



EDITORIAL – Feedback on the 3rd annual e-conference - January 28th- 29th 2020, Montpellier, France

The third EM3E-4SW e-conference which is the main meeting point each year for our master took place on January 28th- 29th 2020, in Montpellier, France. The first-year students celebrated the end of the first semester with the local coordinators in the different partner institutions and exchanged with researchers around a membrane engineering-related theme; this year “Membranes in a Sustainable World”.

The first day, the students presented their individual projects dealing with a rich variety of themes: polymers of intrinsic microporosity, non-oxide membrane for water treatment, additives methods for preparing membranes, capacitive deionization, enzyme membranes for CO₂ utilization or H₂ production, membrane processes for solving the microplastic issue, separation of virus and DNA by membrane chromatography, control of biofouling in membrane processes. Students have demonstrated strong motivation and in-depth knowledge of their topic.

They also had the opportunity to attend the presentations about the offered curricula during the second and third semesters given by representatives from the different partner institutions.

The culminating moment was the invited lecture given by Doctor Lidietta Giorno, Research Director at the Institute on Membrane Technology, in the University of Calabria, associated partner of the EM3E-4SW programme. Her very inspiring and highly appreciated lecture was entitled “Biohybrid membranes: principles and applications”. The lecture record is now available online using the following link: <https://video.umontpellier.fr/video/3299-conference-de-lidietta-giorno-de-luniversita-della-calabria/> (password: IEM2020).



The consortium meeting was scheduled the day after. It was mainly dedicated to the future of the programme. The EM3E-4SW partners worked on the opportunities for a new extension of the Erasmus Mundus Joint Degree implementing innovative educational practices. They also confirmed their wish to reactivate the label in membrane engineering at the master level in partnership with the European Membrane Society. The decision is to be taken soon.

SPECIAL EVENTS

Change of project manager for our programme



At the beginning of 2020, Karin Karlzen left her position as project manager for new adventures. Currently, she is working in Grenoble as a project manager of another European project. Her position was filled by Inmaculada Dosuna. Luckily Karin and Inma worked together as a team until the end of January in order to keep everything going well. Inma is a chemical engineer with a PhD in heterogeneous catalysis and 5 years' experience as a quality manager at the regional chemistry center “Pôle Chimie Balard” in Montpellier, France. You can reach her at: em3e-4sw-project@umontpellier.fr



Launch of LinkedIn pages

The EM3E-4SW master has now put into place its own LinkedIn pages. The main intention group is to create a platform of exchange between the current and future members of the EM3E and EM3E-4SW global network: students, alumni, academics, industrialists. It will enable its members to share ideas, knowledge and experience, news about innovative breakthrough, information on available master thesis, PhD thesis and job offers and applications; updates on upcoming conferences, courses, workshops and meetings...

We warmly invite you to add us now to your network and to join the LinkedIn group.

Linkedin profile: www.linkedin.com/in/master-em3e

Linkedin group: <https://www.linkedin.com/groups/8904094/>



Ignacio HGOBURU, Argentina – EM3E-4SW Edition1 (2017-2019)

Engineer at Bayer, Köln, Germany

April 19th, 2017. That was the exact date when I received an e-mail that changed my life. Sitting in my desk in Argentina, I could hardly believe that I had been granted a scholarship to be part of the EM3E-4SW Program. Finally, my dream became true: I would have the chance to discover different cultures while learning from top researchers about membrane technologies and their potentialities to achieve more sustainable processes.

Now I am writing from Germany, after having spent the last years in beautiful cities such as Montpellier, Toulouse, Prague, Lisbon and Leipzig. In the first four I took courses devoted to membrane materials, processes, and applications, whereas in the latter I did my master thesis project in Lanxess, a manufacturer of reverse osmosis modules. I have been a firsthand witness of how EM3E-4SW brings academy and industry together, promoting a synergic interaction which is vital for technology transfer.

