

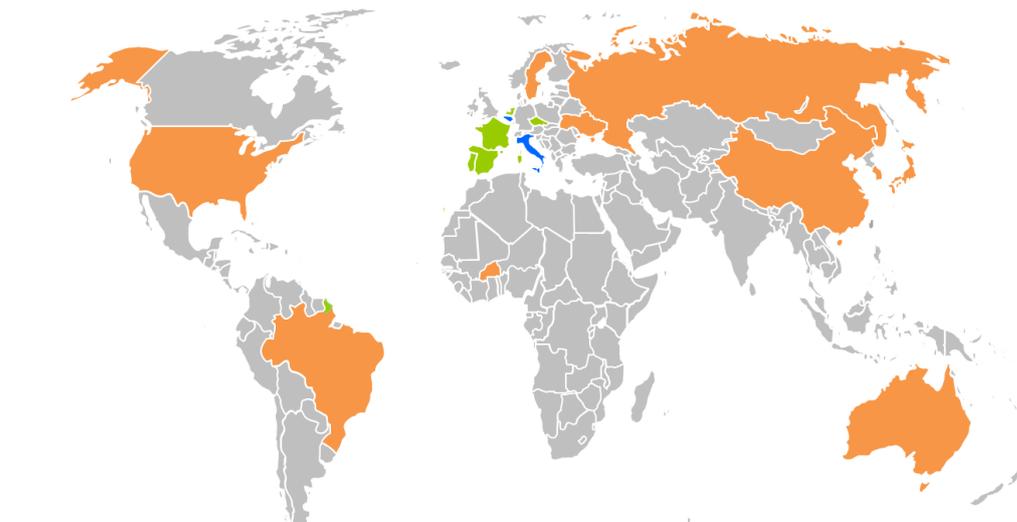
EDITORIAL – Goodbye EM3E, welcome EM3E-4SW!

From September 2017, the Erasmus Mundus Joint Master Degree in Membrane Engineering, EM3E has evolved into the Erasmus Mundus Joint Master Degree in Membrane Engineering for a Sustainable World, EM3E-4SW.

EM3E was born from a close collaboration between the partners through the European Research Network of Excellence NanoMemPro, noting the crucial need to build a new curriculum solely dedicated to membrane science and technology. It was selected and funded by the European Commission from 2011 for five successive editions. It is now renewed and funded by the European Commission for three additional editions under the new label EM3E-4SW.

The first semester of this full-time, two-year master is dedicated to materials science or chemical engineering, depending on the students' background. Technologies and modelling are then addressed during the second semester. The third semester is dedicated to the application of membrane technologies to a more specific domain (reclaimed water, renewable energy, biotechnologies or nanoscience to name a few). The fourth semester is devoted to a master thesis in an industrial company or in an academic research laboratory. Every year, up to 20 students are enrolled from more than 38 countries all over the world.

In its EM3E-4SW version, in addition to our European consortium, external partners have been included in order to create a global network of universities involved in education and research in membrane science and technology. In this frame, it is in particular expected that



Full partners: Université de Montpellier (France), Université Toulouse III Paul Sabatier (France), University of Chemistry and Technology Prague (Czech Republic), Universidade Nova de Lisboa (Portugal), Universidad de Zaragoza (Spain), University of Twente (The Netherlands).

Associated partners: Università della Calabria (Italy), KU Leuven (Belgium).

External partners: China, Japan, South Korea, Australia, Burkina Faso United States, Brazil, Ukraine, Russia, Sweden.

selected students from our external network would attend the 2nd year of the EM3E-4SW master whereas students from other European master programs would spend their second year of master in the external institutions.

COMING EVENT – First annual e-conference (January 30th, 2018, Montpellier, France)

In the frame of the new program EM3E-4SW, it has been decided to create an annual event at the end of the first semester of the academic year enabling students, academic partners and industrialists to meet together around a selected topic.

The first event of this series will be dedicated to the “*New scientific trends and new technological opportunities in membranes and water treatment*”. It will be held on January 30th, 2018, at the European Institute on Membranes, at the University of Montpellier, France.

The scheduled agenda is as follows:

- 9:30 am – 11:30 am: Student presentations in the frame of their 1st semester individual project.
- 12:00 am – 1:00 pm: **Webinar* on “Water treatment & membrane technologies”, given by Dr. Hervé BUISSON, Veolia Water Solutions & Technologies, Vice President - Process Engineering, USA.**

- 2:00 pm – 3:00 pm: Introduction on the education program during semesters 2 and 3.
- 3:30 am – 5:00 am: Student presentations in the frame of their 1st semester individual project.

