in-person ones, three computer class sessions and three different leisure activities. The topics of classes included general antenna theory, dielectric and metallic meta-antenna arrays, simulation and fabrication methods of nanoantennas.

As is traditional for our schools, students are encouraged to actively participate. First, we organized a poster session, where students presented their research to peers and the jury, who ultimately recognized the work of Yuliia Shevchuk from Lviv National University with the Best Poster Award. And second, the final 1.5 days were dedicated to group work on assigned projects. The participants were divided into three teams. Each was given a problem to solve on one of the topics covered during class. On the final day, each group presented their results and each student received a certificate acknowledging the successful completion of the School's program.

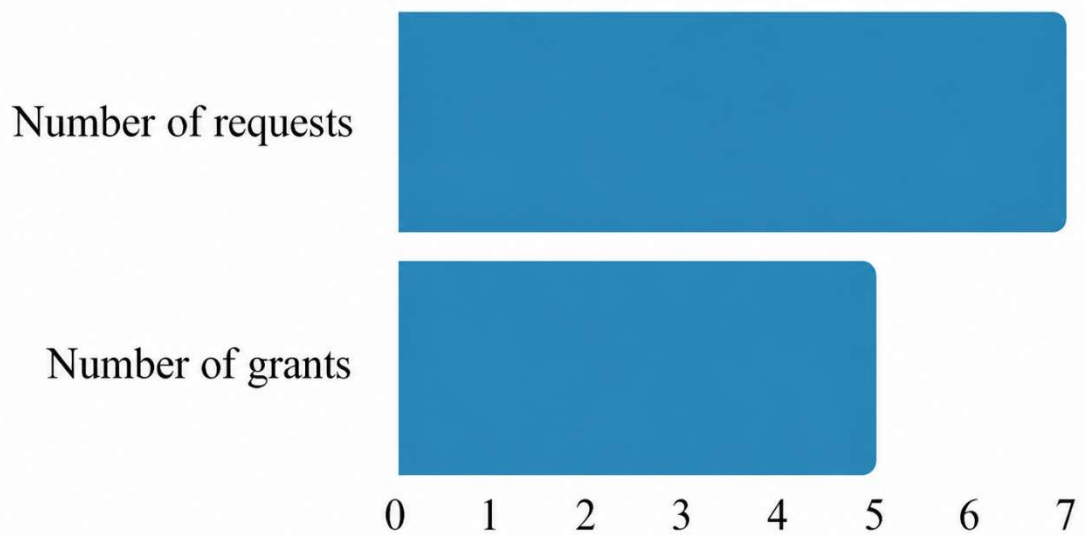
This event would not have been possible without massive work done by our friends and colleagues from the Radio Engineering and Information Security Department at Yuriy Fedkovych Chernivtsi National University. We are grateful to the department's head, Dr. Andrii Samila, and Dr. Mykola Khobzei for leading the efforts. The School would also not have happened without our invited lecturers who took their time to participate. These are, of course, Prof. Vladimir Tuz, V. N. Karazin Kharkiv National University; Ukraine, Prof. Enrica Martini, University of Siena, Italy; Dr. Dmytro Vovchyk, Riga Technical University, Latvia. We also thank Optica and Student Society "Karazin Photonics" (SPIE and Optica student chapters of V. N. Karazin Kharkiv National University) for funding, supporting and promoting this event.

Looking forward to seeing everyone at one of our future events!
Glory to Ukraine!

