

## Development of an Efficient Microwave System for Material Transformation in energy INTensive processes for an improved Yield



### Enjoy reading the sixth issue of the DESTINY newsletter! Events, publications, and the project video

As the project goes on, many were the occasions in which [DESTINY](#) has been presented to stakeholders, scientific community members and industrial organizations. The consortium took part in several conferences, workshops, and other events in order to present the latest results and progress of the project.

In this newsletter we present to you some of the most interesting national and international events attended by the project partners, as well as the latest publications released!

Don't miss any DESTINY updates: follow the project on [LinkedIn](#) and [Twitter](#)!

## EVENTS

### QUALICER 2020 Congress

The QUALICER: World Congress on Ceramic Tile Quality is one of the biggest events of the ceramics field, which took place in Castellón (Spain) on 10th February 2020 and brought together the Castellón Chamber of Commerce, industries and industrial engineers to discuss the latest developments in the ceramic tile sector, focusing not only on the quality of the process and the product, but also the quality of every element involved in the complex network of the ceramic business world.

[KERABEN](#) joined the event and presented DESTINY's latest progress and achievements in the frame of the poster session. Luis Guaita, in particular, highlighted the solutions in terms of stability, process efficiency and characteristics of raw materials, intermediate/sub/final products investigated to improve the performance of the industrial processes in the ceramic sector.



## EPCF&CU online webinar Decarbonization pathways related to indirect emissions in the Ceramic Industry, under the Green Deal

[KERABEN](#) attended the online webinar *Decarbonisation pathways related to indirect emissions in the Ceramic Industry, under the Green Deal*, organized by the European Parliament Ceramics Forum (EPCF) and Cerame-Unie (CU), which was held on Tuesday 30th June 2020. The webinar gave DESTINY the chance to present a comprehensive overview of its aims and objectives, presenting the processes and the technical challenges of the first two years of activity, as well as the main results achieved so far to representatives from the European Commission, industries and to other EU funded projects.

## AMPRE 2021

*AMPRE - International Conference on Microwave and High-Frequency Applications* is a reference conference of the novelties in science and technology in microwave applications, that digitally brought together more than 150 participants from all over Europe to discuss the most recent advances in microwave technology and its applications between 13th and 16th September 2021. DESTINY joined the event participating with two presentations, the first one made by [IST](#) about modelling parametric study of ceramic pigments using microwave, and the second one provided by [CEINNMAT](#) that was restricted to a scientific study of the behavior of a kind of minerals (sulphides) that is present in the raw materials used in DESTINY under microwave heating.

## ECOMONDO 2021



**Ecomondo** is the leading Euro-Mediterranean area green and circular economy expo, which was held from 26th to 29th October 2021 in Rimini (Italy). [CiaoTech](#), partner responsible of the Exploitation, Market Penetration and Dissemination activities of the project, highlighted the latest results obtained by the consortium in the frame of the 'Sustainable technological innovations for material and energy recycling and recovery' conference, which took place on October 26th, 2021. Stakeholders of the energy and microwave technology fields had the chance to learn more about the project also in the CiaoTech booth, where DESTINY poster and other dissemination materials were displayed.

## NEXT APPOINTMENTS!

### 56th Annual Microwave Power Symposium

Laborelec will join the *56th Annual Microwave Power Symposium (IMPI 56)*, which will be held in Savannah (USA), from 14th to 16th June 2022. The project partner has prepared and submitted the paper "Improved Manufacturing Through Continuous High Temperature Microwave Process: The DESTINY Project", which has been accepted for oral presentation at the session on Industrial Microwaves, scheduled on Thursday 16th of June 2022.

## PUBLICATIONS

The consortium is publishing articles and papers related to the DESTINY project, its developments and progresses in specialized journals and newsletters. [Università Politecnica delle Marche \(UNIVPM\)](#) is leading the coordination of this action and below is reported a list of the publications released from January 2020.

- **AMPERE Newsletter: Trends in RF and Microwave Heating**, 31st January 2020. The [UNIVERSITAT POLITÈCNICA DE VALÈNCIA](#) published a brief description of Destiny, as an example of funded project including research and technology transfer activities.
- **High Temperature Dielectric Properties of Iron- and Zinc-Bearing Products during Carbothermic Reduction by Microwave Heating**, Beatriz García-Baños, Jose M. Catalá-Civera, Juan R. Sánchez, Laura Navarrete, Angel M. López-Buendía, Lukas Schmidt (UNIVP, CEINMAT, K1MET), May 2020.
- **Process Simulation and Life Cycle Assessment of Ceramic Pigment Production A Case Study of Green Cr2O3**, Olympios Aliferis, Dimitrios Katsourinis, Dimitrios Giannopoulos, Maria Founti (NTUA), September 2021.
- **Numerical simulation and optimization of the ceramic pigments production process using microwave heating**, Pedro A.V. Ramos, Duarte M.S. Albuquerque, José C.F. Pereira (IST), December 2021.

## DESTINY PROJECT VIDEO!

It is finally available the [DESTINY project video](#), which shortly explains the project, its impact and all the progresses achieved so far towards the development and demonstration of a new concept of firing for granular feedstock to realize material transformation using full microwave heating as alternative energy source and complement to the existing conventional production.

Take a look at the [video](#)!

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For more info about project visit the DESTINY website at: [www.destiny2020andbeyond.eu](http://www.destiny2020andbeyond.eu)



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