Press release

Presse-Information ● Information de presse

03/2018
9 June 2018

http://www.efce.org

Skiborowski wins CAPE PhD Prize

Work on long-standing separations problem scoops Excellence Award

Dr Mirko Skiborowski, research group leader at TU Dortmund, Germany, has won the **European Federation of Chemical Engineering's 2018 Excellence Award for an outstanding PhD thesis in Computer-Aided Process Engineering** (CAPE) for his work on a particularly complex separations process.

His thesis dealt with optimisation-based methods for the conceptual design of hybrid processes for the separation of non-ideal, multi-component liquid mixtures.
His former PhD supervisor, Professor Wolfgang Marquardt, commented: "This is a long-standing problem in process systems engineering with various solution attempts in the last three decades. The synthesis problem is extremely difficult to solve because of the complexity of the optimization model which is strongly nonlinear, comprises a very large number of equations, and which involves a significant number of integer decisions in addition to the design degrees of freedom of a separation process with fixed structure." He further explained: "The key contribution of Mirko's thesis is the development of a general solution strategy for an optimization based conceptual design of hybrid separation processes and its validation with an impressive number of case studies of industrial significance."

The judging committee of EFCE's CAPE Working Party was highly complementary of the scientific quality of Skiborowski's work, which comprises a comprehensive review of the state of the art, the recognition and the integration of the contributions of major researchers in the field in order to propose an enhanced and comprehensive method and the validation of the proposed method by solving real problems of process design for the separation of azeotropic mixtures.

Skiborowski said he was very honoured to receive the award. The Excellence Award consists of a cash prize of €1500 plus a travel grant of up to €500 to attend the 28th European Symposium on Computer-Aided Process Engineering (ESCAPE-28), where the award will be presented. ESCAPE-28 takes place in Graz, Austria, from 10-13 June 2018.

The award is kindly sponsored by Process Systems Enterprise Ltd.

Ends

Related links

EFCE media centre (http://www.efce.info/Media+Centre.html)

Excellence Award in Recognition of an Outstanding PhD Thesis on CAPE (http://efce.info/ExcellenceAwardCAPE.html)

European Symposium on Computer-Aided Process Engineering ESCAPE-28 (http://escape28.tugraz.at)

Notes to media:

For further information, please contact:

Claudia Flavell-While
tel: +44 (0)1788 534422
email: Claudia@icheme.org

About chemical engineers

Chemical, biochemical and process engineering is the application of science, maths and economics to the process of turning raw materials into everyday products. Professional chemical engineers design, construct and manage process operations all over the world. Oil and gas, pharmaceuticals, food and drink, synthetic fibres and clean drinking water are just some of the products where chemical engineering plays a central role.

About EFCE

Founded in 1953, The European Federation of Chemical Engineering (EFCE) is a non-profit-making association, whose object 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. See www.efce.org

About Process Systems Enterprise Ltd.(PSE)
Advanced Process Modeling Company

PSE is the world's leading provider of advanced process modelling software and services to the process industries. The company's gPROMS tools are used to explore the process decision space and optimise design and operation using high-fidelity mechanistic models and advanced global system analysis and optimisation techniques. The result is accelerated process development, better process design and operation, reduced technology risk and improved R&D efficiency. Key application areas are chemicals & petrochemicals production, formulated products manufacture, and oil & gas safety and production optimisation. PSE supports academic research and teaching in universities around the world via a dedicated PSE Academic operation.