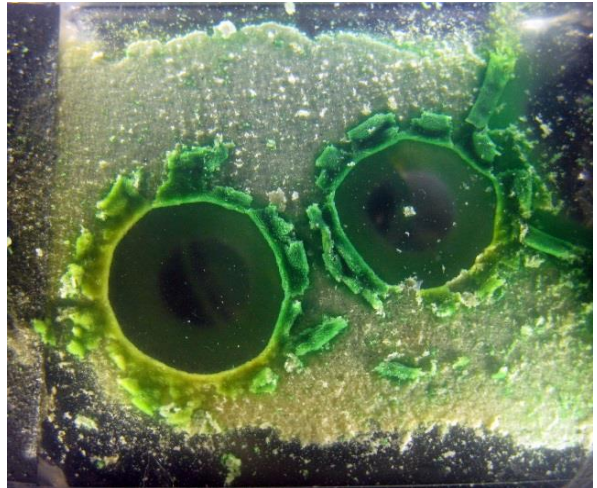
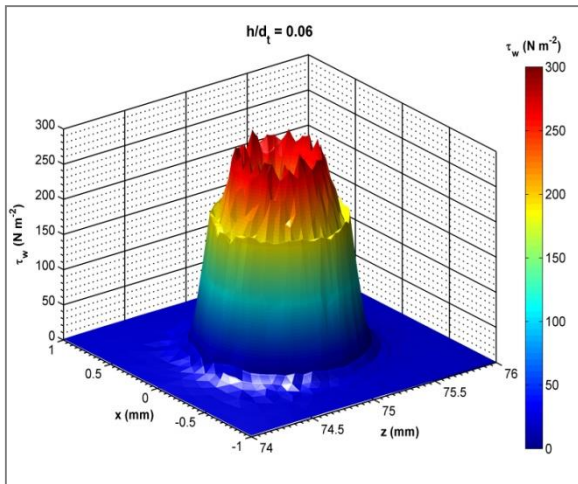
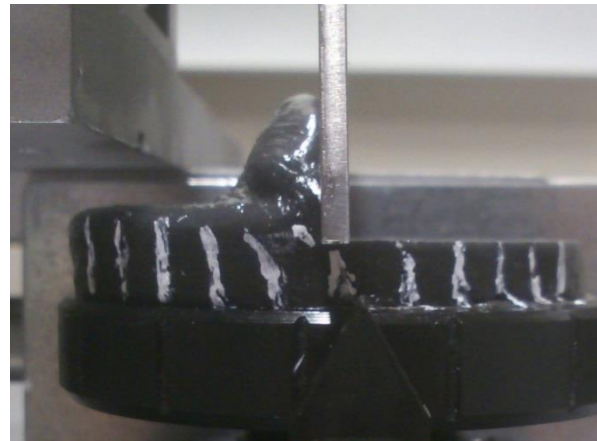
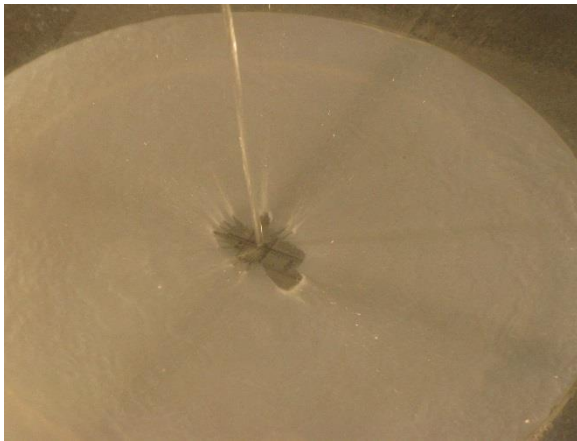


Fouling & Cleaning in Food Processing 2014

Green Cleaning



Jesus College, Cambridge
31st March-2nd April 2014

Schedule



Fouling and Cleaning in Food Processing 2014

31st March – 2 April 2014

Sunday 30th March

16:00-23:00	Registration	Prioress' Room, Jesus College
19:00-23:30	Drinks	College Bar, Jesus College

Monday 31st March

8:00-9:00	Breakfast in Hall
8:00-8:45	Registration Alcock Room, Jesus College, and Department of Chemical Engineering

