

The Blue News

7-9 November 2024

Chapter 5



**Ovidius High School
Constanta**

**Eminescu
National College
Iasi**

"Blue Trails - Navigating Ocean Literacy for a Sustainable Tomorrow" is an initiative by Ovidius Theoretical High School, part of the PROBLEU program promoting ocean and water literacy. Supported by the EU's HORIZON program, it aims to enhance students' understanding of ocean sciences and encourage sustainable practices.



From November 7 to 9, 2024, Mihai Eminescu National College welcomed nine students from Ovidius High School Constanța for a dynamic three-day educational exchange.

During this event, participants enjoyed a rich program that included interactive presentations, hands-on chemistry and biology laboratory assignments, and insightful tours exploring the city's history. The itinerary also featured visits to the UMF Simulator Center, the Dancu Water Treatment Plant (Apavital), and the Research and Development Station for Aquaculture and Aquatic Ecology.

DAY 1



**On the first day
we arrived at
Mihai Eminescu
National College**

**We were warmly welcomed and seated in the main hall, where
we watched presentations prepared by the students of Mihai
Eminescu National College.**

The presentations covered a variety of topics, including:

<Analysis of Quantitative and Qualitative Water Parameters

**<Blue History – Study of Rocks and Observation of
Fossilized Marine Forms from the Former Sarmatian Sea at
the Repedea Geological and Paleontological Reserve**

<The Use of Pigments in Plant Development

<Bilingual Project in French: "Le Bleu"

<Interdisciplinary Blue Exhibition

**These presentations highlighted both scientific and cultural
themes, offering a unique and engaging learning experience for
all participants.**





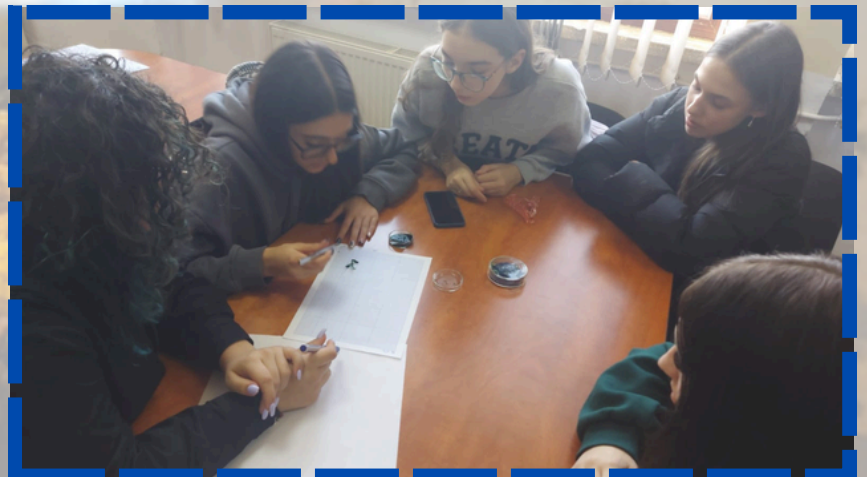
**After the project presentations,
we proceeded to the chemistry lab,
where we conducted a laboratory
assignment.**

**In the lab, we identified ions
present in freshwater using color-
based reagents and measured the
pH levels of the samples.**



After the experiment in the chemistry lab, we went to the biology lab, where we conducted an experiment to identify the influence of colorants/pigments on the germination process in plants.

In this experiment, we likely tested how different colorants or pigments, which may alter light absorption or plant physiology, affected seed germination. We measured and compared each plant and observed the differences in size from one pigment to another.



Later in the evening, we visited the UMF Simulation Center, where we explored the equipment used by future doctors for hands-on practice

The UMF Simulation Center in Iași is a cutting-edge facility that supports training across various medical specialties. The center provides simulation-based education in areas such as surgery, emergency medicine, obstetrics, gynecology, cardiology, and pediatrics. Using high-fidelity mannequins, realistic surgical simulators, and virtual reality modules, the center allows students to practice complex procedures—from laparoscopic surgery and childbirth simulations to cardiac resuscitation and trauma response.



We even had the opportunity to perform a laparoscopy procedure.



DAY 2

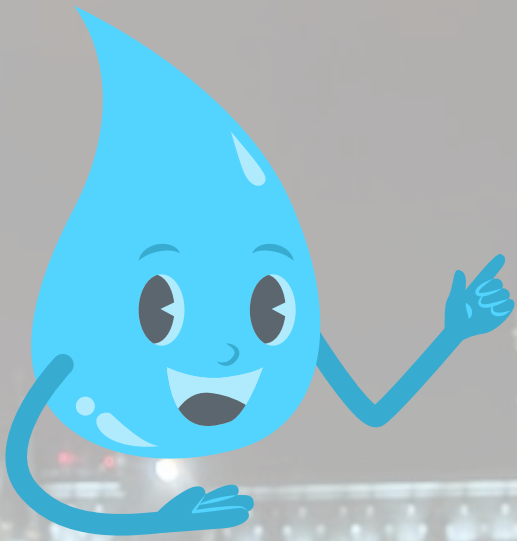


The next day, we woke up early and went to visit the Dancu Water Treatment Plant, managed by Apavital.

The first thing they showed us was a presentation of the water treatment plant layout.



After receiving proper instructions, we went to see the process with our own eyes.



