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 water-based 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 on started in Lund in Sweden in 1981.

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.

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*. 
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 *Food and Bioproducts Processing*

2015

January

Special Issue of IChemE/EFCE journal *Food & Bioproducts Processing*

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](http://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.

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, Sweden
- Dr Frank Lipnizki, Alfa Laval, Denmark
- Edyta Margas, Campden BRI, UK
- Prof. Ken Morison, University of Canterbury, NZ
- Prof. Jens-Peter Majschak, TU Dresden, Germany
- Dr Prof. Tommy Nylander, 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/](http://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

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.

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