9:00 **Conference Introduction and Overview**
Ian Wilson

Session I – Fouling

Chair: Dr Michael Bird

Time	Lead Author	Title
9:10	Maykel Verschueren <i>NIZO Food Research, NL</i>	Understanding and reducing fouling in whey evaporators
9:32	Ken Morison <i>University of Canterbury, NZ</i>	Reduction of fouling in falling-film evaporators by design
9:54	Kent D Rausch <i>University of Illinois, USA</i>	Fouling rates of model carbohydrate mixtures and their interaction effects
10:16	Cristiane Boxler <i>TU Braunschweig, GER</i>	Fouling of milk components with varying surface and process parameters
Coffee Break		
11:10	Yetioman Touré <i>University of Liège-Gembloux, BEL</i>	Influence of whey protein denaturation on adherence of soiling particles to stainless steel
11:32	Tuve Mattsson <i>Chalmers University, SWE</i>	In-situ investigation of soft cake fouling layers using fluid dynamic gauging
11:54	Jie Xiao <i>Soochow University, PRC</i>	Towards predictive modeling of crystallization fouling: from macroscale to multiscale
12:16	Edward Ishiyama <i>IHS Downstream Research, UK</i>	Management of beet sugar refinery preheat trains subject to fouling [Poster]
12:21	Maykel Verschueren <i>NIZO Food Research, NL</i>	Model based prevention of powder build-up in spray driers

Session Wrap Up & Lunch

Session 2 – Surfaces and SUSCLEAN

Chair: Dr Graham Christie

Time	Lead Author	Title
14:00	Parnia Navabpour <i>Teer Coatings, UK</i>	Low surface energy, photocatalytic and antimicrobial approaches to fouling in food and beverage processing
14:22	Thierry Bénézech <i>INRA, FR</i>	Sustainable cleaning and disinfection of fresh-cut products: overview of main advances on the FP7 SUSCLEAN project
14:45	Alfredo Rodrigo <i>AINIA, ESP</i>	Environmental assessment of new decontamination and sanitation techniques for fresh-cut products - SUSCLEAN project [Poster]
14:50	Charles Cunault <i>INRA, FR</i>	A novel set-up to study the biofilm dynamics under specific turbulent flow conditions encountered in fresh cut food industry processing [Poster]
14:55	Janina Grimm <i>TU Braunschweig, GER</i>	Decontamination of adhered cells with alternative cleaning strategies: Metal colloids, electrolyzed oxidizing water and ultrasound [Poster]
15:00	Leanne Fisher <i>Manchester Metropolitan, UK</i>	Cleaning and disinfection of stainless steels [Poster]
15:05	Xiaodong Chen <i>Soochow University, PRC</i>	Poly(ionic liquid)s functional stainless steel surfaces for antibacterial application [Poster]
15:10	Phanida Saikhwan <i>Thammasat University, THAI</i>	Effects of surface properties and cell size on adhesion of bacteria on silicon nitride surfaces [Poster]
15:15	Christine Faille <i>INRA, FR</i>	Evaluation of sampling devices for monitoring surface hygiene in food environments [Poster]
15:20	Madalena Lemos <i>University of Porto, POR</i>	The effect of surface properties on the removal of <i>bacillus cereus</i> and <i>pseudomonas fluorescens</i> single and dual species biofilms [Poster]
15:25	Leonardo Gomes da Cruz <i>University of Sao Paulo, BRA & University of Cambridge, UK</i>	A techno-economic analysis of the performance of antifouling coatings in food industry heat exchangers [Poster]

Poster Session

16:30	Leanne Fisher <i>Manchester Metropolitan, UK</i>	Investigating the potential for the use of photocatalytic surfaces in process hygiene in the brewing industry
16:52	Christine Faille <i>INRA, FR</i>	Food processing lines. Role in food contamination from <i>Bacillus</i> spores.
17:14	Kathryn Whitehead <i>Manchester Metropolitan, UK</i>	Application and detection methods of <i>Listeria monocytogenes</i> and fish soil on open surfaces in order to optimize cleaning protocols

Session Wrap Up

19:00	Pre-Dinner Drinks	Upper Hall, Jesus College
19:30	Dinner	Hall, Jesus College (College Bar open afterwards)

