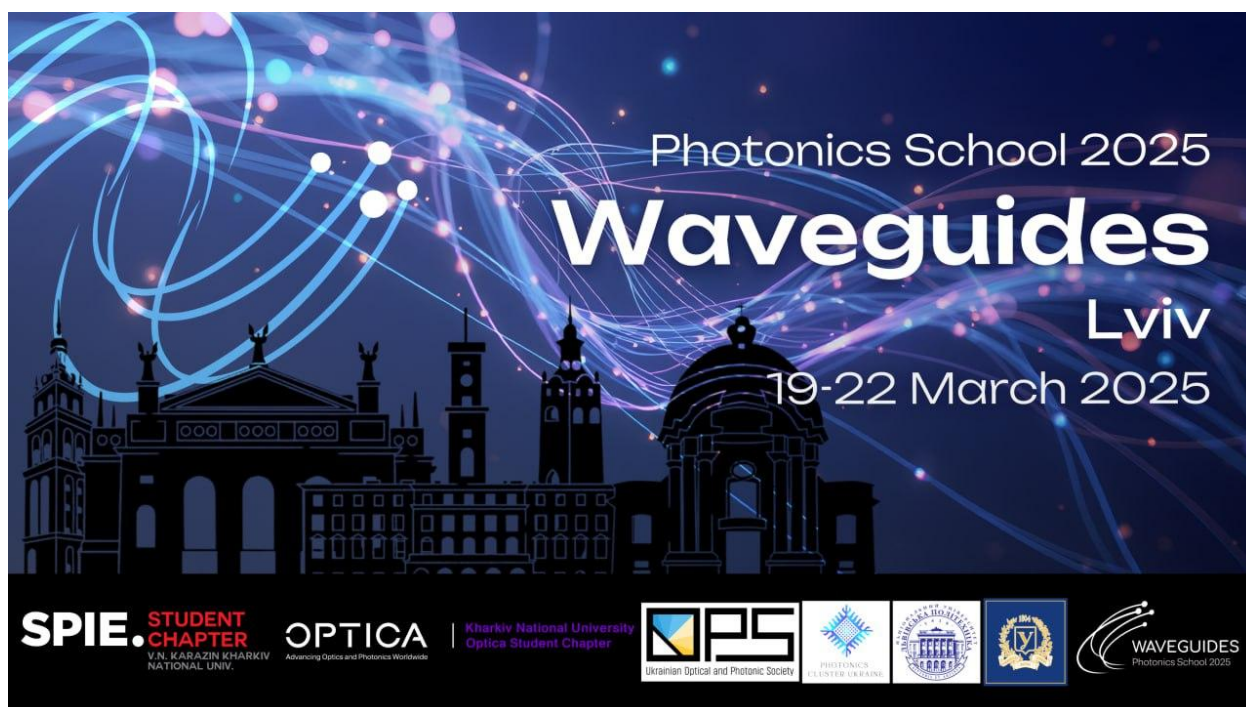


Photonics School 2025

“Waveguides”



19-22 March 2025

Lviv, Ukraine



Ukrainian Optical and Photonic Society

March 25, 2025

Our second edition of Photonics School was held in Lviv from 19 to 22 March. The school was attended by 20 participants from 5 universities across Ukraine. We supported 5 participants coming from Kryvyi Rih, Chernivtsi and Germany with travel grants. In total, we provided 1 special online lecture, 5 in-person lectures and 5 practical classes. The topics of classes include general waveguide theory, dielectric and hollow rectangular waveguides, optical fibers and nanostructured fibers, magnetic semiconductor waveguides, photonic-crystal and metamaterial waveguides, metasurfaces, machine learning for design of special-purpose waveguides. The School culminated in research projects in which participants, divided into 4 teams, conducted their own research using the knowledge and skills they gained during the lectures and practical classes.

