

TRAYS, PACKINGS, AND DIVIDING WALLS IN DISTILLATION COLUMNS - DESIGN, INNOVATION, CONSTRUCTION AND OPERATION

Despite being the most mature industrial separation technology, still many exciting developments take place in distillation research and development, and not only in academia. In this Spotlight Session, three speakers from industry talk about (1) design of trays and operation of tray columns, (2) latest developments in structured packings and packed columns, and (3) how to design and construct dividing wall columns.

While design of trays and packings is in many academia not a topic of research anymore, industrial developments discussed in this spotlight session show that improved trays and packings can lead to very significant reductions in energy demand, and hence, in CO2-footprint. Next to developments on internals level, also column configuration changes can help realize dramatic energy savings.

Dividing Wall Columns are a proven technology to save a considerable amount of energy, but even today, opinion persists that dividing wall columns are only a marginal phenomenon in distillation and that even the mechanical challenges are too great to bring dividing wall columns to a wider range of applications. To counter this view, we will present two case studies featuring a packed and a trayed dividing wall column. These case studies will show that for almost every theoretical obstacle to the design of a dividing wall column, a mechanical solution already exists which has also been tested and proven on an industrial scale.

PROGRAM

14:0	Welcome and introduction Boelo Schuur, Secretary Working Party on Fluid Separations, EFCE Scientific Vi	ce-President
14:1	Distillation tray design and operation Greg Spencer, CEng FIChemE, Koch-Glitsch UK Div. Koch Engineered Solutions	Ltd - UK
14:4	Structured packing, important design aspects and latest product development Roza (MSc), President Roza Process Technology Consulting and Retired Management and Process Innovation, Sulzer Chemtech	•
15:1	Design and construction of dividing wall column distillation processes Dr. Robin Schulz, Julius Montz GmbH - Germany	
15:4	Discussion and conclusion Boelo Schuur, Secretary Working Party on Fluid Separations, FFCF Scientific Vi	ce-President