Tuesday 1st April

7:30-8:30 Breakfast in Hall

8:30-9:00 Registration
Department of Chemical Engineering

Session 3 – Cleaning Chair: Dr Tony Hasting

Time	Lead Author	Title
09:00	José Luis Jiménez Pérez <i>University of Granada, ESP</i>	Optimisation of the cleaning of denatured whey protein with proteases [Poster]
09:15	Martin Shoenitz <i>TU Braunschweig, GER</i>	Challenges in cleaning microstructured devices
09:37	Ruben Mercadé Prieto <i>Soochow Univeristy, PRC</i>	Cleaning beyond whey protein gels: egg white
10:00	Oliver Peck <i>University of Bath, UK</i>	An assessment of the removal behaviour of biofilms grown under static and flow conditions
10:22	Madalena Lemos <i>University of Porto, POR</i>	The effect of shear stress on the formation and removal of <i>Bacillus cereus</i> biofilms
Coffee Break		
11:20	Raul Perez Mohedano <i>University of Birmingham, UK</i>	Development of a mechanistic swelling-removal model for the scanning fluid dynamic gauge
11:44	Akin Ali <i>University of Cambridge, UK</i>	Development of a millimanipulation device to quantify the strength of food fouling deposits
12:06	Henning Foeste <i>TU Braunschweig, GER</i>	A unified approach to classify removal processes of different soils using dimensionless numbers
12:28	Ergun Gungor <i>University of Cambridge, UK</i>	Eco-effective changeovers; underpinning the capabilities

Lunch

Tuesday 1st April

Session 4 – Membranes

Chair: Dr Ian Wilson and Dr Jeanette Lindau

Time	Lead Author	Title
14:00	Olga Santos <i>Alfa Laval, DEN</i>	Fouling in heat exchanger and membrane processes: development and prevention strategies on industrial scale
14:30	Mike Bird <i>University of Bath, UK</i>	Fouling and cleaning phenomena for ethanol pretreated membranes used to ultrafilter black tea liquor
14:52	Jean-Pierre Estievenart <i>HE Louvain en Hainault, BEL</i>	Crossflow filtration and balancing of alkaline bottle washing baths in breweries
15:14	Emily Holt <i>University of Bath, UK</i>	Fouling and cleaning of ceramic membranes during the dewatering of gum arabic waste streams
Coffee Break		
16:10	Ken Morison <i>University of Canterbury, NZ</i>	Effects of the components of milk on fouling and cleaning of polyamide reverse osmosis membranes
16:32	Arend Kingma <i>BASF, GER</i>	Compatibility of nonionic surfactants with membrane materials and their cleaning performance
16:54	Nicolas Velings <i>HE Louvain en Hainault, BEL</i>	Comparison of two oxidative cleaners versus a classical enzymatic cleaner used in the regeneration of microfiltration membranes typically employed for the clarification of alcoholic beverages
17:16	Harriet Manning <i>University of Bath, UK</i>	The effect of fouling upon the performance of synthetic membranes used to fractionate gum Arabic

Session Wrap Up

Optional scenic walk back to Jesus College

19:00	Pre-Dinner Drinks	Cloisters or Upper Hall, Jesus College
19:30	Conference Dinner	Hall, Jesus College
		College Bar open after Dinner

Wednesday 2nd April

7:30-9:00 Breakfast in Hall, Jesus College

8:30-9:00 Registration
Department of Chemical Engineering

Alcock Room, Jesus College, available as luggage store

Session 5 – The fluid mechanics of cleaning

Chair: Dr John Chew

Time	Lead Author	Title
9:30	Bo Boye Busk Jensen <i>Alfa Laval, DEN</i>	Industrial cleaning flows - knowledge gap in tank cleaning
10:00	Hannes Koehler <i>TU Dresden, GER</i>	Cleaning efficiency - which efficiency? Study of the influences of nozzle diameter, pressure and jet moving speed of impinging jets
10:22	Tao Wang <i>University of Cambridge, UK</i>	Flow patterns and cleaning behaviour of inclined liquid jets impinging on angled walls
Coffee Break		
11:10	Enrico Fuchs <i>TU Dresden, GER</i>	An experimental comparison of film flow parameters and cleaning behaviour of falling liquid films for different tilt angles
11:32	Julien Landel <i>University of Cambridge, UK</i>	Cleaning of viscous droplets on a flat inclined surface using gravity-driven film flows
11:52	Sarah Hormozi <i>University of Paris Est, FR</i>	Viscoplastic fluid flows in cleaning
12:14	Manuel Helbig <i>TU Dresden, GER</i>	Design parameters of pulsed flow for enhanced CIP processes

