

## EUCYS 2024 Prizes

European Union Contest for Young Scientists 2024, Katowice

### The First Prize

Name	Gender/Age/Nat.	Project title
Piotr Olbryś	Male 19 Poland	Design of new pyrene-4,5,9,10-tetraone-based heterocyclic derivatives as high-capacity organic cathode materials: a density functional theory study
Nikhil Vemuri	Male 16 United States of America	ANOMaLY: A Real-Time Globalized System for Effective Regional Mitigation of Agricultural Nitrous Oxide Emissions
Lamia Music	Female 15 Austria	Sustainable and Advanced Approaches to Dye-Sensitized Solar Cells
Aleksandra Petkova	Female 17 Bulgaria	Theoretical and Experimental Investigation of Ship Wakes

## The Second Prize

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Seán O'Sullivan	Male 18 Ireland	VerifyMe: A new approach to authorship attribution in the post-ChatGPT era
Adam Kovalcik	Male 18 Slovakia	Design and synthesis of new green furan-based hemisynthetic perfumery compounds derived from agricultural waste
Leon Verreijt	Male 17 Netherlands	Designing, building, and testing a multi-wire proportional chamber
Ann Wang	Female 17 Canada	Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy

## The Third Prize

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Angela Cao	Female 15 Canada	S2S: AI-Powered Translation Between Sign and Spoken Languages
Nicolas Dominic Huber	Male 19 Switzerland	Pushing the Limits - Active Safety in Paragliding
Kamilė Milkintaitė	Female 19 Lithuania	Towards Improved Brain Tumor Treatment: Novel Therapeutic and Diagnostic Targets
Márton Krisztián Hegedűs	Male 19 Hungary	Photocatenane - Robotics on the Molecular Level

**Jury Special Award**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Ido Somekh	Male 14 Luxembourg	AllergyScan
Leonardo Magnani	Male 14 Luxembourg	AllergyScan

**SIYSS**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Piotr Olbryś	Male 19 Poland	Design of new pyrene-4,5,9,10-tetraone-based heterocyclic derivatives as high-capacity organic cathode materials: a density functional theory study
Aleksandra Petkova	Female 17 Bulgaria	Theoretical and Experimental Investigation of Ship Wakes

**LIYSF**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Lamia Music	Female 15 Austria	Sustainable and Advanced Approaches to Dye-Sensitized Solar Cells
Adam Kovalcik	Male 18 Slovakia	Design and synthesis of new green furan-based hemisynthetic perfumeric compounds derived from agricultural waste

**ESA**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Delyan Lyubomirov Boychev	Male 18 Bulgaria	SYNTHETIC IMAGE DETECTION VIA SUPERVISED CONTRASTIVE LEARNING

**CERN**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Leon Verreijt	Male 17 Netherlands	Designing, building, and testing a multi-wire proportional chamber



**EUROFusion**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Julius Gutjahr	Male 17 Germany	New insights on antibubbles
Maja Leber	Female 16 Germany	New insights on antibubbles

**ESRF**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
FEDERICO BERGO	Male 18 Italy	DSUP Project

**EMBL**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Nathaniel Kashani	Male 17 Israel	T cell engineering as a treatment for IgE-mediated allergy

**ESO**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Manu Kiiskilä	Male 20 Finland	Evolving Deep Architectures: A New Blend of CNNs and Transformers Without Pre-Training Dependencies

**ILL**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Nikolas Pippal	Male 18 Czech Republic	Intraoperative Brain Tumor Detection Using Raman Spectroscopy Data and Machine Learning

**XFEL**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Jakob Quinten Schildhauer	Male 19 Switzerland	Seeing Sound – A New Method For Measuring Vibrations With Cameras

**Regeneron ISEF 2025**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Seán O'Sullivan	Male 18 Ireland	VerifyMe: A new approach to authorship attribution in the post-ChatGPT era
Aleksandra Petkova	Female 17 Bulgaria	Theoretical and Experimental Investigation of Ship Wakes

**World EXPO 2025**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Kamilė Milkintaitė	Female 19 Lithuania	Towards Improved Brain Tumor Treatment: Novel Therapeutic and Diagnostic Targets
Márton Krisztián Hegedűs	Male 19 Hungary	Photocatenane - Robotics on the Molecular Level



**CNIC Prize**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Ludmila Kvasnovska	Female 19 Slovakia	Potential biomarkers of age-related chronic inflammation

**CBE JU**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Julija Skrt	Female 20 Slovenia	INFLUENCE OF HYDROLYTIC ENZYMES ON ANTIOXIDANT EFFICIENCY OF OLIVE LEAF EXTRACTS
Jaša Krevh	Male 19 Slovenia	INFLUENCE OF HYDROLYTIC ENZYMES ON ANTIOXIDANT EFFICIENCY OF OLIVE LEAF EXTRACTS

**Swiss talent forum**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Jack Christopher Shannon	Male 19 Ireland	Global Carbon Sinks: Remote Sensing for Monitoring Peatland Restoration
Hanseon Kim	Male 17 Korea (South)	The Future of Carbon Capture Technology: A Novel Moisture Powered Thin-Film Supercapacitor that Adsorbs Carbon Dioxide

**Expo-Sciences Luxembourg**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Alexandru Turculeț	Male 18 Romania	Complete Solution for PCB Assembly (Kinetic Assemblies)
Tudor Dochia	Male 17 Romania	Complete Solution for PCB Assembly (Kinetic Assemblies)

**EuCheMS**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Janis Bojko	Male 20 Czech Republic	Synthesis of new selective-dual inhibitors of cyclin-dependent kinases

**Transform4Europe study visit**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Nicolas Dominic Huber	Male 19 Switzerland	Pushing the Limits - Active Safety in Paragliding
Annika Moppel	Female 19 Estonia	RUSSIA'S PROPAGANDA IN THE INFORMATION WAR: THE EXAMPLES OF THE FIRST CRIMEAN BRIDGE EXPLOSION AND PROPAGANDA USED BY ROSSIYSKAYA GAZETA
Nora Lara Artico	Female 20 Switzerland	Bacteriophages: a glimmer of hope in medicine - when antibiotics fail to treat bacterial infections

**Silesian Science Festival**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Yujeong Ha	Female 17 Korea (South)	Innovating Crop Protection: Jeju Soil Bacteria-Powered Sea Breeze-Responsive Vaccine System

**Silesian University of Technology**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Ediz Osman	Male 20 Germany	Pioneering the Development of a Carbon-Free VTOL Jet for Civil Aviation



**University of Economics Katowice**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Mohamed Abdalla	Male 16 Egypt	Mouseless Mouse
Mohamed Farrag	Male 17 Egypt	Mouseless Mouse

**Medical University of Silesia**

<b>Name</b>	<b>Gender/Age/Nat.</b>	<b>Project title</b>
Ann Wang	Female 17 Canada	Eradicating Cystic Fibrosis Biofilms by a Novel Non-Toxic, Multi-Pathway Salicylate Therapy
Ridhima Pal	Female 17 Denmark	BMI vs. Body Fat Percentage
Aleksander Zieliński	Male 16 Poland	Impact of the ability to block the pathogenesis of autoimmune diseases with newly designed Fab domains of anti-Baff, anti-April antibodies

## Workshop on Coding Theory

Name	Gender/Age/Nat.	Project title
Artem Kovtun	Male 16 Ukraine	Research of the dynamics of a non-binary system with a directed influence