Newsletter Issue 5, January 2020



ENHANCE MICROALGAE

High-added value industrial opportunities for microalgae in the Atlantic Area







Edited by the EnhanceMicroAlgae team at The University of Manchester [WP2] – Communication



Know our partners! GLECEX: A company involved in microalgae research

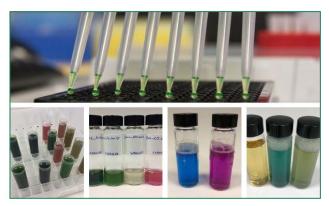
GLECEX (Global and EcoFriendly Natural Extracts S.L.), a partner of EnhanceMicroAlgae (EMA), is a Spaniard biotechnology start-up focused on research and development (R&D). Having a high technological and innovative capacity, GLECEX offers advanced services to companies within the agro-food, cosmetic, and nutraceutical sectors. Founded by University researchers, GLECEX is in a favourable intermediate position between research and industry. Within the framework of the EMA project, GLECEX is contributing by identifying microalgae commercial possibilities and facilitating their route to market whilst eliminating potential technical problems.



GLECEX is working on the functional characterisation of several microalgae species, and has so far developed *in vitro* assays for the screening of biological activity of microalgae:

Cosmetic efficacy: anti-aging (antioxidant \rightarrow activity), whitening (tyrosinase inhibitory activity), anti-wrinkle (neutrophil elastase inhibitory activity, MMP-1 inhibitory activity), antiinflammatory (COX inhibitory activity, sun protection factor - SPF).

→ Screening of bioactives for the treatment or prevention of metabolic syndrome: antihyperlipidemic (pancreatic lipase inhibitory activity), anti-hypercholesterolemic (human HMG-CoA inhibitory activity).



GLECEX is additionally developing and validating fermentation processes using microalgae as a substrate with the goal of obtaining cosmetic ingredients and functional beverages with better biological activity than those obtained by other processes.

For more information, visit: www.glecex.com



EnhanceMicroAlgae participation in Conferences and Workshops

On 27-28 November 2019, María García Portela from <u>CIIMAR</u>/FCUP participated in the 1st Congress of Research Youth in Sustainable Primary Production and Quality and Food Security, held in Lugo (Galicia, Spain). María disseminated the EMA project and was awarded with the 2nd best poster award!

Diogo Cruz, from CIIMAR/FCUP, visited the Polytech Clermont-Ferrand (France) from 2 – 6 December, 2019, and disseminated the EMA project with special focus on the Legislative surveillance of microalgae.



Newsletter January, 2020



On January 20-21, 2020, Prof. Constantinos Theodoropoulos from the <u>University of Manchester</u> gave a 2-day course on "Microalgae Multiproduct Integrated Biorefineries" at the <u>Institute of Sustainable Processes</u>, University of Valladolid, Spain.

The course was a great opportunity to explain the potential of microalgae-based biorefineries as well as to disseminate the EnhanceMicroAlgae project.



Publications by EnhanceMicroAlgae

EMA partners participated in the Advanced World Research on Yeast & Future Algae conference held in Tokyo last May 13-14 2019. A conference proceeding of their work '*Microalgae carotenoids induce apoptosis and chemosensitization of human melanoma cells to vemurafenib and dacarbazine'* is available in <u>our website</u>.

A Bibliometric Analysis of Microalgae Research in the World, Europe, and the European Atlantic Area has just been published in <u>Marine Drugs</u>, and presents an in-depth review of microalgae research. A corpus of 79,020 publications was obtained and analysed to show the evolution of the research domain. Emerging research concepts are highlighted, from a perspective of regional bioeconomy development, differentiating from the global European and world activities. <u>Get a copy of the publication here!</u>

Stakeholders Database

The **EMA database of stakeholders** is an easily accessible, visual and open access database bringing together all the European Atlantic Area players working in the microalgae sector.



The database, which includes an interactive map, facilitates the access to updated information and cooperation between companies and public institutions of the whole sector, and is part of EMA's <u>Work Package 4</u>, led by <u>Université de La Rochelle</u>.



EMA Virtual Marketplace

The **EMA virtual marketplace** is already running! A platform for the exchange of services and interests, to boost business development of the microalgae sector in the Atlantic Area through the exchange of ideas, capacities, and interests.



You can use the MarketPlace to find offers and requests about technology, biomass, food & feed, cosmetics & pharma, and more. The marketplace is part of EMA's <u>Work Package 8</u>, led by <u>ANFACO-CECOPESCA</u>.

Newsletter January, <u>2020</u>



News & Events

EnhanceMicroAlgae Conference

Enhancing microalgae potential: From microalgal strains to products

June 17-18, 2020 The University of Manchester, Manchester, UK



The University of Manchester

The conference will bring together academics and industrialists to promote knowledge transfer and discussion of research and industrial developments within the microalgae sector, as well as disseminate the scope and outputs of the project partners via talks and poster sessions.

More details and information regarding registration deadlines will be available soon. Stay up to date by visiting <u>this link</u>.



Upcoming Conferences & workshops

- AquaFarm Fair 2020 | 19 20 February, 2020 | Pordenone, Italy
- <u>7th Conference of the International Society for Applied</u> <u>Phycology (ISAP)</u> | 19-24 April, 2020 | Makuhari Messe, Chiba, Japan
- <u>28th European Biomass Conference & Exhibition –</u> <u>Transition to a Bioeconomy</u> | 27-30 April, 2020 | Marseille, France
- <u>10th European Algae Industry Summit</u> | 29-30 April, 2020 | Reykjavik, Iceland
- <u>11th European Workshop on the Biology of</u> <u>Cyanobacteria</u> | 31 May – 4 June, 2020 | Porto, Portugal
- Microalgae and Microtechnologies Workshop | 31 May – 4 June, 2020 | Queen Margaret University Campus, Edinburgh, UK
- <u>10th International Conference on Algal Biomass,</u> <u>Biofuels and Bioproducts</u> | 14-17 June, 2020 | Pittsburgh, USA
- Enhancing Microalgae Potential From microalgal strains to products | 17 -18 June, 2020 | The University of Manchester, Manchester, UK
- <u>2nd Seaweed for Health Conference</u> | 21-24 June 2020 | Galicia, Spain
- International Conference on Algal Biotechnology | 22-23 June, 2020 | Venice, Italy
- | 20 -23 September, 2020 | 3rd International Conference for Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability Rive del Garda Congress Centre, near Lake Garda, Italy
- <u>14th World Congresss on Biofuels and Bioenergy</u> | 21-22 September 2020 | Rome, Italy
- AlgaEurope 2020 | 1 3 December, 2020 | Rome, Italy

Sign-up to this Newsletter on the <u>EMA</u> <u>website</u>, and remember to connect with us on social media to keep track of the latest project updates:



Newsletter January, 20<u>20</u>