

Stockholm Junior Water Prize in Israel

Under the auspices of the Iby and Aladar Fleishman Faculty of Engineering,
Tel Aviv University and the Jewish National Fund – USA in memory of Zevi Kahanov
With the Support of the Raquel and Manuel Klachky Fund

תחרות פרס המים של שטוקהולם לנוער בישראל

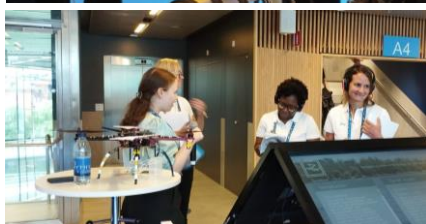
בחסות הפקולטה להנדסה ע"ש איבי ואלדר פליישמן, אוניברסיטת תל אביב
נ'ואיש נשיונל פאנד ארה"ב אשר תמיכתה בפרויקט מוקדשת לזכרו של זאבי כהנוב ז"ל
בתמיכת קרן ראקל ומנואל קלצקי

Stockholm Junior Water Prize 2023 – International Summary

Stockholm Junior Water Prize is an international competition that brings together creative and ambitious young pupils from all over the world, encouraging their continued interests in water and sustainability issues. In 2023, 45 finalists from 29 countries attended World Water Week at Stockholm and presented their creative solutions to broad aspects of water and sustainability issues.



The 2023 SJWP finalists and HRH Crown-Princess Victoria of Sweden at the ceremony.



Mika Rotbart, a UAV (unmanned aerial vehicles) program participant from Hakfar Hayarok Youth Village High-School in Ramat HaSharon has represented Israel in the International competition of 2023. Her project titled "An Autonomous Pollution Detection System for Water Bodies Using Drones," dealt with optimization of water pollution detection using drones. Under the supervision of Mr. Liam Tal, Mika has built and field-tested a prototype of an autonomous system that uses a drone to collect water samples from multiple water bodies within a 10km radius at conditionally predetermined intervals and transport them to portable analytical labs for frequent, cost-effective, and autonomous water testing, and analysis. If the results exceed the specified regulatory threshold level (RTL) set by the user, an alert is activated. If pollution is detected, the system recommends conducting further tests in a traditional lab to determine the specific nature of the contamination. The system can be implemented around the world and customized according to local needs.

Mika has demonstrated professionalism motivated by her ambition and scientific curiosity in three face-to-face interviews. The idea she displayed during the interviews showcased the innovative as well as entrepreneurial thinking as well as high level presentation skills, which impressed the competition jury:

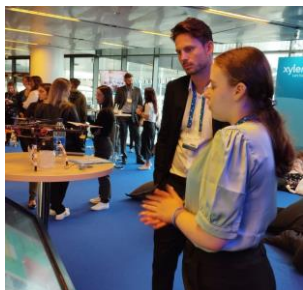
<https://www.youtube.com/watch?v=icVaq5Ve6G0&list=PLMji74tzbBsPB1cOH-0aiYkBnwChzZ5G&index=19>

Stockholm Junior Water Prize in Israel

Under the auspices of the Iby and Aladar Fleishman Faculty of Engineering,
Tel Aviv University and the Jewish National Fund – USA in memory of Zevi Kahanov
With the Support of the Raquel and Manuel Klachky Fund

תחרות פרס המים של שטוקהולם לנוער בישראל

בחסות הפקולטה להנדסה ע"ש איבי ואלדר פליישימן, אוניברסיטת תל אביב
ג'ואיש נשיונל פאנד ארה"ב אשר תמיכתה בפרויקט מוקדשת לזכרו של זאבי כהנוב ז"ל
בתמיכת קרן ראקל ומנואל קלצ'קי



Mika presents her idea to
WWW participants.

During the intensive week in which Mika has stayed in Stockholm she met imaginative young researchers from all over the world and exchanged ideas with water professionals, who exhibited their work at the exhibition and the conference.

Together with other finalists, she has enjoyed several social and educational activities organized by SIWI (Stockholm International Water Institute) team: visited the headquarters of Xylem Inc., the global sponsor of the competition, enjoyed a guided tour at Skansen Museum and, of course, roamed the streets of Stockholm day and night.

As a part of a long time tradition, the Israeli team has been invited to the Embassy of Israel in Sweden. Mr. Ziv Nevo Kulman, the current Ambassador and Mrs. Arezoo Hersel-Rohila Deputy Chief of Mission, have made the Israeli team feel at home abroad and gave Mika the opportunity to present her project in Hebrew. New venues of cooperation have been discussed and hopefully will be organized next year.

