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NEWSLETTER

Centro de Recursos Naturais e Ambiente

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Ph.D. defense of José Augusto Dâmaso Condeço



Last February 23, José Augusto Dâmaso Condeço successfully defended his Ph.D. thesis entitled “Novel Additives for Polyolefins: Bi-Functional Additives for the Inhibition of Photo-oxidative Phenomena”, at IST. Supervisor: João Carlos Moura Bordado (CERENA/IST/ULisboa) and Co-Supervisor: Humberto Eduardo Carvalho Santos Ferreira (FF/ULisboa).

Seminar - Environmental benefits of biochar and their use in the treatment of mining soils



Tuesday, March 21, at 16:30am
Venue: Room PA2, South Tower, IST – Alameda

The seminar “ Environmental benefits of biochar and their use in the treatment of mining soils” was presented by Ana Mª Méndez. Ana Mª Méndez has a Ph.D in Chemical Sciences. She has worked at Instituto Nacional del Carbón (CSIC, Spain) and Faculdade de Engenharia (Universidade do Porto) in carbon materials research. Since 2006 she is Associate Professor at the E.T.S.I. Minas y Energía (UPM, Madrid).

She is co-author of more than 50 articles included in the JCR focused on carbon materials preparation and characterization, biochar uses and soil and water remediation. In the last years her work has been focused on the environmental benefits of biochar in mining tailing and soils and metal recovery from them.

Ana C. Marques has participated at HYMA2017

Fifth International Conference on

Multifunctional, Hybrid and Nanomaterials

6-10 March 2017, Lisbon, Portugal



Ana C. Marques has participated at the 5th International Conference on Multifunctional, Hybrid and Nanomaterials (HYMA2017), in Lisbon, March 6-10, 2017, with the following oral presentation:

“Functional hybrid microscaffolds with long-lasting biocidal effect”, by M. Loureiro, E. R. Silva, O. Ferreira, J. M. Bordado, A. C. Marques.

UPCOMING EVENTS



Lourenco Bandeira has been collaborating with The Smithsonian Institution, Washington DC, USA

The CERENA postdoc researcher Dr. Lourenco Bandeira has been collaborating with Dr. Robert Craddock, a geologist at the Center for Earth and Planetary, National Air and Space Museum, The Smithsonian Institution, Washington DC, USA. The objective of their collaborative work consists in the development a computer algorithm capable of characterizing particles in digital microscopic images. The software will be applied both to Terrestrial images obtained from a microscope as well as images obtained from the Martian surface using instruments on lander missions, including the Mars Hand Lens Imager (MAHLI) onboard the Curiosity rover. The information extracted about the characteristics of individual particles have the ultimate goal to help scientist determine how sedimentary deposits were emplaced on Mars (e.g. wind, water or ice).

 José M. Marques, chairman of the 2nd International Multidisciplinary Conference on Mineral Waters - MinWat2017

The 2nd International Multidisciplinary Conference on Mineral Waters: Genesis, Exploitation, Protection and Valorisation – MinWat2017 took place in Luso, Portugal, from the 26th to the 31st March 2017 (<http://www.minwatportugal2017.org/>). This International Conference was chaired by Prof. José Manuel Marques, CERENA's Researcher / IST, under the auspices of the International Association of Hydrogeologists (IAH) and the IAH Portuguese Chapter.

The International MinWat2017 Conference brought together 120 Delegates from 25 countries from Europe, North America, South America, Africa and Asia. This was an International Conference with an unusual format, as it brought together the three main strands of mineral and thermal waters: Hydrogeology (in the field of hydromineral resources characterization), Industry (in relation to bottling and storage) and Medical Hydrology (in its most varied aspects). The three major themes of this International Conference were:

- i) Hydrogeology, hydrogeochemistry and hydrogeophysics – Origin, protection and management of mineral and thermal waters;
- ii) Bottled water: Key characteristics and market trends, and
- iii) Mineral and thermal waters – Health issues, balneology, balneotherapy and balneotechnics,

Published Papers: **Polyurethane OCF Formulation Optimization for Low Free Isocyanate Monomer Content**

A. C. Marques, H. Dias, S. Matos, B. Sargaço, R. Simões, A. De Schrijver, J.C. Bordado. Journal of Cellular Plastics, 53 (2) (2017) 167–179

[DOI: 10.1177/0021955X16639230](https://doi.org/10.1177/0021955X16639230)

 3D imaging of P-waves velocity as a tool for evaluation of heat induced limestone decay

E. Martinho, M. Mendes, A. Dionísio. Construction and Building Materials, 135 (2017) 119–128

<https://doi.org/10.1016/j.conbuildmat.2016.12.192>

 Study of the cleaning effectiveness of limestone and lime-based mortar substrates protected with anti-graffiti products

A. Moura, I. Flores-Cohen, J. de Brito, A. Dionísio, Journal of Cultural Heritage, 24 (2017) 31–44

<https://doi.org/10.1016/j.culher.2016.04.004>