



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Maria Jose Cocero Alonso

Type (Academic or Industrial): Academic

Country: Spain

Leadership position in the COST: Leader of WG2 on CA18224

Working Group in which you are involved: WG2

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Laboratory/Company: BioEcoUva Research Institute

Laboratory/Company info:

BioEcoUVa objectives are to develop innovative, integrated and sustainable processes for the utilization and valorization of biomass, promoting and driving: i) multidisciplinary research, oriented by innovation. ii) transfer of knowledge and technology to the productive sector, iii) training and contribution to the development of an innovative scientific and technological culture in the society. Biorefineries by innovative processes. Innovative materials. Bioenergy, sustainable use of energy and energy transition

Link to the home page of the Laboratory/Company:

<https://bioeco.uva.es>

Fields of expertise:

- 1) Development of processes and products in the field of Bioeconomy.
- 2) Intensification of processes through the implementation of new technologies.
- 3) Development of new materials through the use of supercritical fluids.
- 4) Energy for the development of sustainable processes.

5 Main publications or patents:

- Cantero, D., Jara, R., Navarrete, A., Pelaz, L., Queiroz, J., Rodríguez-Rojo, S., & Cocero, M. J. (2019). Pretreatment processes of biomass for biorefineries: Current status and prospects. *Annual Review of Chemical and Biomolecular Engineering*, 10, 289-310.
- Cocero M.J., Cabezas A., Abad N., Adamovid T., Vaquerizo L., Martines C., Pazo V. Understanding biomass fractionation in subcritical & supercritical water. (2018) J Supercritic Fluids,133, 550-565.
- Cocero M.J., Supercritical water processes. Future prospects. (2018) J supercritical fluids, 134, 124-132.
- Vaquerizo, L., & Cocero, M. J. (2019). Ultrafast heating by high efficient biomass direct mixing with supercritical water. *Chemical Engineering Journal*, 378,15, 122199
- Abad-Fernandez N, Perez-Velilla E, Cocero MJ. Aromatics from lignin through ultrafast reactions in water. *Green Chemistry*, 2019, 21(6), 1351-1360.

Collaborations:

WP High Pressure Technology EFCE



Facilities:

Pilot plants innovative design (<http://hpp.uva.es/equipment/pilot-plants>)