Not only did the program provide me with a solid scientific knowledge, but also gave me the chance to interact with colleagues and researchers from all over the world, through which I gained valuable cultural insights and a new perspective about the borderless global challenges that we are expected to address through science and technology. This background has been highly relevant during my post-graduate life, in which I am working for a global life sciences company with operations in more than 90 countries.

Right after my graduation in July 2019, I was accepted into the Engineering Track of Bayer's International Future Leadership Program, where I am doing rotations in process, project, and plant engineering. Having sustainability as a top priority, at Bayer we are confronted with ambitious challenges such as achieving CO₂-neutral operations. This environment has been perfect to put into practice all the knowledge and skills gained during my studies. My current hands-on experience confirms how relevant are the contents proposed by EM3E-4SW, to which I will be lifelong indebted for the opportunity of being part of it. I strongly recommend this Program to all students interested in shaping a more sustainable world through novel separation and purification technologies and process intensification.

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Muhammad Salman MALIK, Pakistan – EM3E-4SW Edition1 (2017-2019)

Scientific Researcher (Polymer Competence Center Leoben GmbH) and PhD candidate (Montan Universität Leoben), Austria



I joined EM3E-4SW as a polymer engineer with a publication on the topic of electrochemical membranes modified by conducting polymer, along with pretty much material sciences exposure coming from my homeland Pakistan. When I came to know about Erasmus Mundus, I was really impressed by the idea of a mobility program and cannot forget those wonderful experiences with lectures in Montpellier, Toulouse, Prague and Lisbon (not to mention those challenging but humorous attempts to learn French, Czech and Portuguese). Selecting Lisbon for the third semester study track was one of the best decisions I would say I took in my life. I cannot be more thankful to all those great professors back in Universidade Nova de Lisboa for their great

knowledge deliverance, motivation and of course their hospitality and warm Portuguese culture. In my fourth semester, I wanted to do an industrial thesis and subsequently found one on the topic of vacuum membrane distillation for ammonia separation using domestic waste waters in Austria. This industrial master thesis and the qualitative EM3E-4SW program paved my way to the employment position I have now.

I am working as a full-time researcher at Polymer Competence Center Leoben GmbH and also doing my PhD at Montan Universität in the beautiful country of Austria. This industrial PhD is part of the Austrian National Research Project concerning new curing technologies in aerospace and automobile industries. Even though it does not fall in the category of membrane sciences, the high level of international and professional training in addition to diverse course electives offered by EM3E-4SW has trained me to choose this challenging yet exciting opportunity.

The EM3E-4SW Master program offered a bucket full of gold nuggets that helped me both professionally and personally. One of the best things about EM3E-4SW was having 14 friends from around the globe that I fell in love with. Sudden trip plans, birthday surprises and enjoying university life together with these people was a blessing. I am thankful to all professors in the partner universities and wish them good health and success in future. And to the current EM3E-4SW students, all the best with your studies/thesis and enjoy your time in the master.

Finally, I want to send my best wishes for two of my fellow EM3E-4SW batch mates - Saifullah Saleem (Portugal) and Arooj Fatima (The Netherlands) - on the occasion of their wedding in Pakistan.

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Master edition 2020-2022: The Erasmus Mundus Master in Membrane Engineering for a Sustainable World, EM3E-4SW, has reached the end of its European Commission funding through the Erasmus + programme. For the next academic year (2020-2021), we will not be able to offer any scholarships. Not enough applications have been received from eligible candidates on a self-funded basis. As a consequence, the master will not open to first-year students for the next academic year (2020-2021).

Sponsoring opportunities: EM3E-4SW offers you the possibility to sponsor the programme. We welcome contact from your organisation and are happy to discuss any idea which could facilitate the recruitment of EM3E-4SW students. Moreover, the second year of the master is available as vocational and education training (VET).

Please contact us by e-mail: em3e-4sw-project@umontpellier.fr

More information on: <http://em3e-4sw.eu>