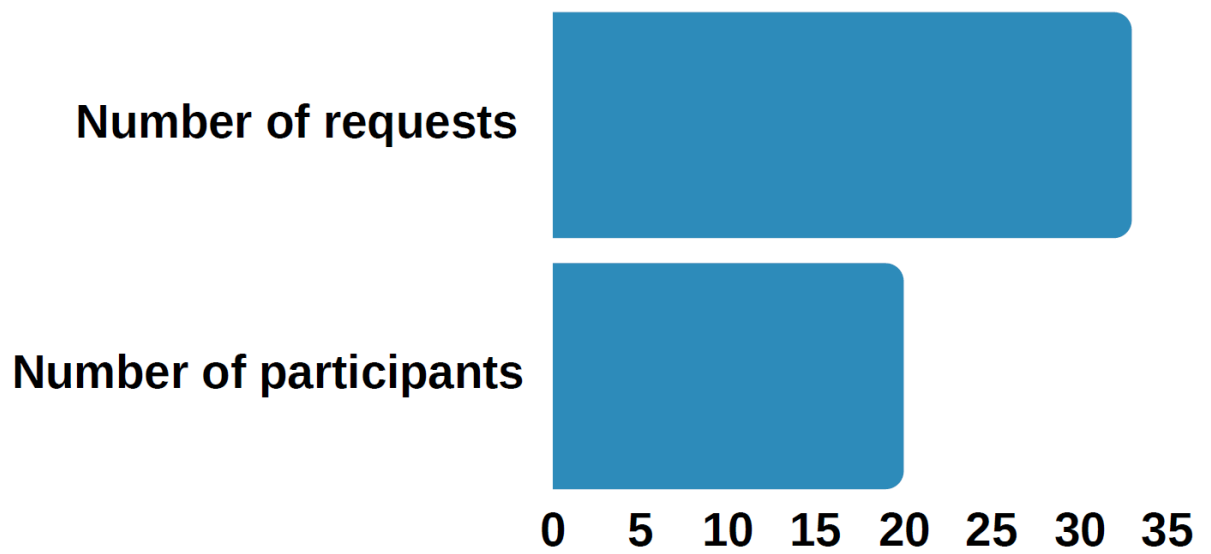
Besides, we organized the poster session, where the participants presented their theses and research works. The Best Poster Award was given to “Wire metamaterials of new generation” by Mykola Khobzei from Yuriy Fedkovych Chernivtsi National University. Moreover, we introduced an additional special prize “Photonics School Chair’s Award”, which was granted to Nataliia Kuzyk from Lviv Polytechnic National University. Finally, the intensive work of the School was accompanied by excursions and evening board games. All participants received the certificates recognizing their progress during the School.

We would like to express our deep gratitude to the Local Organizing Committee led by Prof. Iryna Yaremchuk and Lviv Polytechnic National University for their incredible work and hosting of this event. We are extremely grateful to our lecturers Prof. Markus Schmidt from Leibniz Institute of Photonic Technology, Vladimir Tuz from V. N. Karazin Kharkiv National University and Anton Hlushchenko from Kharkiv Institute of Physics and Technology. We also thank Student Society "Karazin Photonics" (SPIE and Optica student chapters), Photonics Cluster Ukraine, EU-funded HELIOS project and V. N. Karazin Kharkiv National University for funding, supporting and promoting this event.

