# Activated Sludge on its 100th Birthday: Challenges and Opportunities

**Draft Technical Program as of 4/17/13** 

### Sunday, June 9:

**Session 1: Selecting for or Against Organisms** 

3:30pm - 5:30pm

Moderator: Jeanette Brown

Order	Time	Topic	Speaker
	3:30pm	Introduction	Jeanette Brown
Α	3:45pm	Selecting Organisms for the Right Function	Kartik Chandran
В	4:05pm	Shortcut Nitrogen Removal	Sudhir Murthy
С	4:25pm	Moving Towards the Next Generation of Selectors: A Prospectus	Denny Parker
	4:45pm	Facilitated Discussion	
	5:15pm	Poster Session Discussion	Charles Bott

Evening Networking Event 5:30pm - 7:00pm

### Monday, June 10:

Session 2: Engineering Practices for Organism Selection

8:30am - 12:00pm

**Moderator: Beverley Stinson** 

Order	Time	Торіс	Speaker
	8:30am	Introduction	Beverley Stinson
Α	8:40am	C Selection, Sequestration, Mineralization	Jose Jimenez
В	9:10am	Selection and Out-Selection of Organisms Targeting N Removal	Charles Bott
С	9:40am	P Selection, PAO, GAO, Denit PAO	April Gu
	10:10-10:30am	Break	
	10:30am	Facilitated Discussion	
	11:30am	Poster Session Discussion	Kartik Chandran

Lunch 12:00 - 1:30pm

### Session 3: Solids Separation

1:30pm - 5:00pm

**Moderator: JB Neethling** 

Order	Time	Торіс	Speaker
	1:30pm	Introduction	JB Neethling
		Secondary Clarification, Possibilities of "Reactive" Clarifiers with Blankets	
Α	1:40pm	Rather Than Avoiding Blankets at All Costs while Avoiding Washout	Wolfgang Gunthert
В	2:10pm	Future of MBR	Rod Reardon
		Moving Beyond the First Applications of Granular Activated Sludge	
С	2:40pm	Treatment	Ronald Niermans
	3:10-3:30pm	Break	
	3:30pm	Facilitated Discussion	
	4:30pm	Poster Session Discussion	Andy Schuler

# **Dinner and Presentation**

6:00pm - 8:00pm

Order	Time	Торіс	Speaker
	7:00pm	Welcome	Jeanette Brown
	7:10pm	Introduction	Andy Schuler
	7:15pm	Happy Birthday, A. Sludge	David Jenkins
	7:50pm	Group Photo	

#### Monday, June 10, Continued:

Session 4: Identifying and Removing Barriers; Financing, Research Needs

8:00pm - 9:15pm

Moderator: Amit Pramanik

Order	Time	Topic	Speaker
	8:00pm	Introduction	Amit Pramanik
Α	8:05pm	Push-and-Pull on Water Sector Technologies; Innovation	Sudhir Murthy and Charles Bott
В	8:25pm	Collaboration Between Academia and Practice	Britt-Marie Wilen
С	8:35pm	Balancing Risk with New Innovations - Design-Build, etc.	Bruce Johnson
D	8:45pm	R&D at Utilities	Matt Ries
	8:55pm	Facilitated Discussion	

### Tuesday, June 11:

#### Session 5: Engineering for Intensification of Treatment

8:00am - 12:00pm

Moderator: Julian Sandino

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Order	Time	Торіс	Speaker	
	8:00am	Introduction	Julian Sandino	
Α	8:10am	IFAS - Moving On From Where We Are Now	Thomas Welander	
		Granular Sludge: Improved Solids Separation and Microbial Section		
В	8:40am	Potential	Mark van Loosdrecht	
С	9:10am	Instrumentation and Controls	Leiv Rieger	
D	9:40am	Ballasting for Intensification of Treatment	Steve Woodard	
	10:10-10:30am	Break		
	10:30am	Facilitated Discussion		
	11:30am	Poster Session Discussion	Rob Sharp	

Lunch 12:00pm - 1:00pm

### Session 6: Activated Sludge is Dead! Long Live Activated Sludge

1:00pm - 3:30pm

**Moderator: Jeanette Brown** 

Order	Time	Торіс	Speaker
	1:00pm	Introduction	Jeanette Brown
			David Jenkins
			James Barnard
			Dave Stensel
		Panel Discussion:	Cliff Randall
		What discovery are you most proud and which are you not?	Les Grady
	1:10pm	What were you thinking?	George Tchobanoglous
	2:30pm	Facilitated Discussion	
	3:15pm	Forum Closing	Jeanette Brown

This WEF event program has been created with support from the Forum Steering Committee. WEF would especially like to thank these individuals for their efforts:

Jeanette Brown, Manhattan College (Forum Chair)
Charles Bott, Hampton Roads Sanitation District
Kartik Chandran, Columbia University
Nancy Love, University of Michigan
Sudhir Murthy, DCWATER
JB Neethling, HDR, Inc.
Denny Parker, Brown and Caldwell

Amit Pramanik, Water Environment Research Foundation