

SusWaler LEWSLETTER

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The European Researchers'
Night is a Europe-wide public event, which displays the diversity of science and its impact on citizens' daily lives in fun, inspiring ways.

Next event

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Other info on the website www.suswater.eu

The Project: SusWater in a nutshell

SusWater is a multidisciplinary and interdisciplinary consortium aiming to promotes the development of sustainable integrated approaches to achieve contaminants of emerging concern (CECs) and potentially toxic elements (PTEs) removal from contaminated waters.

SusWater assess the quality of water in a pilot wastewater treatment plant (in Spain) and in two aquaculture sites (Italy, Thailand) by monitoring CECs and PTEs.

Mini-Symposium

Mini-Symposium on Advanced Materials for Environmental Cleanup passed 12th July 2023 in the Kitakyushu Institute of Technology (Kitakyushu, Japan).

The symposium featured presentations by leading professors from Italy, Spain and Japan - Paola Calza, Claudio Medana, Mery Malandrino,



Enzo Laurenti, Maria Jose Lopez-Muñoz, Naoya Murakami and Teruhisa Ohno.

All the details are on our website and social media. Join us.





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The Consortium

The SusWater project involves a total of nine partners: four European Universities, two European non-academic companies, plus three entities belonging to third countries.

List of partners:

- Università degli Studi di Torino (UNITO, Italy)
- Aalborg Universitet (AUU, Denmark)
- Politecnico di Torino (POLITO, Italy)
- Universidad Rey Juan Carlos (URJC, Spain)
- Universidade de São Paulo (USP, Brazil)
- Azienda Agricola San Biagio (AASB, Italy)
- Department of Science Service (DSS, Thailand)
- Kyushu Institute of Technology (KIT, Japan)
- Metrohm Hispania (MH, Spain)



ER/ESR Experiences

Episode 3 - Cristina Paganini

I am a professor of Inorganic Chemistry at the Department of Chemistry of the University of Turin. I have been involved in the SusWater project since the beginning and within the project I am involved in the preparation and characterization of new materials for the abatement of pollutants with photocatalysis. I held my first secondment last July 2023 at the Science Service in Bangkok.

I had never been to an Asian country before, and before leaving I was excited and particularly anxious, also because after the years of Covid19 it was the first intercontinental trip. I prepared for the departure planning not only the stay in Bangkok.

After a long journey I finally arrived in Bangkok and the impact with the climate was very impressive, I don't think I have ever felt such a heat. As soon as I left the airport I was assailed by a flow of warm and humid air that added to the fatigue of the flight I tried a lot.

The search for the house I had rented turned out to be more complex than expected, I had not had enough specific indications of the address and the poor taxi driver, very kind, was bottled in the traffic



of the city. We drove around for over an hour before arriving at our destination. The apartment, small but very nice was located on the 18th floor of a beautiful building, the view of the city breath-taking. Bangkok, in its immensity was all there in front of my window, you could not see the end of the lights, a boundless city. I'm crazy about the mango sticky rice!!!

The next morning, I was able to reach, the Science Service welcomed by Dr Jenjira Phuriragpitikhon, who kindly showed me my office, an entire room dedicated to the SUSWater project with a plaque. I would have shared the office with two Spanish PhD students at that time visiting the department. Jenjira then took me on a tour of the institute and the market where all the staff bought lunch daily. I would soon have realized that markets and stalls are the beating heart of Bangkok, and it cannot do without.

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Over the days I met other people who in turn, depending on their skills, took care of me and my

needs. I attended the X-ray laboratory, equipped with a very modern in strument with 6 sample holders at the same time, and



the laboratory of electron scanning microscopy.

Thanks to the kindness and professionalism of the staff I was able to get very interesting results on the samples that I had brought to analyse. The Science Service group led by Dr. Wachirapun Punkrawee organized a visit to the Department of Energy, Environment and Climate change, outside Bangkok which was very informative and interesting. Together with my colleague Ornella Abollino who joined me a couple of weeks after my arrival, we are thinking about a collaboration with this department with the Erasmus project.



