

MESSAGE FROM CHAIR	1
ANNOUNCEMENTS	2
SEF ACTIVITIES	5
IFS UPDATES	5
MEMBER COMMUNICATIONS	6
SEF LEADERSHIP	7

MESSAGE FROM CHAIR

Welcome to our first SEF newsletter. We are pleased to be able to provide this information to you as a benefit of your membership. We hope that you will take a look through this information and see what SEF has been up to, and what our near term plans are.

It is my opinion that one of the key membership benefits is programming at national meetings. We are fortunate to have an excellent programming chair in Helen Lou, who has been busy programming sessions at both Spring and Fall meetings. At the Spring meeting in Houston, SEF sponsored or co-sponsored about a dozen sessions. For the upcoming Fall meeting, we have two topical symposia, each with about 12 – 15 sessions, as well as a few individual sessions. We should have something for everyone.

Also during the Fall meeting we will hold the SEF business meeting. This is the time for you to come out and talk about what you would like to see SEF evolve into. We're still trying to figure this out, so if you have some ideas, now is the time to let us know. If you want to get a head start on providing your ideas, just send me an e-mail. Be careful though, since I'm likely to ask you to lead up that effort. Of course, that means that if there is something that you are interested in doing on behalf of SEF, this is your golden opportunity to give it a try.

Our education committee, led by Chair Ralph Pike, is busy developing new educational programs, in cooperation with other components of IfS. We are hoping to begin a sustainability speaker series, and will be looking for members to who would be willing to volunteer to speak at local section meetings, student chapters, or community events. If this is something you might be interested in doing, please send a note to either Ralph or me.

We are also working to fill out our executive committee. We have several openings at this time, and with elections coming up in the fall, we are also looking for people interested in serving a regular two-year term beginning in 2008. We don't work the executive committee too hard – it's mostly conference calls and then a single committee meeting at the national meetings, so this is again a good opportunity to do something that you would enjoy seeing as an initiative of the forum.

I hope that this give you a semblance of some of the things that your SEF is getting involved in, and I hope that you will consider getting more involved in these activities. Please let us

know what we can do to make SEF more directed to your needs. We look forward to hearing from you, or seeing you at one of our meetings.

Martin Abraham
Chair, Sustainable Engineering Forum

ANNOUNCEMENTS

AIChE 2007 Annual Meeting Call For Papers

The 2007 Annual Meeting Call for Papers will be open until Monday, May 14. Visit <http://aiche.confex.com/aiche/2007/cfp.cgi> for more information.

SEF will sponsor two topical sessions, a Sustainability Topical (Topical E), which contains 13 oral presentation sessions, and a Sustainable Biorefineries Topical (Topical 4), which includes 10 oral sessions and 1 poster session. SEF will also sponsor four additional sessions in conjunction with other divisions. The full listing of SEF programming activities are provided below.

Topical E: Sustainability

Session	Chairs	Chairs E-Mail
Bioproducts and Biomaterials - Critical Products for a Sustainable Economy, Session I	A. Mohanty	mohantya@msu.edu
Bioproducts and Biomaterials - Critical Products for a Sustainable Economy, Session II	A. Mohanty	mohantya@msu.edu
Design for Sustainability	M. El-Halwagi	el-halwagi@tamu.edu
	T. Marrero	marrerot@missouri.edu
Green Chemistry and Engineering for Sustainability	M. Goto	mgoto@kumamoto-u.ac.jp
	Q. Xu	qiang.xu@lamar.edu
Green Manufacturing/Green Supply Chain	S. Veith	susanne.r.veith@usa.dupont.com
	C. Piluso	cpiluso@wayne.edu
Life Cycle Assessment and Sustainability Metrics	R. Smith	Smith.Raymond@epa.gov
	T. Theis	theist@uic.edu
Separation Engineering for Sustainable Processes	J. Ritter	ritter@engr.sc.edu
	A. Sakoda	sakoda@iis.u-tokyo.ac.jp
Sustainability Education	R. Hesketh	hesketh@rowan.edu
	T. Marrero	marrerot@missouri.edu

Topical E: Sustainability (cont'd)

Session	Chairs	Chairs E-Mail
Sustainability of Land Use	A. Gatchett	Gatchett.Annette@epamail.epa.gov
	A. Vega	vega.ann@epa.gov
Sustainability Plenary	Y. Huang	yhuang@wayne.edu
	A. Mangan	mangan@usbcsl.org
Sustainable Energy	W. Barrett	barrett.williamm@epa.gov
	K. Liu	liuk@research.ge.com
Sustainable Fuels	R. Pike	pike@lsu.edu
	T. Yonemoto	toshiy@rpel.che.tohoku.ac.jp
Systems Analysis of Sustainability	A. Karunanithi	karunanithi.arunprakash@epamail.epa.gov
	K. Mochidzuki	mochi@iis.u-tokyo.ac.jp