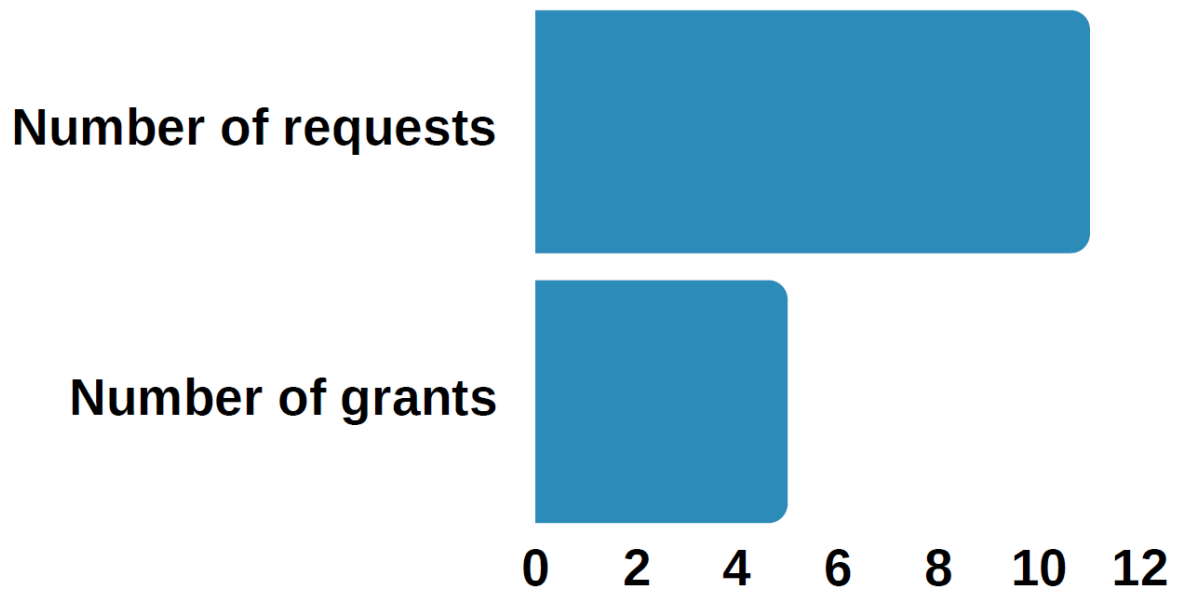
Glory to Ukraine!

