SEPARATIONS DIVISION American Institute of Chemical Engineers

D.B. Bhattacharyya Chair University of Kentucky 169A Anderson Hall Lexington, KY 40506 (859) 257-2794 db@engr.uky.edu

Benny Freeman First Vice Chair Univ. of Texas, Austin 10100 Burnet Road Austin, TX 78758 (512) 232-2803 freeman@che.utexas.edu Mark Pilling Second Vice Chair Sulzer Chemtech USA 4019 S. Jackson Ave. Tulsa, OK 74107 (918) 447-7652 Mark.Pilling@sulzer.com Atanas Serbezov Secretary Dept. Chem. Eng. Rose-Hulman Inst. Technol. Terre Haute, IN 47803 (812) 877-8097 serbezov@rose-hulman.edu Neil Yeoman Treasurer LNCK Associates 1723 Alexis Road Merrick, NY 11566 (516) 946-9530 loretta.neil@yahoo.com Norberto Lemcoff Past Chair UTRC 411 Silver Lane, MS#129-30 East Hartford, CT 06108 (860) 610-7024 lemcofno@utrc.utc.com

DIRECTORS

Dickson Ozokwelu Department of Energy dickson.ozokwelu@ee.doe.gov

Priscilla Hill Mississippi State University phill@che.msstate.edu

Ravi Kumar Praxair Ravi_Kumar@Praxair.com

John Pellegrino University of Colorado john.pellegrino@colorado.edu

James Ritter University of South Carolina ritter@engr.sc.edu

Krista Walton Georgia Institute of Technology krista.walton@chbe.gatech.edu

Scott Husson Clemson University shusson@clemson.edu

Mike Resetarits Fractionation Research, Inc. resetarits@fri.org

Nicholas Urbanski ExxonMobil

SepDivArea2a@aol.com Mark M. Davis UOP

mark.davis@uop.com

AREA CHAIRS

Mike Resetarits Distillation & Absorption (2a) resetarits@fri.org

Chiajen J. Lai Crystallization & Evaporation (2b) chiajen.lai@bms.com

Timothy Frank Extraction (2c) tcfrank@dow.com

Ranil Wickramasinghe Membrane-Based Separations (2d) wickram@engr.colostate.edu

Linda Wang Adsorption & Ion Exchange (2e) wangn@ecn.purdue.edu

Seyi Odueyungbo Fluid-Particle Separations (2f) SEYO@chevron.com

Giorgio Carta Bioseparations (2g) gc@virginia.edu

General Topics & Other Methods (2h) azhe@chevron.com

CTOC LIAISON

Sharon Robinson Oak Ridge National Lab robinsonsm@ornl.gov

MINUTES

Separations Division Planning Meeting American Institute of Chemical Engineers 2010 AIChE Spring Meeting

Sunday, March 21, 2010 Noon-5:00 pm Mission A (2nd Level), Grand Hyatt San Antonio

Attendance:

D.B. Bhattacharyya Neil Yeoman Atanas Serbezov
Norberto Lemcoff Scott Husson Mike Resetarits
Nicholas Urbanski Ranil Wickramasinghe Seyi Odueyungbo
Linda Wang Alice He Andre DaCosta
Sharon Robinson

D.B. Bhattacharyya is the recipient of the 2010 Herb Epstein Award for Technical Programming. Congratulations!

Introductory Remarks (D.B. Bhattacharyya)

The participants in planning meeting were encouraged to brainstorm ideas that will make the Division better in the following three areas:

- Growth
- Service
- Quality

Growth

The membership in the Division as well as in the AIChE has dropped significantly. What can the Division do to increase its members?

• Identify past members who have left the Division and connect with them to understand why did they leave and maybe encourage them to rejoin. The AIChE membership database should be capable of generating the list of past members.

<u>Action item:</u> Neil will send Atanas the contact information for the AIChE staff managing the membership database.

Reach out to the graduate students and young professionals (YPs) working in Separations. Other
divisions (Process Development and Fuels and Petrochemicals, for example) have appointed
Vice-Chairs for Students Programs. Connect with the YPAB (Young Professionals Advisory
Board) to get ideas for programming targeting the young professionals, such as tutorials.

<u>Action item:</u> Scott Husson will establish contact with other divisions as well as with YPAB to discuss ideas for membership growth.

 Identify individuals who are involved in the Division programming committees but are not members of the Division and encourage them to join the Division.

Action item: Area 2e has a programming committee in excess of 100 people. Linda Wang will identify members of that committee who are not Division members and will ask them to join the Division.

Separations Division Service Award

Motion: That Neil Yeoman is awarded the first Division Service Award.

