Newsletter Issue 9, May 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



BUGGYPOWER

From the sea towards a more sustainable world

BUGGYPOWER, an associated <u>partner</u> of EnhanceMicroAlgae (EMA), is a biotechnological company devoted to the production of high quality biomass of marine microalgae containing high nutritional products. The company is based in Spain but its industrial facility is located in Madeira, Portugal and is one of the largest European microalgae production facilities.



The interdisciplinary team of professionals at Buggypower understands the applicability and versatility of microalgae and work together to identify the most sustainable and innovative solutions to produce biomass and develop high added-value products. By integrating proprietary technological processes, they have designed optimal production units, i.e. photobioreactors, CO₂ capture and microalgae biomass yielding bioactive compounds for food, feed, and cosmetics.



Within the framework of the <u>EnhnaceMicroAlgae</u> project, BUGGYPOWER is contributing by providing their expertise and in microalgae R&D and participating in project workshops, brokerage events, and polls. Visit their official <u>website</u> to find out more about BUGGYPOWER.

List of Publications by EnhanceMicroAlgae

- LATEST: Analysis of scientific research driving microalgae market opportunities in Europe, published in *Marine Drugs*. Read <u>here</u>.
- A Bibliometric Analysis of Microalgae Research in the World, Europe, and the European Atlantic Area, published in *Marine Drugs*. Read <u>here</u>.
- The Nagoya Protocol and Its Implications on the EU Atlantic Area Countries, published in the Journal of Marine Science and Engineering).
 Read <u>here</u>.
- Microalgae carotenoids induce apoptosis and chemosensitization of human melanoma cells to vemurafenib and dacarbazine, published in the Global Journal of Biology, Agriculture & Health Sciences. Read here.
- Enhancing the Food value of microalgae, by Teagasc. Read <u>here</u>.
- Bibliometric report: Most studied microalgae in Europe by University of La Rochelle. Read <u>here</u>.
- Updated UPLC-DAD-MS/MS pigment composition of *Tisochrysis lutea* and purification of fucoxanthin using centrifugal partition chromatography for the chemosensitization of melanoma cells, submitted to *Algal Research*.
- EnhanceMicroAlgae: An European Interregional Project Stimulating Research, Innovation, Industrial Development and Transnational Cooperation within the Atlantic Area Microalgae Sector, published in the Journal of Oceanography and Marine Research. Read <u>here</u>.



EMA Virtual MarketPlace

Remember, the EnhanceMicroAlgae virtual Marketplace is now active: an online platform for the exchange of interests, knowledge, and offers and demands on microalgae-related services. The Marketplace aims to connect scientific research and innovation with industry and market to boost the development of the microalgae sector within the Atlantic Area, but worldwide members of the microalgae sector are welcome to contribute.

This platform is developed and managed by the EnhanceMicroAlgae coordinators, <u>ANFACO-CECOPESCA</u>.



Users of the Marketplace can use it to find Offers and/or place Requests about microalgae services, products, or processes within the following categories: Technology, Biomass, Food & Feed, Cosmetics & Pharma, Vacancies, and Others. Visit the marketplace to find the latest offers:

- Micro and nanoencapsulation of bioactive compounds, by INL – International Iberian Nanotechnology Laboratory, Braga, Portugal.
- Method to extract and purify Chlorophyll and Xanthophyll from Biomass | <u>Simple and efficient method for</u> <u>fuconxanthin extraction from microalgae</u>, by UACOOPERA, University of Aveiro, Portugal
- <u>Tailor-made biomass</u>, by Bioréa, France.
- <u>R&D</u> services in the agro-food, cosmetics and nutraceutical fields, by GLECEX, Spain.
- <u>Spirulina farm rental</u>, by Ecospirulina S.L.
- <u>Strain acquisition, isolation, identification and cryopreservation of cyanobacteria and microalgae</u>, by CIIMAR, Portugal.
- <u>Novel method to increase production and extraction of</u> <u>phytosterols in plant cell cultures</u>, by the University of Alicante, Spain.