Chair of Program and Organizational Committee,
Oleh Yermakov

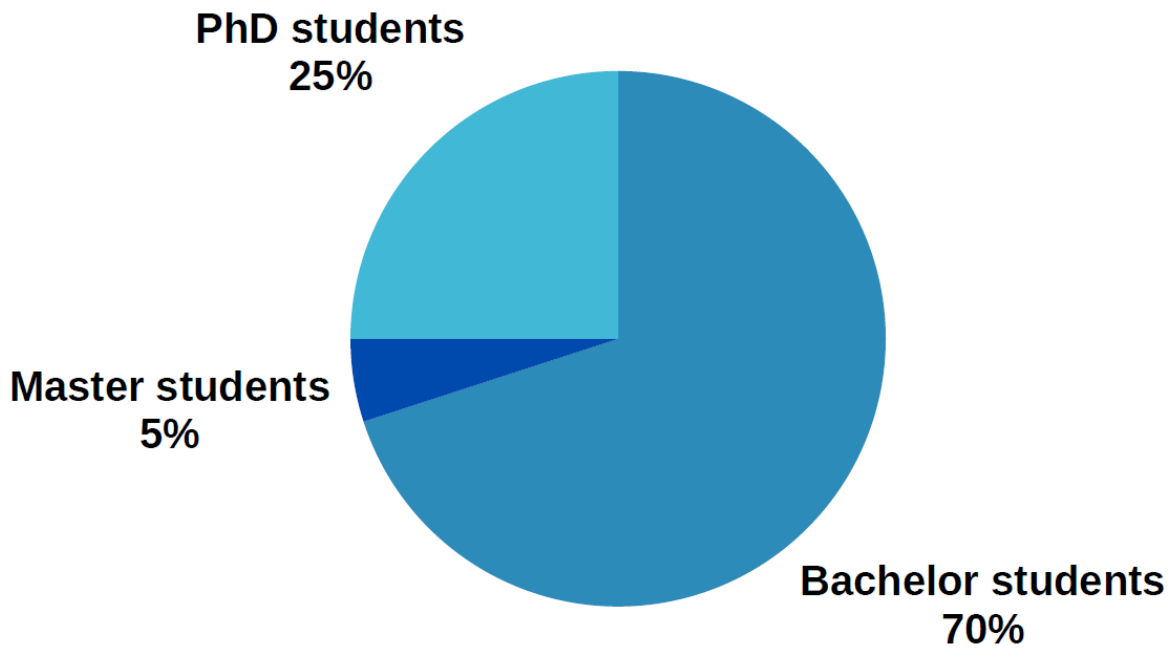
PARTICIPATION



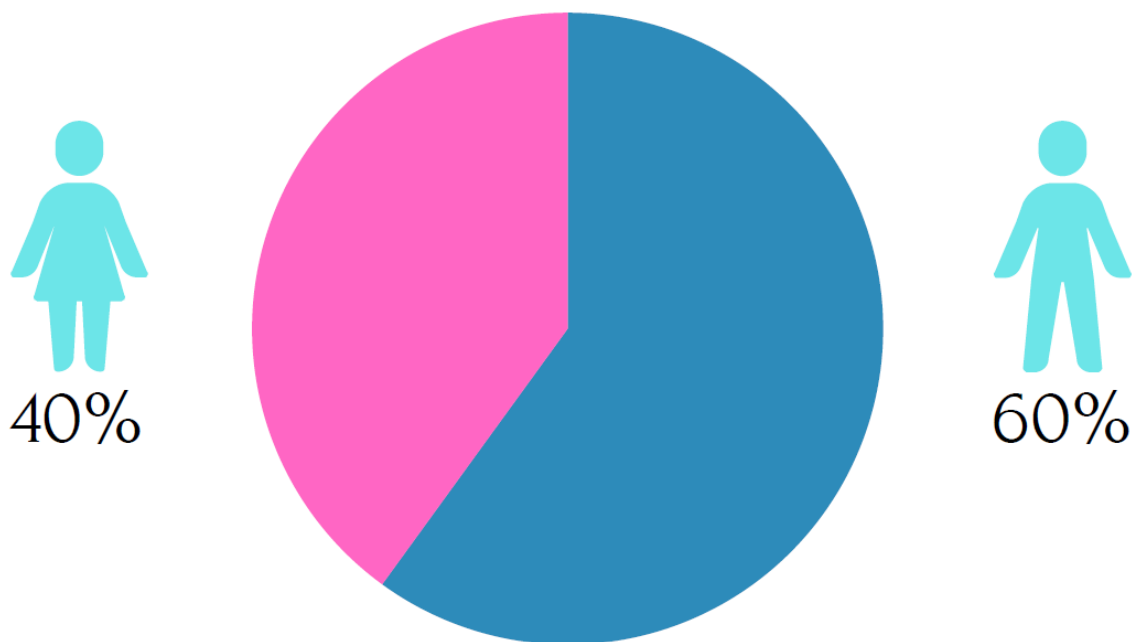
TRAVEL GRANT



LEVEL OF EDUCATION



GENDER EQUALITY



Opening ceremony





Lectures and classes





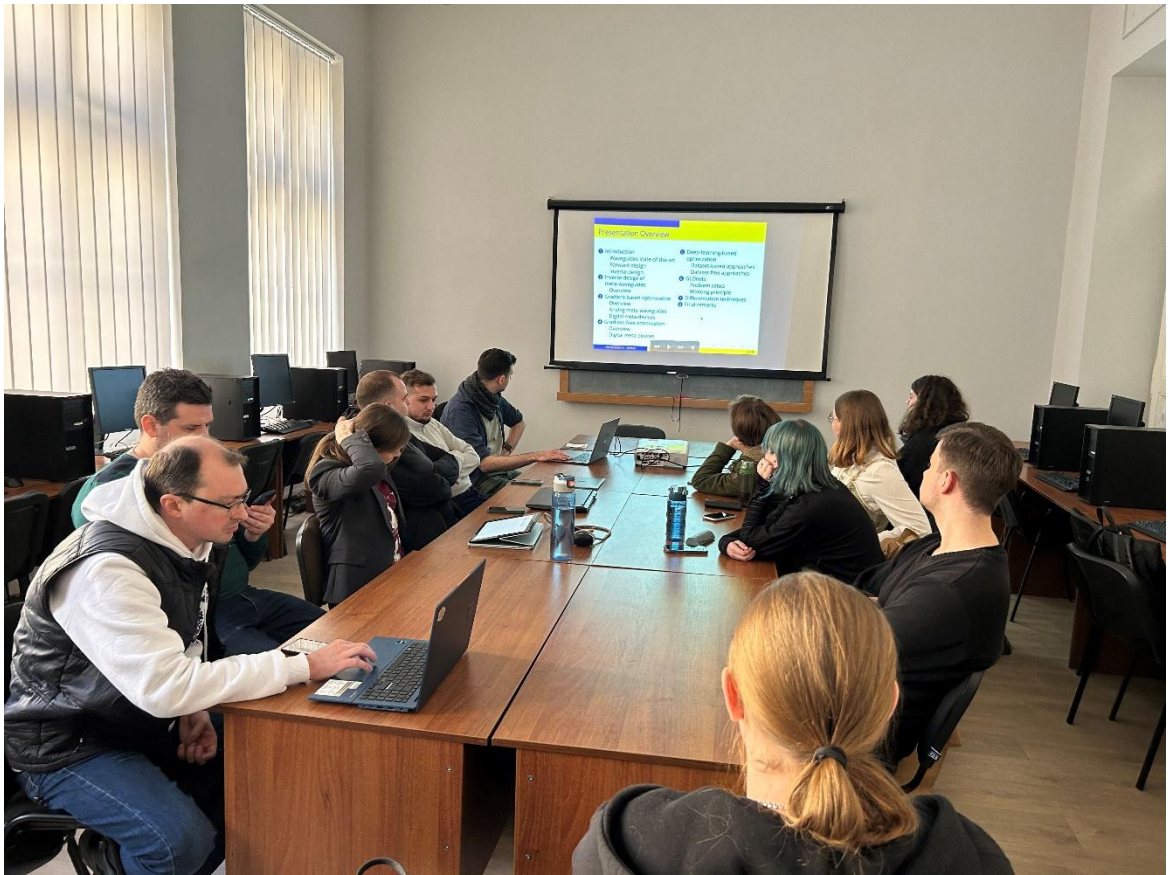


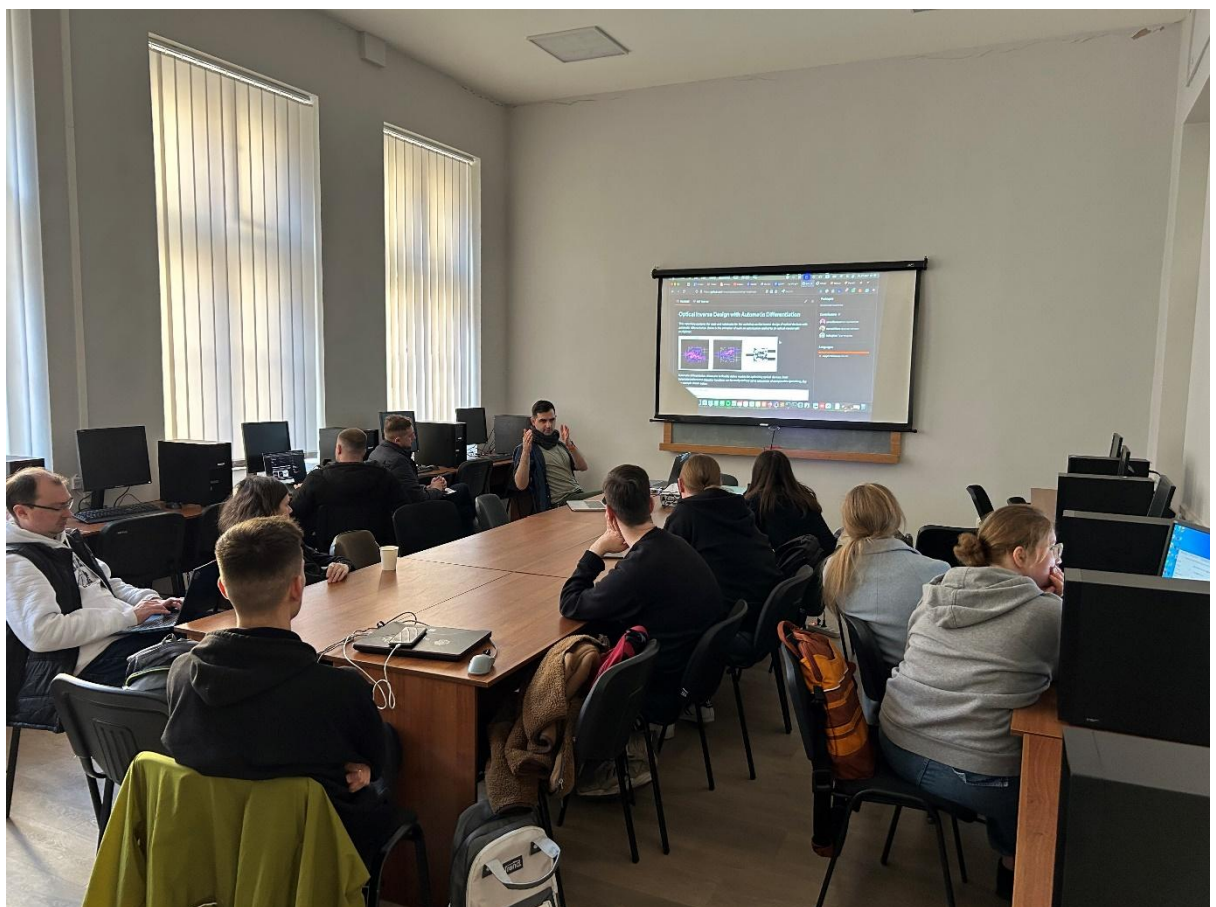














Poster-session and scientific discussions



Board games evening



Excursions





Closing ceremony









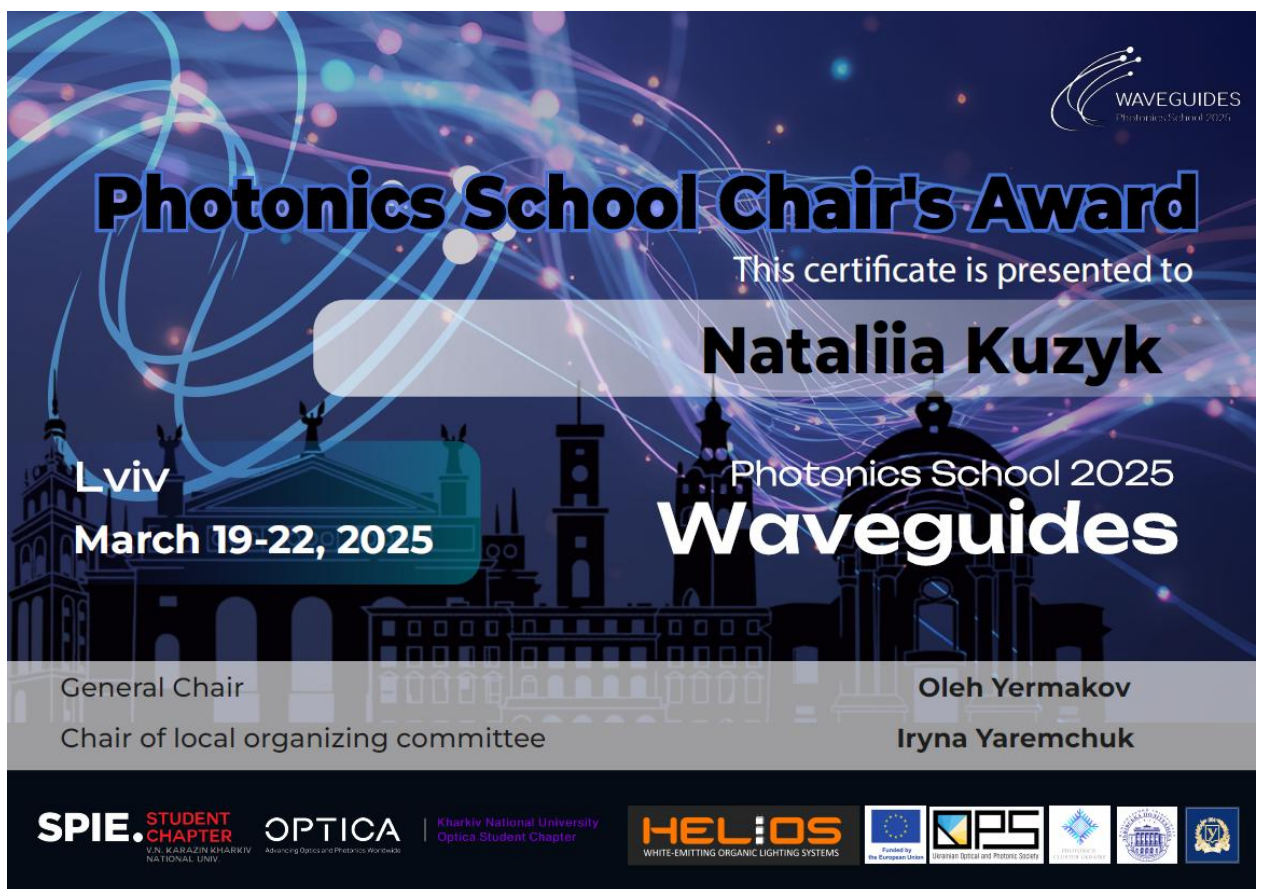












Participants feedback

FEEDBACK

THE ATMOSPHERE WAS WELCOMING AND RELAXED, MAKING THE FOUR DAYS BOTH ENJOYABLE AND RICH IN INFORMATION. I ESPECIALLY APPRECIATED THE BOARD GAMES EVENING, AS WELL AS WORKING ON THE FINAL SCIENTIFIC PROJECT