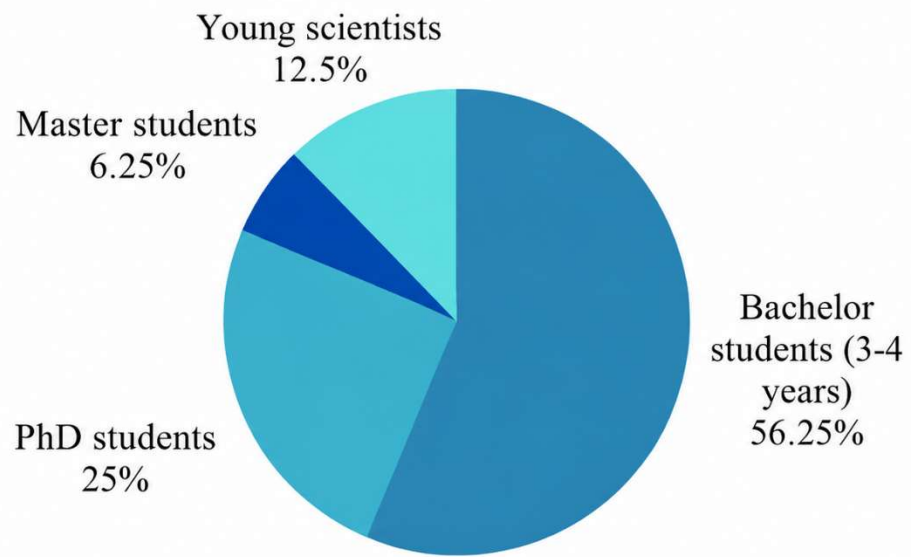
PARTICIPANTS



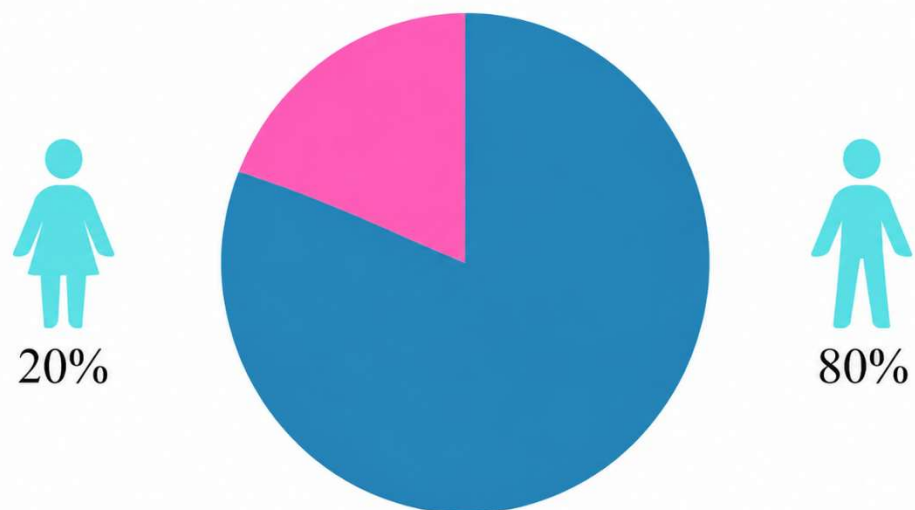
TRAVEL GRANT



LEVEL OF EDUCATION



GENDER DISTRIBUTION

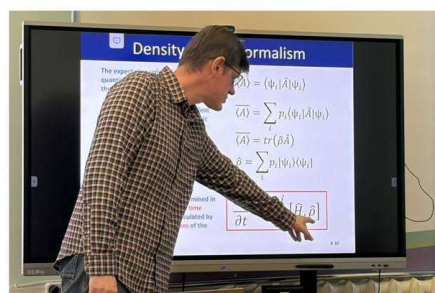
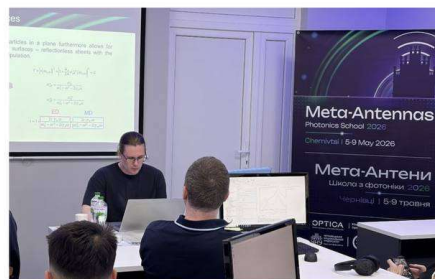
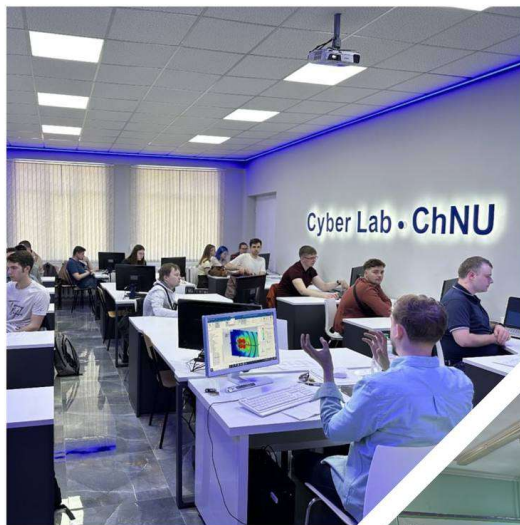