Topical 4: Sustainable Biorefineries

Session	Chairs	Chairs E-Mail
Biological Conversions and Processes for Renewable Feedstocks	M. Moniruzzaman	mmoniruzzaman@bioenergyllc.com
	N. Qureshi	QURESHIN@ncaur.usda.gov
Catalytic Conversion of Renewable Resources to Synthesis Gases and Pyrolysis Oils	R. Bain	richard_bain@nrel.gov
	J. Cobb Jr.	cobb@engr.pitt.edu
Chemical and Catalytic Conversions and Processes for Renewable Feedstocks	D. Miller	millerd@egr.msu.edu
	S. Staggs-Williams	smwilliams@ku.edu
Developments in Biobased Alternative Fuels	B. Duff	bduff@bbbiofuels.com
	M. Rajchel	Marcus.Rajchel@forerunnercorp.com
Life Cycle Analysis of Renewable Feedstock-Based Processes and Products	D. Shonnard	drshonna@mtu.edu
	M. Realff	matthew.realff@chbe.gatech.edu
Pretreatment of Lignocellulosic Biomass and Interactions with Other Processing Steps	R. Elander	richard_elander@nrel.gov
	G. Van Walsum	GPeter_van_Walsum@baylor.edu
Reactor Engineering for Biomass Feedstocks	M. Antal Jr.	mantal@hawaii.edu
	Y. Matsumura	matumura@mec.hiroshima-u.ac.jp
	K. Mochidzuki	mochi@iis.u-tokyo.ac.jp

Topical 4: Sustainable Biorefineries (cont'd)

Separation of Processing Streams Derived from Renewable Feedstocks	N. Mosier	mosiern@purdue.edu
	T. Foust	thomas_foust@nrel.gov
Sustainability and Sustainable Biorefineries Poster Session	K. Taconi	taconik@email.uah.edu
	C. Perkins	christopher.perkins@colorado.edu
Sustainable Biomass Feedstock Production and Supply for the Emerging Biorefinery Industry	T. Richard	trichard@psu.edu
	J. Hess	JRichard.Hess@inl.gov
Sustainable Biorefineries Plenary Session (Invited Papers)	D. Thompson	david.thompson@inl.gov
	B. Dien	dienb@ncaur.usda.gov

2007 SEF Elections

The SEF is currently accepting nominations for the upcoming 2007-2009 elections. The positions open for nomination include Vice Chair, Treasurer, Secretary, and the Chair positions for the following committees: Programming, Education, Membership, Awards, and Technical Advisory. All nominations, self-nominations are also appropriate, or questions regarding the election process should be sent to the current SEF Chair, Martin Abraham, at MAbraha@UTNet.UToledo.edu by August 1st, 2007.

Upcoming SEF Virtual Meeting

The topic for the 5th SEF Virtual Meeting is "Global Freshwater Resources" and will be held on Thursday, May 24th, 2007 from 10:00am - 12:00pm (Eastern Daylight Time). Call in number: 513-569-7897; Conferee code: 2484#.

Please contact Earl Beaver (erbeav@sbcglobal.net) if you are interested in participating by May 17, at which time the final agenda, pre-meeting materials, and reference list will be distributed and posted on the SEF website. We have 30 phone lines available, so feel free to share this invitation with students and associates who may be interested. Note-takers are needed for this meeting and we are currently seeking volunteers.

Additionally, if you have a short presentation or discussion related to this topic that you would like to include, please let Dr. Beaver know as soon as possible.

Past SEF Virtual Meetings

Information regarding past and upcoming virtual meetings are available on the SEF website (http://webpages.eng.wayne.edu/~as8971/AIChE_SEF/workshops.htm). Please contact Earl

Beaver if you are interested in a detailed summary of the main discussion points from these previous virtual meetings or for suggestions for future virtual meeting topics.

SEF ACTIVITIES

SEF Sponsored/Co-Sponsored Activities

The 2008 joint AIChE/ACS spring meeting will be held April 6th-10th, 2008 in New Orleans, LA. Benson Pair (KBR Energy and Chemicals) will serve as the Chair and organizer for all SEF Sustainability programming for the meeting.

The Steering Committee for the SEF Sustainability programming includes:

Ms. Jennifer Bracey, Marathon
Dr. Marco Castaldi, Columbia University
Dr. Paul Blowers, University of Arizona
Dr. Mike Gonzalez, EPA and ACS Programming

If you are interested in detailed information regarding AIChE and SEF programming efforts, please contact SEF Programming Chair Helen Lou (Helen.Lou@lamar.edu).

IFS UPDATES

Rollout of CSTP Sustainability Roadmap September 10, 2007

The Center for Sustainable Technology Practices, the industry group working on implementation of sustainability within their corporations, is rolling out their Sustainability Roadmap at a workshop on Monday September 10, 2007. NIST and the Council for Chemical Research are hosting the Workshop. It will be held at NIST in Gaithersburg, MD.