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.

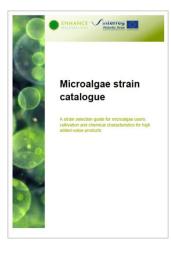


The database, which includes an interactive map, facilitates the access to updated information and cooperation between companies and public institutions of the whole sector, and is part of EMA's <u>Work Package 4</u>, led by <u>Université de La Rochelle</u>.



EMA Strain Catalogue

The microalgae <u>Strain Catalogue</u>, compiled by the EMA team at <u>The</u> <u>University of Manchester</u> has released a **2nd edition** with information about more microalgae strains. This catalogue is part of the deliverables from <u>WP7</u>, led by <u>Swansea University</u>.





Upcoming Conferences & Workshops

A calendar of courses and conferences of interest to the microalgae community is now available in the <u>EnhanceMicroalgae</u> website.

- <u>7th Conference of the International Society for</u> <u>Applied Phycology (ISAP)</u> | *Re-scheduled for May* 23-28, 2021 | Makuhari Messe, Chiba, Japan
- <u>28th European Biomass Conference & Exhibition –</u> <u>Transition to a Bioeconomy</u> | *Re-scheduled for July 6-9, 2020* (VIRTUAL) | Marseille, France
- <u>10th European Algae Industry Summit</u> | *Re-scheduled for October 20-21, 2020* | Reykjavik, Iceland
- <u>10th International Conference on Algal Biomass,</u> <u>Biofuels and Bioproducts</u> | *Re-scheduled for December 7-9, 2020* | Pittsburgh, USA
- <u>2nd Seaweed for Health Conference</u> | *Re-scheduled* for August 23-26, 2020 | Galicia, Spain
- International Conference on Algal Biotechnology | 22-23 June, 2020 | Venice, Italy
- <u>3rd</u> International Conference for Bioresource <u>Technology for Bioenergy, Bioproducts &</u> <u>Environmental Sustainability</u> | *Re-scheduled for 16-19 May, 2021* | Rive del Garda Congress Centre, near Lake Garda, Italy
- <u>14th World Congresss on Biofuels and Bioenergy</u> | 21-22 September 2020 | Rome, Italy
- <u>AlgaEurope 2020</u> | 1 3 December, 2020 | Rome, Italy
- AquaFarm 5th Edition (International Conference & Tradeshow on Aquaculture, Algaculture and Fishing Industry) | 17-18 February, 2021 | Venice Area, Italy

Workshops

- <u>11th European Workshop on the Biology of</u> <u>Cyanobacteria</u> | *Re-scheduled for 6-10 September* 2020 | Porto, Portugal
- Microalgae and Microtechnologies Incubator Workshop |9-12 June, 2020| Queen Margaret University Campus, Edinburgh, UK
- EABA Workshops 2020 (Technical Webinars):
 Fucoxanthin from Micro and Macroalgae | 17 June
 Algae based Fish and Meat | 30 June
- Phycocyanin from Algae | 4 September

Fermentation for Algae Production | 17 September
 Algae Biofertilizer and Biostimulants | 7 October
 Atlantic Sargassum Belt | 4 November

EnhanceMicroAlgae Webinar

An upcoming webinar showcasing the EMA virtual tools and outputs is being prepared. The on-line event, hosted by the University of Manchester, will be a great opportunity for members of the microalgae community to interact with the EMA consortium and benefit from the expertise of our partners.

Event and registration details will be released soon. *Stay tuned!*



The University of Manchester

* Notice: The EnhanceMicroAlgae Manchester conference originally scheduled to take place on June 17-18, 2020 will be postponed. We expect to re-schedule the conference by the end of 2020 when the situation will have hopefully stabilised, allowing all attendees and participants to travel freely and safely.

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:

