

PROJECT, PARTNERS & BENEFICIARIES



FOURTH MEETING AND CESCOP 2019 IN TRABZON (TR)



ESR EXPERIENCES: EPISODE THREE



NEXT MEETING: APRIL 2020 IN IOANNINA (GR)



# AQUALITY NEWSLETTER

Welcome back to another issue of the AQUAlity newsletter. In this fourth number you can find the third episode of "ESR Experiences" (where other three young ESRs write about their experiences in the AQUAlity project), a short report of the project activities that took place in the second half of 2019 and information about the next events. Enjoy the reading!

#### **AOP Summer School**

The 3rd EU Summer School on environmental applications of advanced oxidation processes (AOPs), organized by the International PhD School on AOPs (IPS-AOP) and the Grupo de Procesos de Oxidación Avanzada of Universitat Politecnica de Valencia (Prof. A. Arques and Prof. L. Santos-Juanes), was held in the Alcoy Campus on June 3-7, 2019. More than 100 people (65 PhD students, including some AQUAlity ESRs) from 18 Countries attended the Summer School. Most of the lessons were held by AQUAlity people and the ESRs present had the opportunity to present their work in the form of short presentations and posters.



# Fourth AQUAlity Meeting & CESCOP 2019

The meeting was organised by Dr. İlknur Altın and Prof. Emin Bacaksiz and was held on 2nd-3th September 2019 at Karadeniz Teknik Universitesi, Trabzon (Turkey). Before the meeting, ESRs were invited to an individual meeting via Skype with the coach Pia Bøgelund. These colloquia continued also during the rest of the week.

The project meeting started with a general introduction by the Project Coordinator Paola Calza. Afterwards, the coordinator chaired the session dedicated to WP1 (Project management): during this session, she illustrated the Project Officer's comments received as a final feedback to the Midterm Check and she described the next project steps (in particular: submission of deliverables by the end of October 2019; submission of the periodic by the end of November 2019). Next, the sessions on WPs 2, 3 and 4 took place, including result presentation by each ESR working on the WP and in depth discussion chaired by the WP Leader. The training, dissemination and outreach activities performed so far were described and upcoming events and initiatives were outlined.



After a break, the Supervisory Board Meeting was held; it is worth noting that the 5 ESR representatives sitting in the Board changed in April 2019, on the basis of an election by their peers, following the 12-month rotation rule established in our Consortium Agreement. This was the first board meeting the 5 newly-elected ESR representatives (namely, Alice Pavanello, Ilaria Berruti, Cristina Jimenez Holgado, Dimitra Papagiannaki and Dennis Deemter) had the occasion to participate in. In conclusion, Prof. Calza thanked all speakers, local organisers and participants for the very fruitful meeting.

After the meeting, the "International Conference on Chemical Energy and Semiconductor

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Photochemistry (CESCOP 2019)" took place in Trabzon. The conference was focused on the various aspects of new energy materials, chemical energy conversion, solar energy, photocatalytic systems and biological and chemical applications of semiconductor nanoparticles. Several ESRs and Beneficiary representatives had an active role in the conference, giving oral and poster presentations. A list of speakers, with info on their presentation, can be downloaded at: https://cescop2019.org/program.

## **ESR Experiences - Episode Three**

Our story of AQUAlity ESR's life and research continues in this issue. This time we have to thank Esra, Ivan and Nuno for their kind contribution.

#### Iván Sciscenko

19th October, 8 p.m. I'm at Toronto Pearson Airport just coming back from a conference I have attended in Niagara Falls. Within two hours, I will have my flight with destination Barcelona, first stop until I get to Girona,

where I have another presentation in three days (two considering time difference). Afterwards, I will go back to Clermont-Ferrand, the place where I am doing one of the four planned secondments included in my PhD programme. While writing these words, I wonder how it is

possible that lifestyle. Wil move from this much, expected the music, peop deal on you realize that Regarding princed emot

possible that I have "normalised" this kind of lifestyle. While being abroad and having to move from one part of the world to another this much, you one not only learn those expected things as other cultures, cuisine,

of Exact and Natural Sciences of Universidad de Buenos Aires. During his university career, he gained experience in scientific field as a volunteer researcher at the Materials Physical-Chemistry, Environment and Energy Institute (INQUIMAE) and afterwards, as a research scholar at the Argentinian Atomic Energy Commission (CNEA)

music, people or languages, but you also start to know yourself more, how it feels to deal on your own with almost everything (visa issues, paperwork...), but mainly, you realize that your belongings become -and because they should-just a small baggage.