THE TEAM WAS FRIENDLY, AND THE LECTURERS CREATED A COMFORTABLE LEARNING ENVIRONMENT—THEY WEREN'T AFRAID TO MAKE JOKES DURING LECTURES AND WERE EASY TO TALK TO OUTSIDE OF CLASS

I APPRECIATED THE OVERALL ORGANIZATION, THE PROFESSIONALISM OF THE LECTURERS, AND THE THOUGHTFUL STRUCTURE OF THE PROGRAM

THE PRACTICAL CLASSES AND GROUP WORK WERE BOTH ENGAGING AND EDUCATIONAL

IT WAS A TRULY GREAT EXPERIENCE. I ENJOYED EVERY PART OF IT, BUT THE POSTER SESSION, LECTURES, AND PRACTICALS WERE THE MOST MEMORABLE

THE EXPERIENCE BROUGHT NEW ACQUAINTANCES, VALUABLE KNOWLEDGE, AND A GREAT ATMOSPHERE. THE OPEN COMMUNICATION WITH LECTURERS ON BOTH SCIENTIFIC AND EVERYDAY TOPICS WAS ESPECIALLY MEANINGFUL FOR STUDENTS AND YOUNG RESEARCHERS

OVERALL, MY IMPRESSIONS ARE VERY POSITIVE. THE SCHOOL WAS WELL-ORGANIZED, AND THE STUDY STRUCTURE WAS CLEAR AND EFFECTIVE. I PARTICULARLY ENJOYED THE PRACTICAL SESSIONS AND THE OPPORTUNITY TO WORK ON INDIVIDUAL PROJECTS. THE BALANCE BETWEEN ACADEMIC CONTENT AND SOCIAL ACTIVITIES WAS EXCELLENT

I LIKED EVERYTHING IN GENERAL, BUT THE PRACTICAL SESSIONS STOOD OUT, ESPECIALLY WHEN WE CONDUCTED SIMULATIONS IN COMSOL

THE HIGHLIGHTS FOR ME WERE THE HIGH-QUALITY LECTURERS, THE STRONG MATERIAL SUPPORT, AND THE WELL-PLANNED LEISURE ACTIVITIES

THE POSTER SESSION WAS A COMPLETELY NEW EXPERIENCE FOR ME. I FOUND IT EXCITING TO EXPLAIN MY WORK TO PEOPLE SEEING IT FOR THE FIRST TIME AND TO HEAR THEIR INTERPRETATIONS AND QUESTIONS

General Chair

Oleh Yermakov

V. N. Karazin Kharkiv National University

Leibniz Institute of Photonic Technology

Program and Organizing Committee

Vlad Guz, Artem Hrinchenko, Oleh Demianyk, Anton Ovcharenko

(V. N. Karazin Kharkiv National University)

Local organizing committee

Iryna Yaremchuk (chair), Tetiana Bulavinets, Serhii Melnykov

(Lviv Polytechnic National University)

Sponsors and partners

Student Society "Karazin Photonics" (SPIE and Optica student chapters)

Ukrainian Optical and Photonic Society

Photonics Cluster Ukraine

EU-funded HELIOS project

Lviv Polytechnic National University

V. N. Karazin Kharkiv National University