The registration to physically attend this event in Montpellier or to attend the webinar is free but mandatory: em3e-4sw-project@umontpellier.fr.

**Local time in Montpellier during the event period will be GMT/UTC + 01:00 hour. The connection details will be sent to the registered participants at mid-January 2018. Moreover for those who could not be available to follow the webinar in real time, it will be recorded and archived in the site of the webTV of the University of Montpellier.*

TESTIMONIALS FROM OUR GRADUATES

Lakshmeesha UPADHYAYA - EM3E Edition 1 (2011-2013)
– Indian self-paying student currently post-doctoral fellow in membrane science and technology center (MAST) and the University of Arkansas Fayetteville, USA (Prof. R. Wickramasinghe and Prof. X. Qian group).

When I contemplate on my European masters in membrane



engineering, I adjudge that my journey not only made me a better membrane scientist but also filled me with real-life experiences. Before accepting the offer, I was very keen to pursue higher studies in membrane engineering

but hesitated because of the structure and competitiveness of the EM3E program, three different universities and countries, distinct educational formats and most important is the divergence in culture. But the firm decision which I made with own funding options, changed my entire scientific and career path. The course structure was with the high quality and shifted from one mobility to other with specialization covering all prime aspects related to membrane design, fabrication, processes, modeling, their pros and cons with real-life problems and the industrial exposure.

The EM3E course structure fulfilled all the exigency needed to understand the separation issues faced in the modern world but also accomplished the knowledge to decide and interpret the required solution. This highly advanced program structure and resource made me forge ahead with European doctorate in membrane engineering (EUDIME) for three more years with more challenging and innovative project with new options of universities. The great team of champions and expertise made me complete both masters and Ph.D. within the pre-decided time frame and exposed us to immense opportunities both industrial and academic level. The course input, experience, and my maturity always gave me a thought to work in between the industrial and academic platform to get the solution using membrane technology. The judgment and the help from highly esteem membrane consortia made me select the position in membrane science and technology center (MAST) in the United States to work on industrial problems in the academic environment.

As a post-doctoral associate in the United States, the European study (EM3E & EUDIME) and cultural experience have left me with confidence, independence, and the experience will always be enduring in my heart.

Contact: upadhyayabt@gmail.com

Radek OBORNY – EM3E Edition 1 (2011-2013) – Czech scholarship student currently co-founder of the company FloBro.

Dear membrane readers!

My name is Radek and I am from the first EM3E batch '11-13'. Greetings to you all from Olomouc, Czechia, where I am currently living. I decided to return to my home town and start an own company. It might be of no surprise to you, that this is in the field of membranes. It all began six years ago, when I graduated from my bachelor's degree, I was looking for a following study. When I saw EM3E, I got really intrigued. A degree which seemed practical and not too far away from my previous area of interest. When I found out that it was held in the beautiful south of France, I was determined that I needed to get in. It was a great pleasure to experience Montpellier a time I will never forget. The next semester, which I spent in Prague was a lot of fun too. Not only because I was probably the only Czech Erasmus student in the Czech Republic. For my final year I chose the Netherlands, and after graduating in 2013 I got offered a position in X-Flow where I worked as R&D engineer. I think that EM3E was an excellent preparation for my job as it helped me fundamentally understand the separation processes and come up with an idea which later got patented and quickly proved itself also in the practice.

After 3 years of work at X-Flow, where I specialised mainly on membrane bioreactors and nanofiltration, I decided to leave and go travel for a while to South East Asia. For that journey I prepared a small filter that could be attached to a shower or a tap, so I could prepare my drinking water. Robin got an idea to try to develop it further into a commercial product. So that's what we're trying to work on now- make a portable water filter for travellers Flo-Bro One. With the idea we won a start-up competition and our endeavour also attracted an investor. Now we're live with our filter-project on Kickstarter so have a look and share with your friends! Let me know your opinion too!



<https://www.kickstarter.com/projects/1973550612/flo-bro-worlds-first-universal-water-filter-for-tr>

Contact: radekoborny@gmail.com

Call for application for admission to the master edition 2018-2020: Deadline for submission of applications: January 31st 2018 (admission with scholarship) and May 31st 2018 (admission without scholarship).

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 open as vocational and education training (VET). Please contact us by e-mail: em3e-4sw-project@umontpellier.fr.

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