

ANNUAL SED BUSINESS MEETING MINUTES

Monday, June 15, 2015, 6.15 PM to 7:45 PM

Washington State Convention Center, Room 206, Session M-748

1. NETWORKING: Networking proceeded prior to opening of the meeting.

2. OPENING: Following networking, the SED Business Meeting was opened by SED Chair Fernando Gonzalez at 6.25 PM. Fernando welcomed all and made opening remarks.

3. ATTENDANCE: The following SED members were present at the SED annual meeting:

Radu Babiceanu, Rafic Bachnak, Marjan Eggermont (PIC II Chair), Fernando Gonzalez, Oscar Salcedo, Alice Squires.

4. INTRODUCTIONS: All attendees introduced themselves. Fernando Gonzalez led the meeting on behalf of Peter Golding and welcomed introductions from all that were present. Marjan Eggermont (PIC Chair) joined the meeting to update the SED members on news from the ASEE Board of Directors meeting.

5. NEWS FROM THE ASEE BOARD – PIC II CHAIR REPORT: PIC II Chair Marjan Eggermont's report: (a) Clarification of Dr. N.J. Altiero's comments regarding "ASEE" operating at a budget deficit of \$1,200,000.00. (b) ASEE wants to move from a hierarchic organization to a much more network organization. She committed to providing more information after ASEE Strategic Doings Session, (c) she confirmed that Operating funds cannot rollover to new fiscal year (are swept). (d) BASS funds can roll over to new fiscal year, (e) Bass account funds are now subject to 35% indirect cost, (f) A reminder that the new officers list needs be provided not just to ASEE on the required form, but also to the new PIC Chair, and (g) Military and Veterans is a new division within PIC II*, (h) Special funding (up to \$500) is being provided for innovations that increase the visibility of ASEE and SED. Application required, see the mini-grants program, to be known as the Professional Interest Councils (PICs) Special Projects Fund. See http://www.asee.org/conferences-and-events/conferences/annual-conference/2014/PIC_Special_Projects_Fund.pdf for information. Any division seeking funds needs to apply about 6 months prior to the annual meeting. (i) A reminder to nominate members for awards, which is available under the Membership link, and (j) Reminder to update our Division Awards information, and (l) the next annual meeting is being held in New Orleans, LA, June 26 through 29, 2016 and in Columbus, Ohio on June 25-28, 2017- See more at: <https://www.asee.org/conferences-and-events/conferences/future-conferences/future-ac-dates-locations#sthash.FWMFSLGf.dpuf>

*** Note:** Professional Interest Council II includes: Biomedical Engineering, Design in Engineering Education, Engineering Technology, Environmental Engineering, Materials Engineering, Multidisciplinary Engineering, Nuclear & Radiological Engineering, Ocean & Marine Engineering, Software Engineering, and Systems Engineering.

6. APPROVAL OF THE 2014 BUSINESS MEETING MINUTES: Fernando Gonzales presented the minutes of the last annual meeting, these having been duly circulated and edits provided. The 2014 meeting was held in Indianapolis, IN. The minutes as provided were approved on a motion (Alice), and seconded (Oscar), with all in favor.

7. 2015 DIVISION PROGRAM REPORT:

- 26 abstracts submitted,
- 0 rejected,
- 0 in abstract,
- 4 in draft (did not submit)
- 19 in final
- 19 ready to publish (finalized)
- 1 diversity related

