

EFCE Spotlight Talks

Working Party on High Pressure
Technology

27 April
2022

3:00 pm • 6:30 pm

CEST

Technology to improve conventional chemical engineering processes



Chemical engineering can provide the answers to the major challenges in developing sustainable processes. Pressure is a variable that allows the intensification of processes with compact equipment and with reaction media and solvents properties, which improve yield and selectivity, thereby simplifying downstream processing. Water and CO₂ are widely recognised as green solvents, in which pressure can provide enhanced solvent properties for CO₂ or in transforming water into a non-polar solvent. The constant improvement of pressurised technologies enables the goal of creating energy efficient processes. This webinar will present examples of high-pressure technologies that significantly improve the conventional processes used in chemical, food, and pharma sectors. As a result, they provide enhanced safety and quality of solvent-free products, which go beyond the requirements of more restrictive future legislation.

PROGRAM

- 15:00 **Welcome and introduction**
María J Cocero, Chair WP on High Pressure Technology, Valladolid University – Spain
Giorgio Veronesi, EFCE President
- 15:10 **Sterilization by supercritical CO₂**
Lourdes Calvo, Complutense University of Madrid - Spain
- 15:40 **Extraction of medicinal plants by high-pressure technologies**
Erika Mária Vági, Budapest University of Technology and Economics - Hungary
- 16:10 **CPF Technology – application of CO₂ extracts in industrial product development**
Sabine Grüner-Lempart, Weihenstephan-Triesdorf University, Germany
- 16:40 **High-pressure food processing**
Carl Schaschke, University of the West of Scotland, United Kingdom
- 17:10 **Chemical Reaction Engineering for Sustainable Value Chains in the Chemical Industry**
Thomas E. Müller, Ruhr University Bochum, Germany
- 17:40 **High-pressure technologies from a process engineering perspective**
Luis Vaquerizo, Técnicas Reunidas - Spain
- 18:10 **Final remarks and panel discussion**
María J Cocero, Chair WP on High Pressure Technology

Registration

free of charge but mandatory

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