COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Naiara Fernández
Type (Academic or Industrial): Academic
Country: Portugal
Leadership position in the COST: Participant on CA18224
Working Group in which you are involved: WG1 and WG3
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Laboratory/Company:
iBET - Instituto de Biologia Experimental e Tecnológica

Laboratory/Company info:
iBET is a private non-profit institution specialized in biology research and drug discovery/bioprocess development services. Food & Health Division has strong competences studying quality and safety of food products and has expertise in extraction and fractionation of bioactive and functional compounds from natural sources within green chemistry and biorefinery concept for the development of innovative bio-products with functional and health-promoting properties.

Link to the home page of the Laboratory/Company:
https://www.ibet.pt/

Fields of expertise:
- Extraction and purification of high added value compounds
- Synthesis, isolation and characterization of small molecules
- Deep eutectic solvents as green extracting solvents

5 Main publications or patents:
- Bronze, M. R.; Fernández, N.; Abdallah, M.; Matias, A. "Method for extracting hyaluronic acid and chondroitin sulphate and products thereof". Pedido de patente provisório 20191000050064 (2019/10/07).
- Rodrigues, L. A.; Pereira, C. V.; Leonardo, I.; Fernández, N. ; Gaspar F. B.; Silva J. M.; Reis, R. L.; Duarte, A. R. C.; Paiva, A.; Matias, A. A. "Terpene-based natural deep eutectic solvents as efficient solvents to recover astaxanthin from brown crab shell residues." Sustainable Chemistry & Engineering, 2020, accepted.
- Fernández, N.; Sánchez-Fontecoba, P.;Castillo-Martínez, E.; Carretero-González, J.; Rojo, T.; Armand. M. "Polymeric Redox Active Electrodes for Sodium-Ion Batteries". ChemSusChem. 2018, 11, 311.
- Fernández, N.; Carrillo, L.; Vicario, J. L.; Badía, D.; Reyes, E. "Organocatalytic enantioselective (3+2) cycloaddition using stable azomethine ylides". Chem. Commun. 2011, 47, 12313.

Collaborations:
Universidad de Valladolid, Technische Universität Hamburg, University of Novi Sad,

Facilities:

- High pressure and supercritical fluid extraction, counter current fluid extraction
- Microwave
- Spray dryer, particles from Gas-Saturated Solutions
- Centrifugal Partition Chromatography
- Flow chambers, CO_2 incubators and incubators with agitation
- Microscopes
- HPLC-DAD-MS; LC-MS; GC-MS