Regarding personal feelings, when I was awarded this amazing scholarship, I had mixed emotions going from happiness to sadness. I was going to be part of a scientific project with everything I could ever wish for, but at the same time, I had the feeling of leaving behind everything I knew back then. Although I feel homesick sometimes, the personal and professional improvement that I am experiencing right now, doing and learning about what I am keen on, with the best working environment, expanding my

research interactions this fast... if people had asked me a couple of years ago if I could be part of a project like this, I would have answered that I could only in my dreams.

As a particular event, I remember the first symposium of our project performed in Aalborg (Denmark), only three months after I had started my PhD. Those days I met almost all the other ESRs (fortunately we have become very close friends, and I really hope will remain in time), and was also the moment of my first oral presentation, in English and in front of a room with plenty of scientists specialised in the field... let's say I was a little bit scared. Nowadays, approximately one year later, I have made 7 oral presentations (plus the one I will

#### The AQUAlity consortium

- 7 universities:
  - Università di Torino, Italy
  - Aalborg Universitet, Denmark
  - Università del Piemonte Orientale, Amedeo Avogadro, Italy
  - Universitat Politecnica De Valencia, Spain
  - Panepistimio Ioanninon, Greece
  - \* Ecole Polytechnique, France
  - Karadeniz Teknik Üniversitesi, Turkey

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

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

- 3 research institutes:
  - CNRS Clermont-Ferrand, France
  - Plataforma Solar De Almería, Spain
  - INERIS, France

have in Girona as I told you before) at symposiums and congresses, so I can say experience and self-confidence is something you acquire quite fast with this type of scholarships.

It's boarding time already!





Cultural tour in Istanbul (after the Trabzon meeting)

## Esra Eray

Upon graduation from the Erasmus Mundus Master in Membrane Engineering Program, I opted for industry and joined the R&D team of LiqTech, a Danish company with headquarters in Ballerup, Denmark. Being an industrial PhD student in the early stage of

Chemical Engineering from the Ataturk University and a master degree in a EM3E program jointly from the University of Montpellier & University of Paul Sabatier, University of Chemistry and Technology Prague and University of Zaragoza. In her master thesis she worked at CNRS/Institut Européen des Membranes (IEM), France.

your career is a great way to make transition from Miss Eray obtained a bachelor's degree in academia to industry if you want to pursue an industrial career. It is also a great way of learning to keep in mind the technical and the commercial aspect of the AQUAlity project. LigTech made this transition smooth and easy for me by offering a fantastic working environment with knowledgeable but at the same time friendly colleagues.

Living in a foreign country can be challenging since AQUAlity-Innovative Training Network involves close cooperation with European universities and companies. However, the skills I gained while living in 3 different countries and studying in international environments during my Master's Degree are of great help to me right now in Denmark and during my secondments in other countries.



I must add that doing a PhD means pursuing independent research, so unlike during bachelor or master studies, you should plan your research and be good at time management if you want to reach all the goals you have within the 3 years foreseen. There are also many daily challenges that you have to face: new problems to solve, new issues to think about, new experiments to do. But if you are doing a PhD, you would expect that right? Live, learn and enjoy the ride!

## Nuno Goncalves

Before joining this Marie Curie project I did not have the faintest idea of the fantastic experience I would have. Honestly, I couldn't have wished for something better than this. Living abroad embracing different cultures, meeting people from all over the world is a stimulating experience that allows you to reach your personal maturity. An adventure that I recommend to everyone.

