European Federation of Chemical Engineering
Europäische Föderation für Chemie-Ingenieur-Wesen
Fédération Européenne de Génie Chimique

Press release

Presse-Information ● Information de presse

02/2020
12 May 2020

http://www.efce.org

EFCE presents 2020 Distinguished Lecture in Thermodynamics to Gabriele Sadowski

The 2020 Distinguished Lecture in Thermodynamics and Transport Properties has been awarded to **Professor Gabriele Sadowski**, TU Dortmund, Germany.

The Federation's *Working Party* on *Thermodynamic and Transport Properties* selected Gabriele Sadowski for her internationally recognised work related to advances of the statistical associating fluid theory (SAFT). The perturbed chain SAFT (PC-SAFT) approach, published in 2001 with Prof Joachim Groß, has had a vast impact in the capability to model complex fluids and is widely used all over the world, nowadays even in pharmaceutical industry.

Gabriele Sadowski received a Diploma in Chemistry (1987) and a PhD in Physical Chemistry (1991) from the Technische Hochschule Leuna-Merseburg, Germany. From 1992 to 2000 she was Assistant Professor and Group Leader for polymer thermodynamics at the Department of Process Engineering, TU Berlin, Germany. Since 2001, she is full Professor at TU Dortmund University, teaching fundamentals of thermodynamics, phase equilibrium thermodynamics, polymer thermodynamics, and biothermodynamics. At the same time she was appointed Director of Laboratory for Thermodynamics of its Department of Chemical and Biochemical Engineering. In 2016, she was appointed Vice President for Research at TU Dortmund.

Her research focuses on thermodynamic modelling and simulation, polymer thermodynamics, thermodynamics of pharmaceutical systems, reaction thermodynamics, and crystallization. After the development of PC-SAFT, she continued extending the application of the very successful approach to very difficult systems, including polymers and electrolytes. More recently, Professor Sadowski has focused her efforts to address challenges in pharmaceutical systems. She has applied and extended the PC-SAFT approach to demonstrate the ability of the method to predict the solubility of active pharmaceutical ingredients, in a variety of environments, accounting for pH changes and formulations on amorphous templates. These developments illustrated not only that the model is highly successful and flexible, but also that it constitutes an approach which can have a widespread application in a wide range of systems of practical relevance in chemical, material, environmental and biochemical engineering.

Professor Sadowski has published more than 230 papers in high-impact peer-reviewed journals; these papers have been cited more than 8000 times.

Her commissions of trust and memberships include: Membership of the Board of DECHEMA (since 2011) and membership of several German ProcessNet working parties; membership of the Scientific Board of the Leibniz Institute for Interactive Materials (since 2014); and, since 2015, Associate Editor of Journal of Chemical and Engineering Data. Furthermore, she has been a member of the Working Party on Thermodynamics and Transport Properties of the EFCE from 2007 to 2017

Gabriele Sadowski has received several awards for her research including the Arnold Eucken Award of the German Society of Process and Chemical Engineering (1999), the Gottfried Wilhelm Leibniz Award of the German Science Foundation (2011).

The award jury stated: “In terms of her scientific contribution she is a clear leader in our field, and more importantly, she is a great supporter of our community, a great teacher and mentor to younger scientist.”

Gabriele Sadowski is invited to deliver the 2020 Distinguished Lecture in Thermodynamics and Transport Properties at the 31th Symposium on Applied Thermodynamics (ESAT) in Paris, France. The conference has been re-scheduled to takes place on 4-7 July 2021.

The award is generously sponsored by Elsevier B.V., Amsterdam, The Netherlands.

Ends

Related links

EFCE media centre (http://www.efce.info/News)

31st European Symposium on Applied Thermodynamics - ESAT 2021 (http://www.esat2020.com)

EFCE Working Party on Thermodynamics and Transport Properties (https://wp-ttp.dk/)

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