

**PROJECT, PARTNERS
& BENEFICIARIES**



**SUMMER SCHOOL AND
THIRD MEETING IN
PALAISEAU (FR)**



**ESR EXPERIENCES:
EPISODE TWO**



**NEXT MEETING:
SEPTEMBER 2019
IN TRABZON (TR)**



AQUALITY NEWSLETTER

Welcome again to the AQUALITY newsletter. In this third number you can find the second episode of "ESR Experiences" (where three young researchers wrote about their experiences into the AQUALITY project), a short report of the project activities that took place in the first half of 2019 and information about the next events. Enjoy the reading!

International Winter School on Mass Spectrometry

The Laboratoire de Chimie Moléculaire from École Polytechnique organized the School on Mass Spectrometry in Palaiseau (France) on March 4-5th. The event organized by Stéphane Bouchonnet and his group, addressed the mass spectrometry fundamental concepts and its potential environmental application, with particular focus on water analysis for the identification of contaminants and their transformation products. The lectures covered a large field on this complex technique preparing the ERS with essential skills for the challenging world of analysis and treatment of water. The School was also marked by the lectures of two ESR experts in the field, Zsuzsanna Varga and Dimitra Papagiannaki.

Workshop on Substances Prioritization

A workshop on substances prioritisation was organized on 6th March 2019 by INERIS in collaboration with the NORMAN network. During the first part of the workshop, it was possible to examine the Urban Waste Water Treatment Directive (UWWTD 91/271/EEC) and to get an overview of the results of relevant EU projects on Contaminants of Emerging Concerns (CECs) in urban wastewater (UWW). Successively, an analysis on how to select priority substances was performed and the Norman Prioritisation Scheme was explained. Then the participants, distributed in groups having each a moderator, discussed on different questions: whether it is possible to define a common list of European "priority" CECs in urban wastewater, what should be the priority targets for innovative treatment technologies, and whether or not it is necessary to set new emission limit values for specific priority contaminants. The final report of each group was presented to the plenary for final discussion and possible recommendations for policy review.

Third AQUALITY Meeting & Mid-Term check

The meeting has been organized by Stéphane Bouchonnet and held on 7-8th March 2019 at École Polytechnique, Palaiseau (France). The meeting started with a general introduction on the purpose of the meeting by the Project Coordinator Paola Calza and the REA Project Officer, Apostolos Paralikas. Then a Tour de table followed where the scientists-in-charge and/or the representatives of beneficiaries and partner institutions gave short presentations on their research teams and roles within the network.



The participants to the meeting in Palaiseau

After that, the REA Project Officer explained to the audience the rules on the monitoring of the project in the framework of the mid-term check and the coordinator presented her overall report about all the administrative and financial activities carried out so far. Soon after, fellows' individual presentations and discussions followed: each of them focused on her/his background and individual research project.

In the second day, the coordinator chaired the WP1-Project management session. Successively, the sessions relative to the WP2-4 took place, in each session a brief introduction of the person in charge for the WP was followed by the presentation of the results by each ESR and a final discussion with planning of future activities.

Then, Emilia Sannino introduced the WP7-Data management, dissemination and outreach session giving a presentation on the status of outreach and dissemination activities and inviting all the participants to update the information of their activities for the project's archive and the website. A general discussion followed the presentation and the network decided to take into account the specific EU channels for dissemination and find a user-friendly right way to share scientific data between the researchers.

Finally the Supervisory Board Meeting chaired by the coordinator, and a final section about the planning of the next project meetings concluded the network activities.

The AQUAlity project

- **AQUALity** is a project funded by the European Union under the Marie Skłodowska-Curie Actions (MSCA) – Innovative Training Networks (Call: H2020-MSCA-ITN-2017). Project N. 765860
- **AQUALity** is a multidisciplinary European Training Network aiming to generate and promote 15 highly skilled scientists in the field of the removal of pollutants present in very small amount in aqueous systems.
- **Info:** www.aquality-etn.eu/the-project/

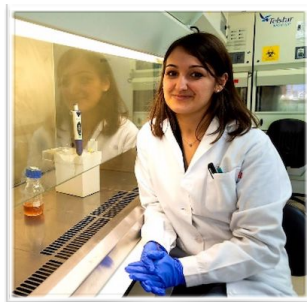
ESR Experiences - Episode Two

In this number, three ESRs talk about their work and life in the AQUAlity project. Thanks to Ilaria, Zsuzsanna and Davide for their contributions.

Ilaria Berruti

I never considered and planned the possibility to get out of my “comfort zone”, to put myself out there and to dramatically change my life. However, the best things in life aren't planned, they simply just... happen. When I had the opportunity to apply for a PhD abroad, without thinking twice, I decided that I might have been ready for a new life, in a foreign country with an unknown language.