In this project, living abroad in different countries among research activities, secondments, conferences, training activities and events can make you feel that everything is going really fast

Mr. Gonçalves has graduated from University of Coimbra as Bachelor's in Industrial Chemistry. Then he obtained his Master's degree in Chemistry with specialisation in not have organic synthetic chemistry. After graduation, the time he had the chance to joint to a spin-off of the University of Coimbra to develop new photosensitisers for photodynamic therapy.

and that you do to enjoy it. After each

flight there is another travel to plan. However, with the right dose of adaptability, everything becomes easier, especially being part of a project with a great team where everyone is very

#### 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 focused on creating the next generation of integrated Urban Water System management innovators: the project will train 15 highly skilled scientists in the removal of pollutants present in aqueous systems in very small amount.
- Info: www.aquality-etn.eu/the-project/

friendly and keen to help, beyond the extra support of my supervisors from Turin. So far, I had the incredible chance to meet, and be part of, great researcher teams from Turin University, CRNS in Clermont-Ferrand and École Polytechnique where I am doing a secondment right now.

The crazy thing is that, all this happened in just one year and a half, and for the next year I still have one month in Aalborg, two in Copenhagen and two in Oslo. As if it was not enough adventure, to make this year even more legendary, I also got married! Even if I'm just at halfway in my PhD project, I can say without a doubt that an MSCA project opened my horizons.



Nuno's wedding celebration with some ESRs

### **Outreach activities**

AQUAlity puts a lot of emphasis on informing the general public about project aims and outcomes. To achieve this goal, we released an interview to an Italian TV show focused on scientific breakthroughs (TG Leonardo, 17 April 2019, 1,173,000 people reached, available at: https://www.rainews.it/tgr/rubriche/leonardo/video/



2019/04/ContentItem-e3eb2fea-81fd-49af-a391e3318700df71.html) and we published an article on Platinum magazine (IlSole24ore), in July 2019 release (265,000 readers were reached; link: https:// platinum-online.com/releases). Besides, we published the 2019 release of our Project Booklet and we posted press releases and stories on institutional websites and on portals dedicated to public engagement (on UNITO News, 5 July 2019: https://www.unitonews.it/ index.php/it/news\_detail/aquality-un-progettoeuropeo-formare-scienziati-grado-di-combattere-icontaminanti-di-ultima-generazione; on UNITO Portal "FRIDA": http://frida.unito.it/wn\_pages/ contenuti.php/514\_fondamenti-di-chimica/ 267\_rimuovere-gli-inquinanti-emergenti-dalle-acqueil-progetto-europeo-aquality/; in SMAT Annual report

on research activities (page 36; www.smatorino.it/en/smat-research-center/). Besides, ESRs presented their work during the European Researchers' Night 2019 (in Italy, Spain and Sweden) and ESR Esra Eray replicated the AQUAlity lab (i.e. experiments involving students) in a presentation to master students (October 2019).

# **Networking**

In March 2019, AQUAlity was selected by the European Commission to participate in Horizon 2020 MSCA-ITN cluster event on "Clean Water", meant to allow cross-fertilisation among MSCA projects and diffusion of best



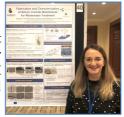
practices. The event took place in Girona (Spain) on 22 October 2019 (more information available at: <a href="https://ec.europa.eu/info/horizon-2020-msca-itn-cluster-event-clean-water\_en">https://ec.europa.eu/info/horizon-2020-msca-itn-cluster-event-clean-water\_en</a>). Coordinator Paola Calza and two ESRs, Dimitra Papagiannaki and Iván Sciscenko, gave an oral presentation: on the whole, it was great to hear other success stories, to tell what our project has achieved so far and to create new links with potential partners for dissemination, outreach and future collaboration. Last but not least, the Girona event was also an opportunity

to give feedback to EU policy-makers on possible policy strategies for raising awareness

on clean water and for increasing the skills of young generations in this very field: this resulted in suggestions gathered in a Policy Brief Document (sent to the European Commission in November 2019).

#### **Awards**

A new Award has been gained by one of our ESRs! Our best congratulations to Esra Eray for her Best Poster Presentation Award, won at the 6th MEMTEK International Symposium on Membrane Technologies and Applications (Istanbul, Turkey, 18-20 November 2019)!



## NEXT EVENTS & ACTIVITIES

Fifth AQUAlity Meeting and Chemometric School April, 6-9, 2020

Venue: Panepistimio Ioanninon, Ioannina (Greece)

Information will be available soon on the Website:

www.aquality-etn.eu/events

INFORMATION & NEWS:

Website: www.aquality-etn.eu Facebook: www.facebook.com/AQUAlity/TN2017 Instagram: www.instagram.com/msca\_aquality/ Twitter: twitter.com/AQUALITY18