Opening ceremony

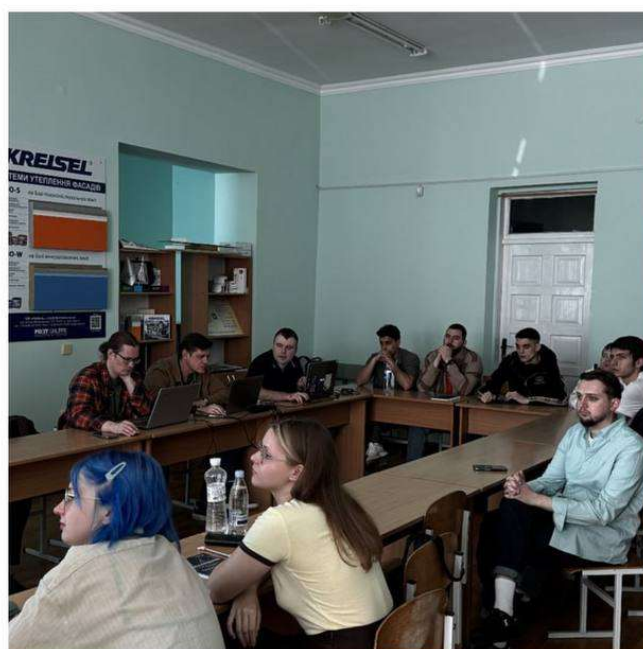
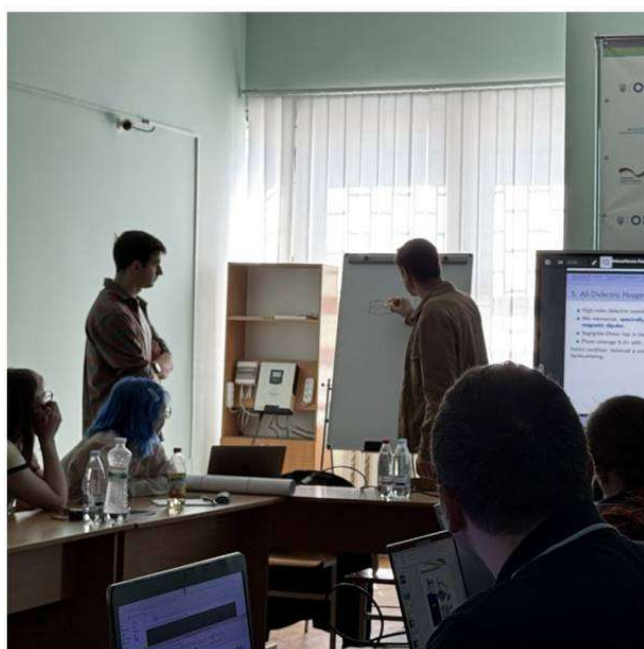




Lectures and classes



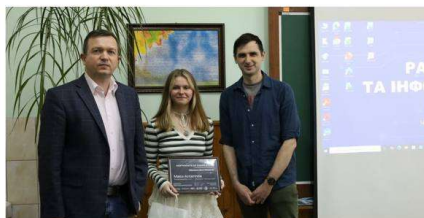
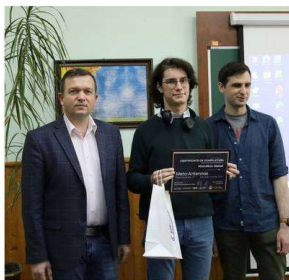
Poster-session and scientific discussions



Excursions



Closing ceremony



The Best Poster Award

This certificate is presented to

Yuliia Shevchuk

Meta-Antennas

Photonics School 2026

Chernivtsi | 5-9 May 2026

General Chair

Chair of local organizing committee

Anton Ovcharenko

Andrii Samila

OPTICA
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ЧНУ

ЧЕРНІВЕЦЬКИЙ
НАЦІОНАЛЬНИЙ
УНІВЕРСИТЕТ
ІМЕНІ КИРИЛЛА ФЕДЯКОВИЧА



**META
ANTENNAS**
Photonics School 2026

Participants feedback

Photonics School 2026 “Meta-Antennas”

“

Each lecturer presented the topics from their own professional perspective while simultaneously complementing the material covered by previous or subsequent speakers. The balance between theory and practice was very well maintained.