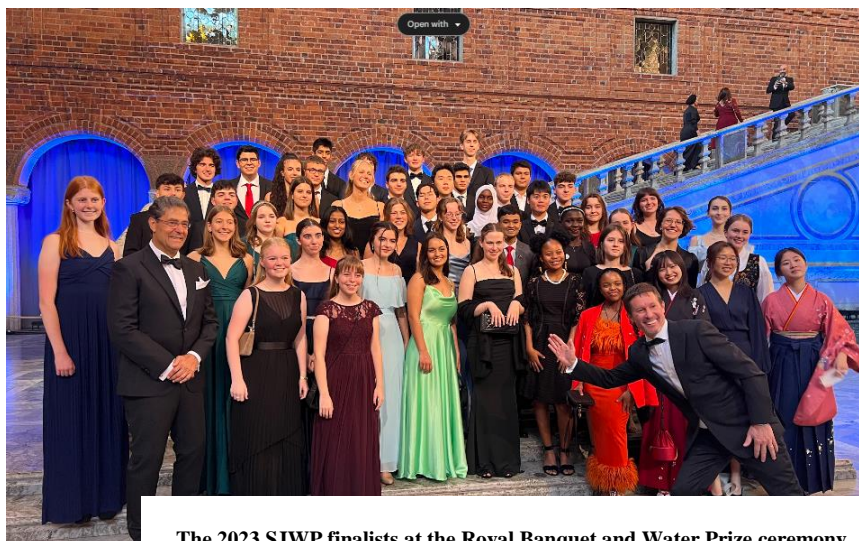


From left to right: Mr. Liam Tal, Mr. Uri Schor, Mr. Ziv Nevo Kulman, Mika Rotbart, Ms. Helena Tenenbaum and Mrs. Arezoo Hersel-Rohila on the bank of water by the Israeli Embassy



At the most exciting moment for the finalists, they were honored by the presence of H.R.H. Crown-Princess Victoria of Sweden, the patron of the prize. Mika had the opportunity to meet HRH prior to the award ceremony.

The SJWP finalists were also invited to the Royal Banquet at the famous Stockholm City Hall where Dr Andrea Rinaldo (gentleman on the left) was awarded the 2023 Water Prize by HM King Carl XVI Gustaf.



The 2023 SJWP finalists at the Royal Banquet and Water Prize ceremony.

Stockholm Junior Water Prize in Israel

Under the auspices of the Iby and Aladar Fleischman Faculty of Engineering,
Tel Aviv University and the Jewish National Fund – USA in memory of Zevi Kahanov
With the Support of the Raquel and Manuel Klachky Fund

תחרות פרס המים של שטוקהולם לנוער בישראל

בחסות הפקולטה להנדסה ע"ש איבי ואלדר פליישימן, אוניברסיטת תל אביב
ג'ואיש נשיונל פאנד ארה"ב אשר תמיכתה בפרויקט מוקדשת לזכרו של זאבי כהנוב ז"ל
בתמיכת קרן ראקל ומנואל קלצ'קי



Though Mika did not receive an international prize this year, she has represented Israel in a very honorable manner. Several members of the jury have mentioned that the project was seriously discussed since it has a lot of potential and thus urged Mika to continue working on it. Mika was also invited to discuss her project on a live "talk show" answering audience's questions.

Besides, as Mika has said, it has been a once in a lifetime experience, with a chance to meet interesting talented colleagues and now she has a place to stay at in 29 countries around the world.



2023 **SJWP Winner** of the SJWP competition for her research on the removal of carbon dioxide and oil products from the ocean is **Naomi Park** from **USA**.

HRH Crown Princess Victoria of Sweden presented the winner with her award during a ceremony at World Water Week in Stockholm.



The **Diploma of Excellence** was awarded to **Ayşe Pelin Dedeler** from **Turkey** for her study on how to capture microplastics with magnetic nano-adsorbents and remove them from the water using strong magnets.



The **People's Choice Award** went to **Fernando de Silva Hernández** and **Carlos Erquizio** from **Mexico**, completing the line-up of winners.

Photos: https://www.flickr.com/photos/siwi_water/with/53140667475/

This was also a very fruitful week for the national organizers, academic advisors, teachers and accompanying people. A network of international cooperations was established during several social and professional gatherings:

Stockholm Junior Water Prize in Israel

Under the auspices of the Iby and Aladar Fleishman Faculty of Engineering,
Tel Aviv University and the Jewish National Fund – USA in memory of Zevi Kahanov
With the Support of the Raquel and Manuel Klachky Fund

תחרות פרס המים של שטוקהולם לנוער בישראל

בחסות הפקולטה להנדסה ע"ש איבי ואלדר פליישמן, אוניברסיטת תל אביב
ג'ואיש נשיונל פאנד ארה"ב אשר תמיכתה בפרויקט מוקדשת לזכרו של זאבי כהנוב ז"ל
בתמיכת הרו ראהל ומנואל קלאכקי



A Welcome Reception for national organizers at Scandic Klara Hotel and later during the week at the Mexican Embassy.



Hiding from the rain during the water-guided tour at Skansen Museum.
Meeting the Xylem sponsors team at dinner for professional discussion



During preparations for the ceremony and national organizers Seminar concentrating on generating new realistic ideas for improving SJWP

The Stockholm Water Prize in Israel team would like to express thanks to international SIWI team, the Faculty of Engineering of Tel-Aviv University, the Raquel and Manuel Klachky Fund, the Jewish National Fund USA (in memory of Zevi Kahanov), for their continuous support. The support of Water Research Center at TAU, Israel Water Authority and the Ministry of Education is also heartily acknowledged.

Reported by: Helena Tenenbaum, National Organizer of SJWP in Israel