Miss Berruti received a Master degree in Environmental Chemistry from Università degli Studi di Torino. Soon after, she started a fellowship at the Agricultural Department of the same University on a project about the recovery of digestate in agronomy.



I felt a mixture of fear and excitement, not having the near future clear. The hardest part is dealing with sometimes being homesick, but when you have the luck to meet people that make you feel like being at home, everything is so much easier. I'll be always grateful for the constant support of my colleagues and supervisors. Moreover, the PSA provides an international environment and I have the opportunity to meet several people from different places in the world with different cultures, way of thinking, backgrounds and languages. It is helpful to have someone in the same position as you to share work, pleasure, and tired times. The hardest part is always to have to say goodbyes and I'll never be ready for it, but this allows me to make friends from all over the world and a tour in South America is

waiting for me! I have become a more independent person, expanded my horizons, will keep discovering new side of my character and I am more ready than ever to deal with challenges and overcome myself to be an even better person.

The AQUAlity consortium

• 7 universities:

- Università di Torino, Italy
- Aalborg Universitet, Denmark
- Università del Piemonte Orientale, Italy
- Universitat Politècnica De Valencia, Spain
- Panepistimio Ioanninon, Greece
- Ecole Polytechnique, France
- Karadeniz Teknik Üniversitesi, Turkey

• 8 companies:

- Liqtech International A/S, Denmark
- Società Metropolitana Acque Torino, Italy
- IRIS, Italy
- FACSA, Spain
- ISALIT, Italy
- MIRTEC, Greece
- Eurofins VBM Laboratoriet, Denmark
- NIVA, Norway

• 3 research institutes:

- CNRS Clermont-Ferrand, France
- Plataforma Solar De Almería, Spain
- INERIS, France

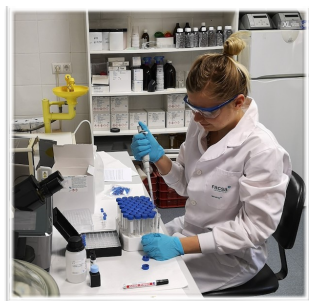
Info: www.aquality-etn.eu/who-we-are/

Last but not least, one of the AQUAlity project key points, for which I am very happy, are the regular meetings and the secondments. They boost interactions, collaborations and personal relationships among the ESRs. We are getting to know each other better and better. Thereby it is also nice to organize AQUAlity trips to enjoy different places. And so, an event like the Fallas in Valencia is a good occasion to have fun together.

Zsuzsanna Varga

There are different levels of doing a PhD abroad, and I would categorize a Marie Curie PhD project, with 10 months of secondments, as expert level. In this one, you have to juggle between living in multiple countries in one year, the many conferences and project meetings, while doing efficient work as a researcher. Sometimes you don't know exactly where all your luggage is, you might lose track of how many plane tickets did you book or you are confused which language to prioritize learning, therefore it does require a good amount of flexibility.

Miss Varga obtained a bachelor degree in Chemical Engineering at Budapest University of Technology and Economics and a master degree in Advanced Spectroscopy in Chemistry jointly at University Lille 1 and University of Bologna



Mindfulness is required to enjoy such a lifestyle since besides its many benefits one might miss a point of stability and it can get lonely sometimes. Fortunately, the great people involved in this project helped me feel like home everywhere I went so far. Shout out to the great team of ESRs and professionals involved in the project. I would like to especially thank Stéphane, who is an incredibly supportive, qualified and kind supervisor. Thanks to all the help and encouragement, I have managed to embrace this lifestyle and have great experiences in both my professional and personal life: be part of great research teams, enjoy the culture and cuisine of many European countries (I am a big food-lover), the Parisian museums and art scenes, the Spanish warmth (both from the sun and the hearts of the locals), and soon experiencing my first conference and visit to the USA.

This project offers plenty of opportunities on so many levels and the possibility to experience cross-sectoral approaches will be helpful in finding a suitable career. At first it was scary to change from an analytical research laboratory to a wastewater treatment plant, but in the end my secondment at FACS turned out to be an amazing experience, I have learned how to implement my work at secondments into my core research project, gained much practical knowledge in the field of water treatment and met exceptional people in Spain.

We are in an age where environmental chemistry, water cleaning, and climate change are hot topics, and water reuse and decontamination are gaining increasing importance. All this gives extra motivation and meaning to our work, and I am extremely happy to say that I have found passion and love in what I am doing.

