Fouling and Cleaning in Food Processing 2014: 'Green Cleaning'

31st March – 2 April 2014 Jesus College Cambridge





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 and assurance is a multi-disciplinary field lying at the interface between life sciences, physical sciences and engineering.

Most food production processes employ waterbased techniques for cleaning. The need to minimise water consumption, energy use and reduce the environmental impact of cleaning operations is increasingly important. Achieving 'green cleaning' requires quantitative understanding of the mechanisms involved in *both* fouling and cleaning.

Modern measurement techniques and surface technologies mean that we can measure and control much more than ever before. The aim of this conference is to bring together those active in the area from different disciplines and the food industry to (*a*) report on developments in the area, (*b*) explore interactions with related fields (*e.g.* micro-fabrication, surface analysis) and (c) engage in discussions of the way forward for the industry.



The conference will be held in Cambridge, UK, in spring 2014 and continues the series of meetings onstarted in Lund in Sweden in 1981.

Photo – cleaning jet

The conference proceedings will be published in book form and as a CD. Selected papers will be invited for submission to the January 2015 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. Material 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 materials, 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 manufacturing 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 minimization.

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.

Timing

2013

30 September	Submission date for abstracts for full papers
31 October	Submission date for abstracts for short (industry) papers
30 November	Confirmation of acceptance for all papers and programme construction
2014	
31 January	Final submission date for papers (in pdf format) in order to generate the proceedings (booklet and CD-ROM)
28 February	Final date for registration for industry presentations
31 March - 2 April	Conference
April	Invitation to papers for special issue of <i>Food and Bioproducts Processing</i>
2015 January	Special Issue of IChemE/ EFCE journal <i>Food</i> & <i>Bioproducts Processing</i>



Instructions to authors and other submission information will be available on the conference website.

www.ceb.cam.ac.uk/FCFP2014/

Venue

Jesus College is one of the older colleges in Cambridge and regularly hosts academic meetings of this size and nature in its very pleasant and congenial setting.

The facilities at this 15th Century college have been refurbished extensively recently, so that all accommodation is en-suite. Further information about the College can be found at

www.jesus.cam.ac.uk

Conference sessions will be held in the Department of Chemical Engineering & Biotechnology, which is 10 minutes walk from the College, in the city centre.

Cambridge can be reached readily by major roads, and by regular coach and train services. London's Stansted airport is 40 minutes away by coach or train. Regular coach services also service London's Luton, Gatwick and Heathrow airports. Car parking is available at the College, which is a short walk from the bus/coach station and the city centre.



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 1 March 2014.

Organising Committee

Dr Thierry Bénézech	INRA-LGPTA, Villeneuve d'Ascq, France
Dr Michael Bird	University of Bath, UK
Prof. Xiao Dong Chen	Monash University, Australia
Dr John Chew	University of Bath, UK
Dr. Graham Christie	University of Cambridge, UK
Dr Guillaume Delaplace	INRA-LGPTA, Villeneuve d'Ascq, France
Dr Martijn Fox	NIZO Food Research BV, NL
Prof. Peter Fryer	University of Birmingham, UK
Prof. Christine Grant	North Carolina State University, USA
Dr Tony Hasting	formerly Unilever, UK
Dr Jeanette Lindau	Tetrapak, Swedend
Dr Frank Lipnizki	Alfa Laval, Denmark
Edyta Margas	Campden BRI, UK
Prof. Ken Morison	University of Canterbury, NZ
Prof. Jens-Peter Majscha	ak TU Dresden, Germany
Dr Prof. Tommy Nylande	r University of Lund, Sweden
Dr Kath Whitehead	Manchester Metropolitan University, UK

Glenn Ward	Procter & Gamble, UK
Dr Ian Wilson	University of Cambridge, UK

The meeting is organised by the Departments of Chemical Engineering at Bath and Cambridge. Supporters include the IChemE Food and Drink and Fluids Separations Special Interest Groups.

Further details can be obtained from

www.ceb.cam.ac.uk/FCFP2014/

or

Dr. Ian Wilson, Congress Secretary Department of Chemical Engineering & Biotechnology New Museums Site Pembroke Street, Cambridge CB2 3RA, UK

ian.wilson@ceb.cam.ac.uk