



Issue 2 December 2017

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Outreach and Collaborations



EPHEMARE Project Meeting

The 2nd Annual EPHEMARE project meeting was held in February, hosted by CNR – ISMAR in Genoa, Italy. The two-day meeting was in order to update consortium partners on activities to date and scheduled activities for 2017. The next EPHEMARE project meeting will take place in Antwerp on February 19th and 20th 2018.

The EPHEMARE Stakeholder Workshop will take place in Antwerp, February 21st, 2018. The workshop will encourage knowledge exchange between Scientists, Regulators, Policy/Decision makers, and Industry representatives to work together on solutions to the adverse impacts of marine microplastics.

More information will follow in the new year, see our <u>website</u> for the latest updates.

Progress and Results to Date

Within the first half of the project, model contaminants were absorbed in different types of microplastics at different concentrations. From there, contaminated microplastics were fed to specific marine species to measure the uptake, elimination and accumulation rates. The project is studying the biological effects of marine pollutants at molecular, cellular, physiological and organismic levels, to allow for the detection of the effects of microplastics across the main phyla of marine organisms, covering most trophic levels.

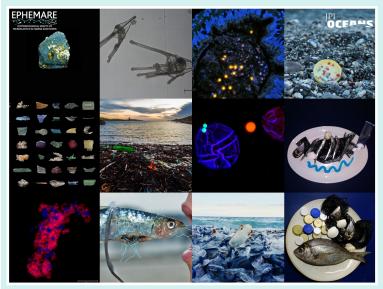
2017 saw much of the field validation studies carried out across the Mediterranean and Adriatic, as well as having the opportunity to sample in Bermudan waters and in the water around Guadeloupe with the Race for Water.

EPHEMARE activities were well documented through the projects social media outlets and website, in order to engage diverse audiences. Members of the project consortium took part in a range of thematic outreach events to engage with the public, and activities such as the IMPACT 2017, awareness raising and the publication of factsheets also serve to disseminate ideas to a wider audience.



From all the team at EPHEMARE, we would like to take this opportunity to wish you all a wonderful Christmas and a Happy New Year!

IMPACT 2017 International Microplastics Photo Competition



In January, EPHEMARE launched the 2017 IMPACT International Microplastics Photo Competition. This competition was to allow participants to express their views on microplastics in the marine environment through the medium of photography.

The competition attracted a lot of entries from across Europe, many of which have since been used as part of various exhibitions.

Winners were selected through a combination of a jury and public vote, through the project social media channels, focusing on the clear communication of a scientific message, and the quality of the submission in terms of artistic and visual appeal.

EPHEMARE featured at the Ocean Teacher Global Academy (OTGA) course: Ocean Literacy and Story Telling Maps Training Course in Santa Marta, Columbia at Invemar, as an example how Ocean Literacy can be advanced on specific topics such as microplastics in our oceans. The course, coordinated by IOC-UNESCO, was held back to back with the 8th International Coastal Atlas Network (ICAN) workshop on "Coastal Web Atlases enhancing Ocean Literacy (OL) and both events attracted more than 25 participants from 20 countries in the week from the 11th till 15th of September 12, 2017.



Ocean Plastics Lab

EPHEMARE contributed some of the entries from the IMPACT 2017 Photo Competition to the Ocean Plastics Lab, a hands-on science lab, inviting visitors to assume the role of scientists and over the course of four consecutive containers explore the extent and impact of plastics in the ocean.

As well as the IMPACT 2017 photos, the exhibits in OPL encompass interactive installations, displays and animations on loan from laboratories, research institutes and various other science and civil society partners worldwide.

To date, the OPL has visited Turn and Paris, and for 2018 will travel to Brussels, Washington D.C. and Ottawa, Canada.



EPHEMARE scientists on board the MS Wissenschaft

EPHEMARE scientists from the University of Heidelberg, were invited to talk about microplastics on board the MS Wissenschaft on Sunday the 16th of July, 2017. This swimming science centre promotes marine science and targets specific topics that are of concern in marine science. The EPHEMARE team in Heidelberg used the opportunity to not only inform about microplastics in general but highlighting through research methods where microplastics can be found e.g. in sediment samples, especially targeting the younger audience members age 8-12 years old.