Neil is not only one of the founders of the Separations Division of AIChE but also the only treasurer the Division has had since 1990. Neil has been taking care of the Division funds as if they were his own, while at the same time supporting new initiatives and participation of officers in activities that expand the Division activities and open new doors, such as Networking sessions, Leadership Conference, etc. Neil has done an outstanding service to the Division and there is no doubt he has performed above and beyond the expected duties.

The motion was seconded and passed unanimously.

The award will be presented at the annual awards dinner.

Webinars

AIChE is looking into expanding the webinar series and improving the quality. Analysis shows that people who watched at least one webinar renewed their membership.

Currently there is no peer review associated with the webinars but this will change in the near future. AIChE is looking for volunteers to serve as webinar peer reviewers. AIChE is also looking for suggestions for future topics. CTOC is coordinating this effort.

<u>Action item:</u> Sharon Robinson (the Division's CTOC liaison) will contact Ravi Kumar (the Division's director for webinars) and will solicit webinar topics as well as individuals who are willing to serve on webinar review panels. The deadline for sending this information is June 1, 2010.

Quality of Technical Programming

The quality of the technical programming is a recurrent issue. The Institute wants to elevate the status of the poster session, which is currently perceived to have lower stature than the oral session. Ultimately, it is the responsibility of the session/area chairs to ensure the quality of the technical presentations.

AIChE has recently created a resource page describing the roles and responsibilities of the area/session chairs. Andre DaCosta will communicate the resource page link to all programming areas.

Board of Directors (BOD) Report (Neil Yeoman)

<u>Financials.</u> The Institute had a loss of \$ 0.5 MM in 2009. A loss of \$ 0.25 MM is expected in 2010. The net assets of the Institute are around \$ 8.3 MM.

<u>Membership.</u> Professional membership continuous to drop: 2 % in 2009 and 1 % (projected) in 2010. There is an ongoing effort to increase the membership by adding members from outside of the United States.

<u>Center for Energy Initiatives (CEI)</u>. AIChE is in the process of creating a Center for Energy Initiatives. The focus is on energy initiatives and projects that cross the boundaries of existing AIChE entities working in the energy area. The primary focus is on identifying, launching and incubating new projects and initiatives. The Separations Division will be listed as one of the Entities in the Center.

<u>AIChE Taking Positions on Government Policy</u>. AIChE has discussed taking positions on government policy, such as environmental and global warming issues.

Chemical Technology Operating Council (CTOC) Report (Sharon Robinson)

CTOC is looking for nominees to join the committee.

Motion: That the Norberto Lemcoff be nominated as a CTOC member.

The motion was seconded and passed unanimously.

Action item: Sharon Robinson will communicate Norberto Lemcoff's nomination to CTOC.

Leadership Development Conference (LDC)

Motion: That the Division fund Scott Husson and Ranil Wickramasinghe to attend the 2010 LDC.

The motion was seconded and passed unanimously.

Treasurer Report (Neil Yeoman)

The report is distributed electronically (via e-mail) every month. If anyone wants a copy, he/she can contact Neil. The most recent balance is around \$71,500. The annual budget of the Division is around \$20,000. The financial health of the Division is good.

2010 Programming (D.B. Bhattacharyya)

May 3 is the deadline for presentation submissions. The Division is sponsoring two sessions: Gerhold Award Session and Networking Session.

Ranil Wickramasinghe and Glenn Lipscomb are co-chairing a topical "Separation Needs for Energy Independence and Environmental Sustainability" with 12 sessions.

An emphasis for the 2010 Fall meeting is going to be on water, and a new AIChE Water Initiative will be kicked off with technical sessions in the area. Alice He (Area 2h) will organize a session on international water projects that will be coordinated with the YPAB (Young Professionals Advisory Board).

Details for the 2010 programming are shown at the end of the minutes.

Action item: D. B. will request that all poster sessions are scheduled on the same day and the same place.

Action item: Alice He (Area 2h) will organize a session on international water projects.

Networking Session in Salt Lake City

The Directors in charge are John Pellegrino, Mike Resetarits and Krista Walton

2011 Programming (D.B. Bhattacharyya on behalf of Benny Freeman)

All session titles for the 2011 Spring meeting must be submitted by April 30. All session titles for the 2011 Annual meeting must be submitted by December 6.

Areas are encouraged to emphasize programming in the following key areas:

- Energy
- Water
- Sustainability
- Modeling, simulation, computation

The 2010 Spring meeting in Chicago provides an opportunity for the nearby universities to showcase their research to industry.

A topical on water is being considered for the 2011 annual meeting in Minneapolis.

