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Press release

MPI CEC researcher receives award for "green chemistry"

For his doctoral thesis entitled "Green processes for the production of glycerol carbonate and solketal", Dr. Jesús Esteban Serrano (33) will receive the EFCE Excellence Award in Chemical Reaction Engineering on May 21, 2018.

"The award recognizes an outstanding PhD thesis and is judged on the breadth and depth of study, industrial relevance, innovation, dissemination of the results and the European dimension," it says in the official statement.

Serrano is currently a postdoctoral fellow at the Max Planck Institute for Chemical Energy Conversion in Mülheim an der Ruhr. He completed his doctoral thesis at the Complutense University of Madrid between 2010 and 2015.

The doctoral thesis, which has now been published in nine journals and 12 lectures, provides an "exemplary application of chemical engineering methods to processes in green chemistry," as the selection committee explained.

The prize is endowed with EUR 1500 and includes a travel grant to the 25th International Symposium on Chemical Reaction Engineering (Florence), during which the prize is awarded. Serrano will present his results to an expert audience.

The award is sponsored by BP International Ltd.

The committee appreciated that Serrano in his work applied a broad spectrum of experimental techniques (from the determination of phase equilibrium to measurement of reaction kinetics) which he additionally supported with modelling methods. This allowed him also to propose new theories to model the observation he made in his PhD thesis.

It is worth to stress that his research might be highly applicable to anyone interested in green chemistry as it applies a typical "biorefinery type" reaction utilizing glycerol and a

reactant under limited miscibility conditions to produce glycerol carbonate and solketal. This process is also industrially attractive despite its difficulties.

This press release is based on the text of the European Federation of Chemical Engineering. The original notification can be found at: <http://www.efce.org>

The European Federation of Chemical Engineering (EFCE), founded in 1953, is a non-profit-making association whose aim is to promote co-operation in Europe between non-profit-making professional scientific and technical societies in 30 countries for the general advancement of chemical engineering and as a means of furthering the development of chemical engineering.