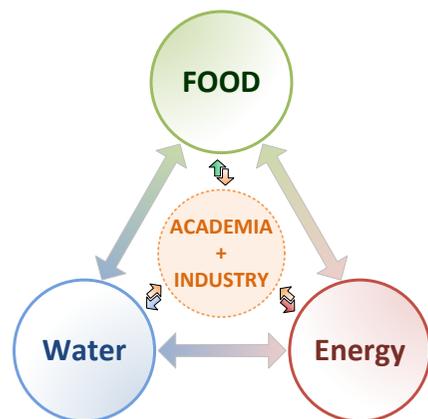


# Fouling and Cleaning in Food Processing 2018: 'the food-water-energy challenge'

17<sup>th</sup>-20<sup>th</sup> April

Lund University, Sweden



## Announcement and Call for Papers

The formation of unwanted layers of fouling deposits on the surface of process equipment and their removal, as well as the attachment and inactivation of associated microbiological species, is of critical importance in the food industry. Fouling is prevalent in heat transfer devices, evaporators, membrane separations and distribution lines. Hygienic design, operation, maintenance, monitoring and assurance is a multi-disciplinary field lying at the interface between life sciences, physical sciences and engineering.

Most food production processes employ water-based techniques for cleaning and disinfection. The need to minimise water, energy and chemical consumption (in effect, a food-water-energy nexus) is increasingly important for sustainable food production. Building quantitative understanding of the mechanisms involved in *both* fouling and cleaning is needed to achieve this.

We can measure, model and control more than ever before. The aim of this conference is to bring together those active in the area from different academic disciplines and the food industry to (a) report on developments in the area, (b) explore interactions with related fields (e.g. micro-fabrication), (c) explore opportunities for knowledge transfer and (d) engage in discussions of the way forward for the industry.



The conference will be held in Lund, Sweden, in spring 2018. It continues the series of meetings which started in Lund in 1981 and were held in Cambridge, between 1994-2014.

The conference proceedings will be published in book and electronic form. Selected papers will be invited for submission to the January 2019 issue of the IChemE/EFCE Journal: *Food & Bioproducts Processing*.

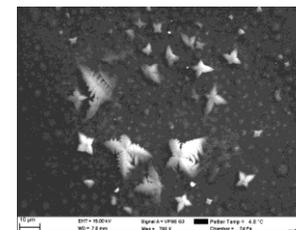
## Aims and Scope

This conference aims to bring together experts in the field, graduate students and industrial practitioners to meet, network and hear about interesting developments or work in progress. Materials will be presented in oral and poster formats. Parallel sessions are **not** used.

Technical papers are invited in all aspects of fouling and cleaning of food-related products, tailored surfaces, and attachment of microbial species, for example:

- (i) Adsorption and attachment of proteins, fat or oil, bacteria and carbohydrates to surfaces
- (ii) Cleaning of hard or porous surfaces, including membranes
- (iii) Disinfection – relating to cleaning and rinsing operations
- (iv) Biofilms – formation and removal
- (v) Designing and functionalising surfaces to mitigate fouling or promote cleaning
- (vi) Sensor development
- (vii) The 'interface' between equipment design, plant operation and microbiology
- (viii) Sustainability in operation and design, particularly in water minimisation.

Experimental papers and modelling studies are equally welcome: papers reporting industrial data and experience are particularly welcome.



Industrial registrants will be able to change the person attending up to the start of the conference to suit company dynamics.

Exhibition space will be available for companies wishing to present and demonstrate their technologies.

## Preliminary Timing

### 2017

31 October	Submission date for abstracts for full papers
17 November	Submission date for abstracts for short (industry) papers
30 November	Confirmation of acceptance for all papers and programme construction

### 2018

31 January	Final submission date for papers (in pdf format) in order to generate the proceedings (book and e-version)
28 February	Final date for registration for industry presentations (not for publication)
8 March	Programme finalised
<b>17-20 April</b>	<b>Conference</b>
May	Invitation to selected papers for special issue of <i>Food and Bioproducts Processing</i>

### 2019

January	Special Issue of IChemE/EFCE Journal: <i>Food &amp; Bioproducts Processing</i>
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Instructions to authors and other submission information will be available on the conference website.