On-site, the Apavital staff guided us along the water's path through the treatment process.

Preliminary Treatment:

Screening: Large debris, such as sticks, rags, and other solid objects, are removed using metal screens.

Grit Removal: Sand, grit, and small stones are settled out .

Sedimentation: In primary sedimentation tanks, heavier organic solids settle to the bottom and form sludge, which is removed for further treatment.



Primary Treatment:

This involves allowing the water to sit in sedimentation tanks, where heavier solids settle to the bottom and are removed as sludge.

Secondary Treatment:

The remaining wastewater undergoes a biological treatment in aeration tanks. Here, bacteria and other microorganisms break down dissolved organic matter, converting it into sludge.



Secondary Sedimentation:

After biological treatment, the water flows into secondary sedimentation tanks where sludge formed by bacteria settles out and is removed. The treated water moves to the next stage, while the settled sludge is processed separately.

Tertiary Treatment :

Filtration: To further remove any remaining fine particles, the water may pass through filters.



After we finished visiting the water treatment plant, we set off towards the Research and Development Station for Aquaculture and Aquatic Ecology.



After arriving at the Research and Development Station for Aquaculture and Aquatic Ecology, we had the opportunity to visit several artificial outdoor ponds. These ponds are carefully managed to simulate natural aquatic environments, providing an ideal setting for studying and supporting fish species.



During our visit, we observed different species of sturgeon. The station's team explained the importance of maintaining ideal conditions for these species, such as stable water temperature and clean habitat.



We also used specialized equipment to measure the oxygen levels in the water. This step is crucial, as adequate oxygen is essential for fish health and growth. The staff showed us how they monitor and regulate these conditions daily, ensuring an optimal environment for the aquatic species they are studying and cultivating.



DAY 3

On the 3rd and last day we went on a tour around the city visiting cultural landmarks

The tour started in the Union Square.

The place where “Hora Unirii” was first played





**We saw mosaics representing
our values from 1970**



The statue of Miron Costin in Iași honors the 17th-century historian and chronicler, celebrating his contributions to Romanian history and literature. It serves as a symbol of cultural pride and intellectual heritage.



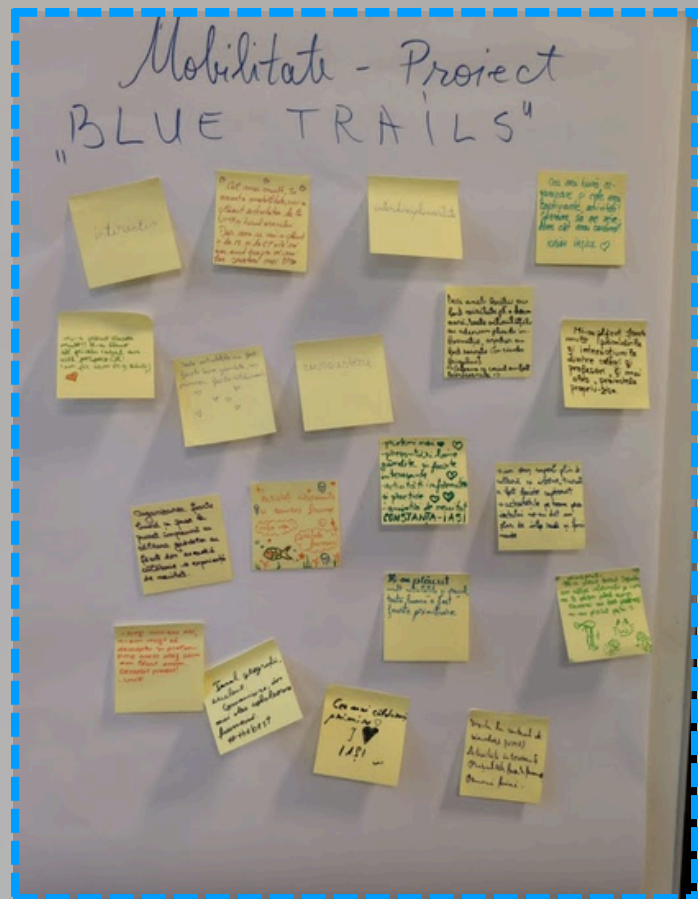
The Iași National Opera House, opened in 1896, is a historic Neo-Classical building and cultural landmark, hosting opera, ballet, and theater performances. It stands as a symbol of the city's artistic heritage.

The St. Parascheva Church is a stunning Orthodox landmark, known for its beautiful architecture and historical significance. It houses the relics of Saint Parascheva, a revered patron saint of Romania, and serves as a major spiritual center, attracting pilgrims from across the country.



Next to St. Parascheva Church is the Biserica Sf. 3 Ierarhi, a 17th-century masterpiece of Moldavian architecture. Dedicated to Saints Basil the Great, Gregory the Theologian, and John Chrysostom, it is known for its intricate exterior and historical significance.

To finish everything off, we returned to the Mihai Eminescu College, where we shared our thoughts and opinions on the day's experiences.



A nighttime photograph of a city street. In the background, a large, ornate clock tower is illuminated. The street is wet, reflecting the city lights. In the foreground, there are several large, dark planters filled with yellow and white flowers. A red car is visible on the left side of the street.

Thank you for reading!

**We appreciate your time and support.
Stay tuned for more updates, and feel free
to share your thoughts with us!**