The Race for Water Odyssey

Along with fieldwork being conducted in European study sites, in 2017, EPHEMARE researchers also had the opportunity to participate in the 'Race for Water' Odyssey, harvesting, sampling and analysing microplastics in waters around Bermuda (July) and Guadeloupe (October). The race for water is on a 4 year voyage from Lorient to Dubai, and allows researchers to conduct scientific studies on optimal conditions with minimal environmental impact, in a location that has not been studied before.



As part of the research, EPEHEMARE scientists took samples from across difference coastal and marine ecosystems, to better understand how microplastics are distributed in the ocean environment, and how they accumulate in the water column, emerged sediment, on beaches, and collected samples of endemic marine organisms. Researchers also interacted with local stakeholders and residents of both Bermuda and Guadeloupe.

Joining the R4W also provided a great opportunity to raise awareness of the and marine litter issue of microplastics and the work of the EPHEMARE project through extensive media coverage, conference, workshop, and visits from local school children to the vessel. For more information on EPHEMARE and the Race for Water, http:// www.raceforwater.com, blogs for Bermuda and Guadeloupe.

"Quite frankly, I'm delighted and I'm sure my colleagues are too. The vessel is incredibly spacious and we can carry out some high-quality work on her, added to which the teams aboard the boat have given us a very warm welcome. It's just extraordinary to be able to carry out oceanic studies without any environmental impact and noise-free thanks to this vessel being propelled by clean energies"

Dr. Bénédicte Morin

Presentation to the Swedish King



In September, EPHEMARE researcher Steffen Keiter of Örebro University presented to King Carl XVI Gustav of Sweden on microplastics and the results of the EPHEMARE project.



The King was visiting the university, where researchers were demonstrating how plastic is spread in the environment, affecting humans, animals and the world we live in. Pictured is Steffen Keiter speaking to the King (L), and demonstrating a water filtering system (R). Steffens presentation is available here.

EPHEMARE researchers from CNR ISMAR Marche Polytechnic University participated in Italy's most important Science Communication event: the Italian Festival of Science. Held in Genoa from October 26th to November 5th. Researchers participated with an educational laboratory 'Plastoc contacts' and organised a conference 'Aliens are among us', where plastics are defined as 'aliens invading the marine environment'.



Cork Science Festival

Some of the entries of the EPHEMARE IMPACT 2017 International Microplastics Photo Competition were recently displayed by EPHEMARE partners UCC MaREI as part of the Science of Sustainability event during the Cork Science Festival, Ireland.



2nd JPI Oceans Conference

The 2nd JPI Oceans Conference took place in Lisbon on the 26th of October, 2017, presenting the first results of the actions and project initiated under the framework of JPI Oceans. EPHEMARE project coordinator Ricardo Beiras presented project achievements and impact to date, and all work packages were presented individually via the poster sessions.

The following day, Work Package leaders also attended the JPI Oceans Microplastics Mid-Term Review to discuss the results of the first half of the projects, address common issues and challenges, as well as look ahead to the second half of the projects.







Student Presentation Award

PRIMO During July's meeting "Pollutant Responses in Marine Organisms" in Japan, Lucia Pittura PhD Student at Polytechnic University of Marche, received the "Student Presentation Award" sponsored by Society for Environmental Toxicology & Chemistry (SETAC) for the oral presentation "PRESENCE AND **ECOTOXICOLOGICAL RISKS** OF MICROPLASTICS IN MEDITERRANEAN ORGANISMS". Lucia presented data derived from the EPHEMARE Project.

Greenpeace Collaboration

EPHEMARE scientists took part in Plastic the 'Less more Mediterranean' mission with Greenpeace. On board the Rainbow Warrior 3, activities included sampling organisms and the seawater along Mediterranean.



H2020 SC2 Information Week

EPHEMARE Project Coordinator Ricardo Beiras presented the key findings to-date from the project as part of the H2020 Societal Challenge 2 information week in Brussels on November 17th. His presentation formed part of the Blue Growth Research and Innovation Day, and was presented at the sub-session addressing Marine Stressors and Food Security.

Connect with us and find out more!



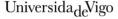
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