[www.lth.se/membranportalen/english/fcftp2018/](http://www.lth.se/membranportalen/english/fcftp2018/)

## Venue

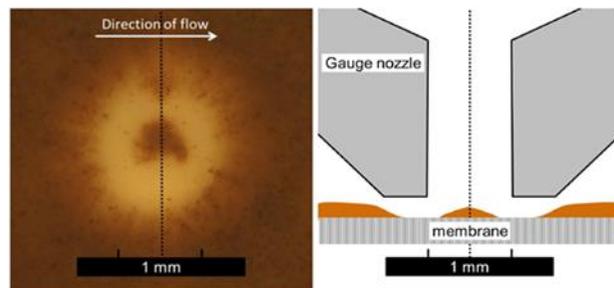
The University of Lund is located in the South of Sweden and with its 350 years' history it is one of the oldest universities in Europe. The conference will be held close to the centre of Lund.

Lund is readily accessible by road, train and air. The closest airports are Malmö-Sturup (30 minutes by coach) and Copenhagen (Denmark, 50 minutes by direct train).



Registration fees will include reduced rates for research students, and one-day rates. Accommodation will be available either side of the meeting for delegates with long journeys.

The number of delegates is limited to **100**, of which 15 places will be reserved for industrial delegates until 28 February 2018.



## Technical Committee

Dr Thierry Bénézech	<i>INRA-CERTIA, Villeneuve d'Ascq, France</i>
Dr Michael Bird	<i>University of Bath, UK</i>
Prof. Xiao Dong Chen	<i>Soochow University, China</i>
Dr John Chew	<i>University of Bath, UK</i>
Dr. Graham Christie	<i>University of Cambridge, UK</i>
Dr Guillaume Delaplace	<i>INRA-LGPTA, Villeneuve d'Ascq, France</i>
Dr Martijn Fox	<i>NIZO Food Research BV, NL</i>
Prof. Peter Fryer	<i>University of Birmingham, UK</i>
Prof. Christine Grant	<i>North Carolina State University, USA</i>
Dr Tony Hasting	<i>formerly Unilever, UK</i>
Dr Bo Boye Busk Jensen	<i>Alfa Laval, Denmark</i>
Prof. Ann-Sofi Jönsson	<i>Lund University</i>
Dr Jeanette Lindau	<i>Tetra Pak, Sweden</i>
Prof. Frank Lipnizki	<i>Lund University, Sweden</i>
Prof. Ken Morison	<i>University of Canterbury, NZ</i>
Prof. Jens-Peter Majschak	<i>TU Dresden, Germany</i>
Prof. Tommy Nylander	<i>Lund University, Sweden</i>
Dr Olga Santos	<i>Alfa Laval, Sweden</i>
Dr Kath Whitehead	<i>Manchester Metropolitan University, UK</i>
Prof. Ian Wilson	<i>University of Cambridge, UK</i>

The meeting is organised by the Departments of Chemical Engineering at Lund, Bath and Cambridge. Supporters include the IChemE Food and Drink Special Interest Group and the UK Fluids Network Special Interest Group on Fluid Mechanics of Cleaning and Disinfection.

Further details can be obtained from

[www.lth.se/membranportalen/english/fcftp2018/](http://www.lth.se/membranportalen/english/fcftp2018/)

or

Prof. Frank Lipnizki ([frank.lipnizki@chemeng.lth.se](mailto:frank.lipnizki@chemeng.lth.se))

Prof. Ian Wilson ([ian.wilson@ceb.cam.ac.uk](mailto:ian.wilson@ceb.cam.ac.uk))