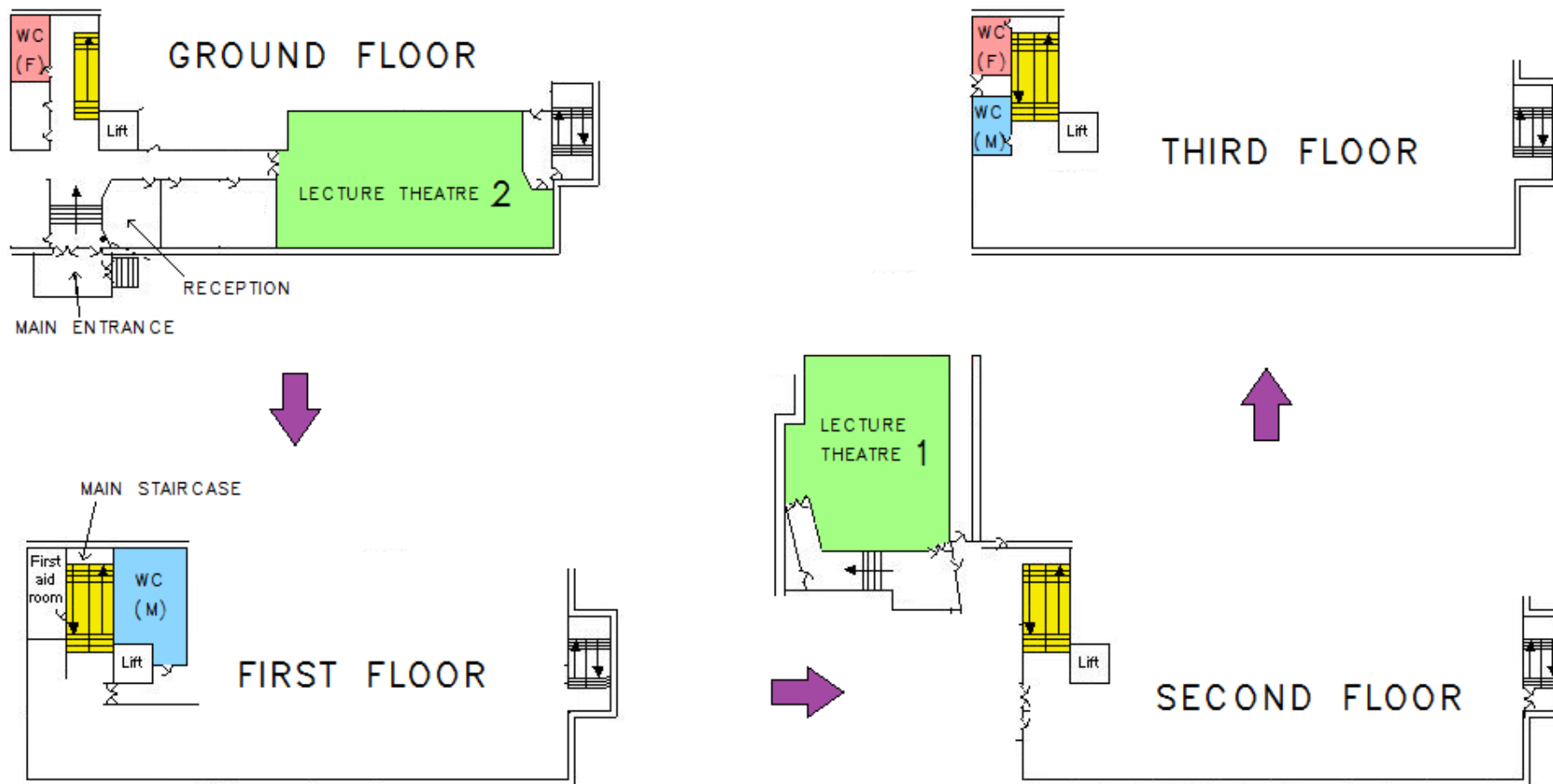
Conference Summary and Close

13:00 Lunch

14:00 Technical Committee Meeting

Weather permitting – punting on the river Cam

Floor Plan of Department of Chemical Engineering & Biotechnology, New Museums Site, Pembroke Street, Cambridge, CB2 3RA



LECTURE THEATRE 1 - SESSIONS
LECTURE THEATRE 2 - REFRESHMENTS, POSTERS