

Center for Biofilm Engineering

07/10/08

Monday July 14

6:00–8:30 p.m.
**Pre-registration and
welcome reception**
Hilton Garden Inn, Bozeman

Tuesday July 15

7:30–8:30 a.m.
**Registration and
continental breakfast**
Hilton Garden Inn reception area

8:30–8:45
Introductory remarks
Larkspur Ballroom
Paul Sturman, CBE Industry
Coordinator
Ruth Cutright, W.L. Gore,
TAC Chair
Phil Stewart, CBE Director

SESSION 1: **Coatings for Biofilm Inhibition**

8:45–8:50
Session Introduction
Phil Stewart

8:50–9:35
**Combating bacterial adhesion,
biofilms, and implant-associated
infection via nitric oxide release**
Mark Schoenfisch, Associate
Professor, Department of
Chemistry, University of North
Carolina at Chapel Hill, NC

9:35–10:00
**Methods of assessing biofilm
inhibition on surfaces**
Diane Walker, CBE Research
Engineer

10:00–10:25 Break

10:25–11:00
**Biopassive and bioactive
(biocidal) surfaces**
Andreas Mühlebach,
Ciba Specialty Chemicals, Inc.
Basel, Switzerland

SESSION 2: **Environmental Biofilms**

11:00–11:05
Session Introduction
Al Cunningham, Professor,
Civil Engineering, CBE

11:05–11:30
**Biologically induced
mineralization: Fundamentals and
possible applications**
Robin Gerlach, Associate Professor,
Chemical & Biological Eng., CBE

11:30–12:00
**Biological ice nucleators in snow
and rain**
Christine Foreman, Assistant
Research Professor, CBE

12:00–1:00
Lunch at the Hilton Garden Inn

Special Presentation
1:00–1:30
State of the CBE
Phil Stewart

SESSION 3: **Water/Industrial Biofilms**

1:30–1:55
Session Introduction
**Water quality changes in premise
plumbing**
Anne Camper, Professor, Civil
Engineering, CBE

1:55–2:30
**Legionella—(re-)awakening to the
amoeba-based pathogens of
distribution system biofilms**
Nick Ashbolt, Senior Research
Microbiologist, US EPA,
Cincinnati, OH

2:30–3:00 Break

3:00–3:30
**Effect of chlorite on microbial
nitrification in a simulated
premise plumbing system**
Shahed Rahman, PhD candidate,
Civil Engineering and Lynne
Leach, Postdoctoral Research
Associate, CBE

3:30–4:05
**Water treatment biocide
applications and automated
controls of industrial cooling
water systems**
Mike Dorsey, Senior Materials
Corrosion Technologist, DuPont
Engineering Technology and
Doug McIlwaine, Senior Scientist,
ChemTreat, Inc.

4:05–4:30
**From microbially influenced
corrosion to microbial fuel cells**
Zbigniew Lewandowski, Professor,
Civil Engineering, CBE

4:30–5:00
**Consumer product biofilm related
problems**
Alex Blanchard, Senior Scientist in
R&D Microbiology, Procter &
Gamble Technical Centres,
Egham, Surrey, UK

Dinner: Restaurant of your choice

Wednesday July 16

7:30–8:30 a.m.
**Registration and
continental breakfast**
Hilton Garden Inn reception area

SESSION 4: **Biofilm Methods and Microscopy**

8:30–8:55
Session Introduction
**Standardizing a method for rapid
biofilm analysis**
Darla Goeres, Assistant Research
Professor, CBE

8:55–9:25
**Laser microscopy in biofilm
research—current options and
future potential**
Thomas Neu, Senior Scientist,
Department of River Ecology,
Helmholtz-Zentrum für
Umweltforschung, Magdeburg,
Germany

9:25–9:45

***Salmonella typhimurium* biofilms at the gene level**

Stewart Clark, PhD candidate,
Microbiology, MSU

9:45–10:15 Break

10:15–10:35

Protein expression in biofilm models

Elinor deLancey Pulcini, Research
Scientist, CBE

10:35–10:55

Biofilm impact on keratinocyte morphology

Pat Secor, PhD candidate,
Cell Biology & Neuroscience, CBE

10:55–11:15

Proteomic analysis for the determination of biodegradation pathways in *Polaromonas* sp. JS666

Laura Jennings, visiting PhD
candidate, Environmental
Engineering, Cornell University

11:15–11:45

Helpful Insights: How can the FDA Antimicrobial Guidance apply to biofilm claims in medical devices

Chiu Lin, Director, Division of
Anesthesiology, General Hospital,
Infection Control, and Dental
Devices, FDA

11:45–12:00

Update on *Biofilms: The Hypertextbook*

Al Cunningham, Professor, Civil
Engineering and Rocky Ross,
Professor, Computer Science

12:00–1:00

Lunch at the Hilton Garden Inn
Lunch session for Biofilm Methods
Advisory Committee

**Poster Session
& Laboratory Open
House**

2:30–5:00

CBE Laboratories, 3rd Floor EPS
Building, MSU

6:00–9:00 Rock'n TJ Ranch,
Bozeman

**Thursday
July 17**

7:30–8:30 a.m.

Registration and continental breakfast

Hilton Garden Inn reception area

7:30–8:30 a.m.

TAC Business Meeting (Industrial
Associate Representatives) with
breakfast, Larkspur Ballroom

SESSION 5:

Nitrogen Compounds and Their Biofilm Impact

8:30–8:40

Session introduction

Garth James, Medical Projects
Manager, CBE

8:40–9:20

**Gaseous nitric oxide (gNO):
A novel antimicrobial agent**

Bevin McMullin, University of British
Columbia, Vancouver, Canada

9:20–10:00

Genetic & metabolic clues for the treatment of anaerobic *Pseudomonas aeruginosa* biofilm infections

Dan Hassett, Professor, Molecular
Genetics, Biochemistry &
Microbiology, University of
Cincinnati College of Medicine, OH

10:00–10:20

Consequences of nitrate and nitrite stress in *Desulfovibrio vulgaris*

Matthew Fields, Assistant Professor,
Microbiology, CBE

10:20–10:50 Break

**SESSION 6:
Physics of Biofilm
Control**

10:50–11:00

Session introduction

Phil Stewart, Professor, Chemical &
Biological Engineering, CBE

11:00–11:20

**Biofilm viscoelastic properties—
measurements & modifications**

Warren Jones, Associate Professor,
Civil Engineering, CBE

11:20–11:40

**Penetration and efficacy of
daptomycin against
staphylococcal biofilms**

Phil Stewart

11:40–12:00

**Modeling material aspects of
biofilms**

Isaac Klapper, Professor,
Mathematics, CBE

12:00–12:10 Meeting wrap up

**See you next year at the
2009 CONFERENCES**

FEBRUARY 3-4, 2009

JULY 7-9, 2009