“

The practical tasks were extremely interesting. The lectures were also delivered at a very high level – the lecturers explained the material clearly and engagingly, with plenty of visualizations.

“

I especially enjoyed the lectures by Prof. Tuz and all the practical sessions, since during the practical work you could actually “touch” what was explained in the lectures and gain a deeper understanding of how these processes work from the inside. What impressed me most about the lectures was the way the material was presented – everything was structured very clearly, and it was evident that the lecturers fully mastered and deeply understood the processes taking place within metasurfaces. The material was presented exceptionally well.

“

The productive collaboration between people from different specialties and fields allowed the topics to be explored more comprehensively.

“

Probably the next most important aspect after gaining knowledge was “making new connections and working in teams.” And this aspect exceeded all expectations. The participants were intelligent, open-minded, and constantly discussing something (both related and unrelated to the topic). Some naturally took leadership roles in completing the tasks, while others eagerly absorbed new information and tried to contribute as much as possible. Overall, I really enjoyed working in groups. I later shared the newly acquired knowledge in my own presentation, and I believe the goal was fully achieved.

“

All lecturers approached both their own sessions and the presentations of others responsibly. They were patient and always willing to answer questions.

“

The organization was handled with great responsibility and attention to detail. The organizers constantly kept us informed about upcoming activities, communicated any changes promptly, and never left participants confused about “what comes next.” It was clear that the organizers truly cared about the event, and the result was excellent.

“

I especially enjoyed the practical sessions. The lecturers provided many explanations and actively assisted with the practical tasks, which significantly enhanced the overall learning experience.

PHOTONICS SCHOOL 2026 “META-ANTENNAS”



**Yuliia Shevchuk,
School Participant,
Best Poster Award Winner**

- Why did you decide to participate in the School?

- A friend of mine spoke very enthusiastically about the Photonics School and highly recommended it to me, so I decided to join as well.

- What impressed you the most and what did you enjoy most during the School?

- What I enjoyed most were the in-person lectures. Face-to-face communication and active engagement in the learning process are incredibly inspiring. To be honest, I would have loved to have even more lectures like these in the program!

- What advice would you give to future participants of the School?

- Definitely apply — you will not regret it! I would also strongly recommend planning your time in the host city in advance. The School program is extremely engaging and intensive, so you will have very little free time outside of the educational activities.

PHOTONICS SCHOOL 2026

"META-ANTENNAS"



Anton Ovcharenko,
Co-Chair of the
School

- What is the main principle of the School?

- The main principle of the School is the harmonious combination of intensive learning with a friendly and informal atmosphere that encourages communication, collaboration, and mutual development among peers under the guidance of experienced mentors.

The program is designed to provide participants with high-quality, up-to-date, and fundamental knowledge, as well as practical skills delivered by lecturers who actively work in their respective fields. At the same time, the School aims to stimulate students' motivation and engagement, strengthen their confidence in their own abilities, and encourage them to pursue scientific research.

- Why was Yuriy Fedkovych Chernivtsi National University chosen as the venue this year?

- This decision was the result of a combination of several factors. First, Yuriy Fedkovych Chernivtsi National University is one of Ukraine's leading educational and research hubs. Second, the city itself, with its unique character, beauty, and vibrant student atmosphere, provides an excellent setting for scientific events.

Finally, we had already established strong and friendly connections with representatives of the Department of Radio Engineering and Information Security, which became the host department of the School. Similar to last year's School held at Lviv Polytechnic National University, members of the department took the initiative and invited us to organize this year's edition of the School at Chernivtsi National University.