The Roadmap is a conceptual map that connects the *critical corporate functions* of a company with major *value chain stages* and important sustainability considerations. The need for this roadmap was identified by research conducted by CSTP in 2005 under an EPA grant to review the use of sustainability decision-support tools in the chemical industry and identify major gaps. Findings from this study underscored the need for a tool that could guide a business organization through the assessment of sustainability considerations and initiatives, both across the value chain—*Business Strategy Alignment; Upstream Supply;*

R&D; Production; Industrial Customer Use; Consumer Use; End-of-life—and throughout a company's organizational structure—*Executive Management, Business Unit Management;*

Finance; R&D; EHS; Engineering; Manufacturing & Operations; Logistics & Supply Chain; Sales; Customer & Technical Service; Marketing; Communications; PR; HR; Legal; IT.

This tool is designed to promote organizational learning towards sustainability by promoting collaboration within the business organization and providing general guidance as well as more specific sustainability checklists. The Sustainability Roadmap can support organizations that are either interested in integrating new sustainability considerations into their business or enhancing existing sustainability-related initiatives.

To learn more or inquire about the workshop, contact Darlene Schuster, Director, Institute for Sustainability at darls@aiche.org.

Engineers Forum on Sustainability Feature AIChE Sustainability Index on May 11, 2007

AIChE Institute for Sustainability Activities featured at the May 11, 2007 Engineers Forum on Sustainability meeting at the National Academies in Washington DC. The AIChE Sustainability Index project will be discussed and the plans for expanding the AIChE

Sustainability Index to other industrial segments with funding from the United Engineering Foundation will be presented. If interested in attending the Engineering Forum on Sustainability meetings (a cooperative effort of the AIChE Institute for Sustainability, the ASME, ASCE, IEEE-USA, and ASEE), please email darls@aiche.org.

MEMBER COMMUNICATIONS

Sustainability Readings

Lists of valuable sustainability related reading materials, as assembled by Earl Beaver, are available on the SEF website. Anyone interested in learning more regarding the areas of sustainability, global climate change, and how sustainable companies make decisions please see: http://webpages.eng.wayne.edu/~as8971/AIChE_SEF/Readings.htm

2006 AIChE Annual Meeting Recap

The 2006 Annual Meeting in San Francisco was extremely successful and full of informative discussions and presentations. The SEF sponsored two topical sessions, Topical E: Sustainability (Co-Sponsored by The Society of Chemical Engineers, Japan (SCEJ)) and Topical 4: Sustainable Biorefineries. Please visit the following websites for full SEF sponsored programming activity listings.

- Topical E: Sustainability
<http://aiche.confex.com/aiche/2006/techprogram/D1129.HTM>

- T4 Topical 4: Sustainable Biorefineries
<http://aiche.confex.com/aiche/2006/techprogram/D1112.HTM>

SEF LEADERSHIP (2005-2007)

Chair	Dr. Martin Abraham, Professor Department of Chemical and Environmental Engineering, University of Toledo, Toledo, OH.43606 E-Mail: MAbraha@UTNet.UToledo.edu
Vice Chair	Dr. Yinlun Huang, Professor Department of Chemical Engineering and Materials Science, Wayne State University, Detroit, MI 48202 E-Mail: yhuang@wayne.edu
Treasurer	Dr. Robert Hesketh, Professor Department of Chemical Engineering, Rowan University, Glassboro, New Jersey 08028 E-mail: hesketh@rowan.edu
Programming Committee Chair	Dr. Helen Lou, Associate Professor Department of Chemical Engineering, Lamar University, Beaumont, TX 77710 E-Mail: Helen.Lou@lamar.edu
Education Committee Chair	Dr. Ralph Pike, Professor Department of Chemical Engineering, Louisiana State University, Baton Rouge, LA 70803 E-Mail: pike@lsu.edu
Membership Committee Chair (Provisional)	Dr. Raymond Smith National Risk Management Research Lab/USEPA, Cincinnati, OH 45268 E-mail: Smith.Raymond@epamail.epa.gov
Awards Committee Chair	Dr. Robert Sylvester DuPont, Wilmington, DE 19898 E-Mail: robert.w.sylvester@usa.dupont.com

Technical Advisory Committee Chair Dr. Mahmoud El-Halwagi, Professor
Department of Chemical Engineering, Texas A&M University,
College Station, TX 77843
E-Mail: El-Halwagi@tamu.edu

Past Chair Dr. Subhas K. Sikdar, Associate Director for Science
National Risk Management Research Lab/USEPA, Cincinnati, OH
45268
E-Mail: sikdar.subhas@epa.gov

Newsletter Editor Cristina Piluso, Ph.D. Candidate
Department of Chemical Engineering and Materials Science, Wayne
State University, Detroit, MI 48202
E-Mail: cpiluso@wayne.edu

Webmaster Jie Xiao, Ph.D. Candidate
Department of Chemical Engineering and Materials Science, Wayne
State University, Detroit, MI 48202
E-Mail: jiexiao@wayne.edu

SEF Website: http://webpages.eng.wayne.edu/~as8971/AIChE_SEF/