A session on Industrial Innovation in Separations sponsored by the Division is being considered for the 2011 annual meeting in Minneapolis.

Areas are encouraged to include at least one session on modeling for the 2011 annual meeting in Minneapolis.

<u>Action item:</u> Linda Wang will organize a session on Continuous Chromatography at the 2011 Spring meeting in Chicago based on contributions from universities in the local area.

Details for the 2011 programming are shown at the end of the minutes.

Awards (Nick Urbanski)

<u>FRI/John F. Kunesh Award</u>. This new award recognizes outstanding contributions to the academic, scientific, technological, industrial, or service areas involving separations technologies for individuals under the age of 40.

<u>Clarence (Larry) G. Gerhold Award</u>. This award recognizes an individual's outstanding contribution in research, development, or in the application of chemical separations technology. Starting in 2010 the award will be presented in even years to nominees from industry or non academic entities, and in odd years to nominees from academia.

The deadline for both of these awards is 01 June 2010. For more information go to the Separations Division website http://www.aiche.org/DivisionsForums/ViewAll/SEP.aspx

Graduate Student Awards. Nominations are accepted in any of the following areas: Distillation and Absorption, Crystallization and Evaporation, Extraction, Membrane-Based Separations, Adsorption and Ion Exchange, and Fluid-Particle Separations. Notification letters were sent to department heads earlier in April. Deadline for submissions is 01 June 2010. For more information, please access the following: http://www.aiche.org/Students/Awards/SeparationsDivisionGraduateStudentResearchAward.aspx

To assist with vetting the submissions, Nick Urbanski will be asking each of the Area Chairs to assist in their respective fields. Information about this process will follow at a later date.

<u>Area Honors Sessions.</u> The Division leadership agreed that each Area could organize sessions to honor one (1) significant contributor to their respective separations field at each AIChE meeting which would include the production of a plaque for the honoree (from Division funds) to be presented to the honoree at the respective honors session. The division will not cover travel or dinner fees for an Area honoree. If you have any questions, please contact Nicholas Urbanski, the Director of Awards. Please consider honoring the "giants" among us while they are still with us.

Separations Division Programming Plans for the 2010 Meetings

	San Antonio (Spring 2010)				Salt Lake City (Fall 2010)			
Area	Total	Co-Sponsored	Honor / Special	Poster	Total	Co-Sponsored	Honor / Special	Poster
Area 2a (Distillation and Absorption)	5	0	2 (Karl Chuang) 1 (Topical)	0	4	0	1 (TBD)	0
Area 2b (Crystallization and Evaporation)	No Programming				7	1 (Pharmaceuticals)	0	1
Area 2c (Extraction)	No Programming				5	1 (Nuclear Eng)	0	0
Area 2d (Membrane-Based Separations)	No Programming				29	13 (Areas 8,15,17 and Topical 1)	1 (Anthony Fane) 8 (Topical 1)	1
Area 2e (Adsorption and Ion Exchange)	No Programming				18	2 (Nuclear Eng, Bioseparations)	0	1
Area 2f (Fluid-Particle Separation)	No Programming				8	1 (PTF)	1 (PTF, Karl Jacob)	0
Area 2g (Bioseparations)	No Programming				5	3 (Areas 2e, 2d, 15)	1 (Soc. Chem Eng. Japan)	0
Area 2h (General Topics and Other Methods)	No Programming				3	0	0	1
Total for Area 2	5	0	3	0	74	21	12	4

Separations Division Programming Plans for the 2011 Meetings

	Chicago (Spring 2011)				Minneapolis (Fall 2011)				
Area	Total	Co-Sponsored	Honor / Special	Poster	Total	Co-Sponsored	Honor / Special	Poster	
Area 2a (Distillation and Absorption)	6	0	6 (Kister Symposium)	0	3	0	1 (TBD)	0	
Area 2b (Crystallization and Evaporation)	No Programming				8	3 (PTF, Eng. Sci & Fund)	0	1	
Area 2c (Extraction)	No Programming			5 or 6	2 (Nuclear Eng, Bioseparations)	1 (TBD)	1 (Possibly)		
Area 2d (Membrane-Based Separations)	No Programming			20 (TBD)					
Area 2e (Adsorption and Ion Exchange)	No Programming			17	2 (TBD)	0	1		
Area 2f (Fluid-Particle Separation)	3	1 (F&PT/Envir./ PTF)			6	0	1 (TBD)	0	
Area 2g (Bioseparations)	No Programming				2 to 4 (TBD)				
Area 2h (General Topics and Other Methods)	No Programming				3			1	
Total for Area 2	9	0	6	0	64 to 67				