The next secondment will be in Japan at the Kyushu Institure Technology (KIT). I can't wait to leave and discover another piece of Asia.

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Episode 4 - Ornella Abollino

I am a professor of Analytical Chemistry at the Department of Drug Science and Technology of the University of Torino. My role in Suswater project mainly falls in WP4, i.e. Monitoring of CECs, PTEs and assessment of antimicrobial activity and ecotoxicity. One of the activities in WP4 is the analysis of waters from aquaculture sites.

From 24/07/2023 to 23/08/2023 I held a secondment as ER at the Department of Science Service in Bangkok, Thailand.

I lived for one month in a small but nice apartment, defined as "Cozy studio" by the owner, in a large block in Sukhumvit area, a district in Bangkok where many foreigners reside. My first days in Thailand were highly facilitated by the advices I received from Dr. Elisa Gaggero, an ESR who had spent some months in that country, and from Prof. Cristina Paganini, an ER from the University of Torino who reached Thailand at the beginning of July 2023. So I had no trouble in exchanging money, buying a new SIM card, getting

to my apartment and using public transport to reach the DSS building.



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During my first day in DSS, I received a warm

welcome from the research group involved in Suswater, in particular Dr. Amornpon Changsuphan, Dr. Jenjira Phuriragpitikhon, Dr. Wachirapun Punkrawee and the rest of the staff. I also had the chance to meet Dr. Orasa Onjun, the Director of the Chemicals and consumer Products Division. A whole office in DSS is dedicated to guests belonging to Suswater project. At the beginning of my stay I shared it with two nice PhD students from Spain, and with prof. Paganini, and I remained alone when they ended their secondment. Dr. Whachirapun took care of me for any scientific or practical needs during my stay in Thailand.

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I had the great chance to go with him and with other members of the staff and visit two fish farms, where we collected water samples from different sites. The water was analyzed on site for the main parameters (pH, conductivity, dissolved oxygen). In the next days the samples were filtered and prepared it for the transport to Torino at DSS. Water sampling and pretreatment were carried out with the helpful assistance of the technical staff of the research group. During my secondment I also gave a seminar on my research studies at DSS; our hosts also took Prof. Paganini and me to visit the Asian Institute of Technology; later I gave a second seminar there.

I really enjoyed everyday life in Bangkok. People are kind and polite. I tasted a lot of new (for me), flavoursome foods cooked in the small stalls present everywhere in the town. I had plenty of delicious fruits. I had the chance of eating... insects for the first time in my life! But sometimes I bought more usual (for me) food from a large supermarket, which had a wide assortment of Italian items, from pasta to cookies to mineral water. I greatly appreciated the public transports in Bangkok, especially the Bangkok Mass Transit System (BTS) skytrains, which enabled me to move safely and quickly in the town. During the weekend I visited the magnificent temples and the Gran Palace, on my own or with a local guide, who gave me lot of information on the

local culture. I remember a nice lunch with C r i s t i n a Paganini, who showed me the huge Chatuchak Market, where I bought gifts for



my family and friends and also experienced a Thai massage.

Overall, my secondment to Thailand was very fruitful from the scientific and professional point of view as well as for my cultural and human experience. My next secondment will be in Spain.

European Researchers' Night 2023

SusWater people of UNITO and POLITO participated at the UNIGHT in Turin (29th-30th September 2023). Like every year, for this edition too, the SUSWater's researchers could not miss appointment!



"NEW LIFE TO POLLUTED WATER" together with adults and children, we tried to purify water! We learnt that thanks to extraordinary new materials and even sunlight can be enough.

More details are on the our website.



NEXT EVENTS

Winter school

11th-13th March 2024 in the Turin (Italy).

EU-Thailand conference on circular economy & food technology

28th November 2023, Bangkok (Thailand) - The Athenee Hotel.