Together, these factors enabled us to bring together highly motivated students interested in photonics and young researchers who are already actively engaged in scientific work and have achieved significant results, allowing us to organize this multi-day event at a high level.

- Why was the theme "Meta-Antennas" selected for this year's School?

- The theme "Meta-Antennas" was chosen because of its strong scientific relevance and practical importance. The rapid development of fabrication technologies and numerical modeling over recent decades has significantly accelerated the creation of next-generation antennas, opening up new possibilities for controlling electromagnetic waves, transmitting information, and developing efficient telecommunications systems.

Moreover, Yuriy Fedkovych Chernivtsi National University is home to researchers who are among Ukraine's leading experts in this field. Therefore, the choice of this topic became a natural combination of scientific relevance, a strong expert environment, and the available opportunities and enthusiasm to explore this rapidly advancing area.

PHOTONICS SCHOOL 2026

"META-ANTENNAS"



Mykola Khobzei,
Co-Chair of the Local
Organizing Committee

- What distinguishes the Photonics School from other similar events?

- The main distinction is that this School follows the format of a classical scientific and educational *summer school*, which is commonly organized at leading universities abroad. It combines lectures, practical sessions, immersion in the local culture, and a rich social program. Such events are still relatively uncommon in Ukraine, which makes the Photonics School stand out among other activities currently taking place in the fields of radiophysics, optics, and photonics.

- Can you name a particularly memorable moment for you during the School?

- For me personally, the most memorable part of the School was the final two days dedicated to group project work. It is during this stage that the true value of the event becomes especially evident, as you see participants from completely different academic backgrounds come together and apply the knowledge they have gained. They clearly demonstrated how newly acquired knowledge can be transformed into solutions for specific practical challenges. This stage is the most important part of the entire learning process, as it serves as the best indicator of the lecturers' effectiveness and the overall quality of the educational program.

- How do you see the future development of antennas and photonics in Ukraine?

- The future of antenna technologies and photonics in Ukraine is extremely promising for several reasons. Today, these technologies have gained exceptional strategic importance not only for the development of next-generation telecommunications but also for the defense sector, the aerospace industry, and national security as a whole.

Thanks to the initiatives of the Ministry of Education and Science of Ukraine, private companies, and professional organizations, a new generation of scientists and engineers is already emerging in Ukraine. They are successfully integrating their research into the global scientific community and establishing collaborations with international universities and organizations. I sincerely believe that this trend will continue to gain momentum, leading to the growth of new researchers, scientific teams, and research laboratories throughout the country.

LECTURERS:



Enrica Martini

University of
Siena, Italy



Dmytro Vovchuk

Riga Technical
University, Latvia



Vladimir Tuz

V. N. Karazin Kharkiv
National University,
Ukraine



Mykola Khobzei

Yuriy Fedkovych
Chernivtsi National
University, Ukraine



Vladyslav Tkach

Yuriy Fedkovych
Chernivtsi National
University, Ukraine



Oleh Demianyuk

V. N. Karazin Kharkiv
National University,
Ukraine



Anton Ovcharenko

Ukrainian Optical and
Photonic Society,
Ukraine

General Co-Chairs

(Ukrainian Optical and Photonic Society):

- Anton Ovcharenko
- Oleh Yermakov, also Leibniz Institute of Photonic Technology, Germany

Main sponsors:

- Optica
- Ukrainian Optical and Photonic Society



General Organizing Committee

(Ukrainian Optical and Photonic Society):

- Oleh Demianyuk, also V. N. Karazin Kharkiv National University
- Vladyslav Huz, also V. N. Karazin Kharkiv National University
- Artem Hrinchenko, also V. N. Karazin Kharkiv National University
- Iryna Ludchak

Local organizing committee

(Yuriy Fedkovych Chernivtsi National University):

- Andrii Samila (co-chair),
- Mykola Khobzei (co-chair),
- Vladyslav Tkach
- Oleh Krulikovskiy
- Nataliia Muzdebaieva
- Taras Kazemirskiy

Sponsors:

- Student Society "Karazin Photonics" (SPIE and Optica student chapters)
- Yuriy Fedkovych Chernivtsi National University
- Department of Radio Engineering and Information Security