Towards a scenario- and problem-based chemical engineering curriculum

Prof. Eva Sorensen, Associate Chair and Professor of Chemical Engineering University College London

9 AM – 11 AM, November 13, 2015, Civil Engineering Conference Room • CENT 3031

In this workshop, Prof. Sorensen will describe their experience at UCL in developing a scenario- and problem-based chemical engineering curriculum with emphasis on experimentation and computation and supported by eLearning. She will focus on the *challenges* (5 week part-time projects) and *scenarios* (1 week full time projects) they have introduced for first and second year students. She will present more details, including how they are organizing the projects, what exactly the students are doing, how faculty are assessing their work and the resources that are involved. In particular, she will tell us what is required by the faculty and the department to undergo a restructuring such as the one done by the chemical engineering department at UCL. This is meant to be an interactive workshop, she would like to hear from all the participants about their views on the program changes at UCL and how it may apply to UNM's educational programs.

This is a faculty development workshop organized by the Chemical & Biological Engineering as part of the NSF – Professional Formation of Engineers, Research Initiation in Engineer Formation (PFE:RIEF) grant (EEC 1544233; co-PIs Abhaya Datye, Vanessa Svihla and Jamie Gomez). If you would like to meet Prof. Sorensen on Friday Nov. 6 after the workshop, please inform the host Abhaya Datye.

Biography of the speaker

Prof Eva Sorensen received her degree of sivil ingeniør (MSc) in Chemical Engineering from the Norwegian University of Science and Technology in 1989 and obtained the degree of doktor ingeniør (PhD) from the same institution in 1994. Following this, she spent one year at the Centre for Process Systems Engineering at Imperial College London as a postdoctoral researcher. Prof Sorensen joined the Department of Chemical Engineering at UCL in 1996 and is currently a Professor in Chemical Engineering. She obtained an MA in Education from UCL in 2011.

Prof Sorensen is a Chartered Engineer, a Chartered Scientist and a Fellow of the Institution of Chemical Engineers (IChemE) and a Fellow of the Higher Education Academy (HEA). She is a member of the European Federation of Chemical Engineering (EFCE)' Working Party on Fluid Separations and was its Chair 2007-2013. She is also a member of the EFCE's Executive Board.

Prof Sorensen is Editor-in-Chief of Chemical Engineering Research and Design and a member of the Advisory Board for Chemical Engineering & Technology. She is a member of the IChemE's Fluid Separations Special Interest Group Committee and Education Special Interest Group Committee and member of the IChemE's Education & Accreditation Forum.

She is a member of the Centre for Process Systems Engineering, a joint Centre between Imperial College and UCL. She is also a member of the American Institute of Chemical Engineers (AIChE) and of the European Society for Engineering Education (SEFI).