Davide Palma

It was the January the 18th 2018, on the day of my 28th birthday, when I received the email informing me that I had been accepted for the PhD position I had applied for a couple of months before; it was the best birthday present I could have asked for! But that email also meant that many things were about to change in my life and, above all, it meant that I had to move abroad. Less than two months later I was on the bus taking me to Clermont Ferrand, a small city in the center of France that would have been my new home for the following three years. A completely new and exciting chapter of my life had begun, full of surprises, challenges and responsibilities like I never had to face before. and Dealing with French bureaucracy, looking for an apartment, getting

Mr. Palma obtained his Master degree in Environmental Chemistry at Università degli Studi di Torino. His work concerned the synthesis of iron-oxides based magnetic nanoparticles containing natural organic matter.

familiar with the work environment and the city was a lot to deal with at the beginning especially because I didn't know the language but, as time passes by, things got easier and I started feeling less and less as a stranger in this new reality and the more I got in touch with the French culture the more I realized that Italy and France were not so different after all. It's been one year now

that I'm living abroad and even if on some days I still feel homesick, I never regret having boarded for this adventure that is giving me a lot of personal and professional satisfaction.



AQUAlity trip: Fallas de Valencia



Zsuzsanna and Ivan at FACS WWTP



On December 2018 I participated to EMEC19, the European Meeting on Environmental Chemistry, hosted in the city of Royat (France). For me it was a very special conference because at EMEC19 I had my first oral communication in an international conference. The participants arrived from all over Europe forming a heterogeneous and stimulating scientific community with a very friendly feeling; regardless this, I remember being quite nervous the moments before taking the microphone to present my work but once I started talking I got more relaxed and time flew so fast that, before I could even realize, my presentation was over and the much feared "time for questions" arrived. When I got back to my seat I felt like I got a huge stone off my chest but I was not entirely satisfied of my performance, for this reason, I was extremely surprised when, at the closing session of the conference, I was awarded with a prize for my oral communication!



Other activities

AQUALity consortium considers very important the bi-directional process involving the public in interaction and listening with the goal of mutual benefit. For these reasons, the ESRs take advantage of all the available events to involve school students and generic public in the consortium activities. An AQUALity Lab has been established and already presented on February 2019 at secondary school students in the Università del Piemonte Orientale, Alessandria (Italy) by Ilaria Berruti and Masho Belay, in Università degli Studi di Torino, Torino (Italy), by Ilaria Berruti, Masho Belay, Nuno Gonçalves, Dimitra Papagiannaki, Fabricio Bortot Coelho and Katarzyna Janowska and to citizens during La PrimaVera Festa in Torino on May 2019 by Bethel Anucha and Nuno Gonçalves.

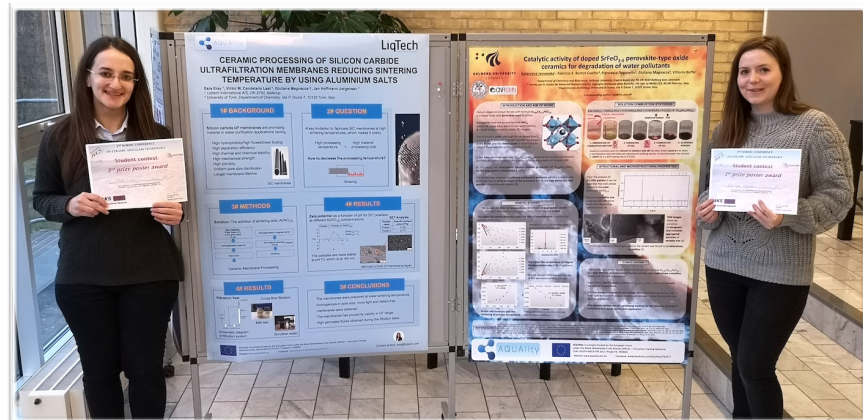


A three days of interaction of AQUALity ESRs with other projects (ETN PARACAT; H2020 Innovation Action Project Ô; ProGReg, H2020-SCC-2016; Re-Horti) have been organized in May 2019 at Università degli Studi di Torino with courses on soft skills and dissemination activities.



Awards

Davide Palma was not the only ESR to win a prize in 2018. The posters presented by Katarzyna Janowska and Esra Eray win the first and the third prize at the 2nd Nordic Conference on Ceramic and Glass Technology, that was held on 10-11 December 2018 at the Technical University of Denmark in Roskilde. Congratulation to all of you!



NEXT EVENTS & ACTIVITIES

3rd European Summer School of Environmental Applications on Advanced Oxidation Processes
3 - 7 June 2019, Alcoy, Spain

Fourth AQUALity Meeting
2-3 September 2019

International Conference on Chemical Energy and Semiconductor Photochemistry (CESCOP 2019)



Venue: Karadeniz Technical University, Trabzon (Turkey)

Information on the Websites:
<https://www.aquality-etn.eu/4th-aquality-meeting-and-cescop-2019/>
<https://cescop2019.org/>