Below is a listing of ASEE-SED related activities at the 2015 Conference

Systems Engineering Division Poster Session	Poster Session
Systems Engineering Division Annual Business Meeting	Business Meeting
Systems Engineering Division Technical Session 2	Technical Session
Systems Engineering Division Technical Session 3	Technical Session
SUNDAY WORKSHOP: Integrating Systems Engineering into Engineering Education	
Challenges in Systems Engineering Education	Panel of Invited Speakers
Systems Engineering Division Technical Session 1	Technical Session
Systems Engineering Division Technical Session 4	Technical Session
Student Design and Manufacturing Competition	Social Function
Combined with 5184 DISTINGUISHED LECTURE: A Framework for Catalyzing Change in Engineering Education	Distinguished Lecture
Defining the "Moonshot" Strategies that Transform Undergraduate Engineering Education: Diverse Paths to Addressing the "Grand Challenges" in Engineering Education	
Meeting for Incoming/Current Programs Chairs & Division Chairs	Panel of Invited Speakers
ASEE-wide Session on Eng & Liberal Education (E&LE) Integration	Panel of Invited Speakers
ECCD Electric Energy and Power Education & Research Issues	Panel of Invited Speakers
Joint EMD/ EED/ IED/ SED Dinner.	Social Function
DISTINGUISHED LECTURES: "Power to the People: Engineering Education and Energy Poverty Alleviation," presented by Henry Louie, and "A Framework for Catalyzing Change in Engineering Education," presented by Susan Elrod	
	Distinguished Lecture

SUNDAY WORKSHOP: Integrating Systems Competencies into the Curriculum of Any Engineering Discipline
Workshop

Interdivisional Town Hall Meeting
Panel of Invited Speakers

DISTINGUISHED LECTURE: To and Through: Creating an Ecosystem of Achievement for College Success
Distinguished Lecture

8. BEST PAPER AWARD RECIPIENTS: Dr. Radu Babiceanu announced the winners of the SED Best Paper Award at the Joint Awards Banquet on Tuesday, June 16 at Wild Ginger in Seattle, WA as Dr. Timothy L.J. Ferris, School of Engineering, University of South Australia; Dr. Alice F. Squires, Engineering and Technology Management, Washington State University; and Dr. Fanny Camelia, School of Engineering, University of South Australia. The award was officially presented via email by Dr. Peter Golding on June 17, 2015.

9. SECRETARY/TREASURER'S REPORT: Oscar Salcedo presented the Treasurer's report summarizing the year's revenues and expenses. As of 1/31/2015 the SE Division has a (BASS fund account) balance of \$3,504.74, (compared with \$3,130.74 at the same time in 2014). The operating account balance is \$254.00 (compared to \$229.00 this time in 2014). Payment of \$565.76 is still pending for last year expenses according to Alisa Graham but could not be confirmed by SED officers present at the SED business meeting in Seattle. Oscar Salcedo will follow up with Alisa Graham to clarify. Oscar Salcedo reported on the development of the [SED webpage](#). The SED website also contains links to the bylaws and Newsletter format. As follow up to Action Item #1 from 2014, a suggestion was made to investigate the SED homepage capabilities to act as repository. Oscar Salcedo will follow up with ASEE to see what documents are supposed to be provided to them from the divisions. Either way we information to be shared with the SED membership. Oscar committed to investigate a viable process for decision-making and propose modification to the bylaws if required. Oscar Salcedo reported that the new version of the Operations Manual has been uploaded to the SE homepage to close out Action item 5 (d) from 2014.

10. MEMBERSHIP REPORT: Oscar Salcedo presented the SED membership report. Membership is now at 264 members (as of Jun 2015), compared with 254 members (as of Jun 2014). This is an increase of 10 members (as of Jun 2014). Overall SED membership is steadily increasing, which is in contrast to some divisions where membership has declined.

11. OFFICERS AND ELECTIONS: A motion (2014 action item 2b) to (a) amend the bylaws to create a succession scheme for officers, (b) insert a commitment to diversity statement, and (c) that the PIC II chair will determine and alert SED of impending deadlines and for the Program Chair to provide this information to SED executives was passed unanimously during the 2014 business meeting in Indianapolis. Oscar H. Salcedo reported that an electronic balloting system (Qualtrix) was used to allow members who wished to do so to cast ballots to effect the modifications. The balloting was 17 in favor out of 19 ballots cast (89%); the modifications are deemed approved and in effect.

Newsletter format has been completed in response to Action item (3c) from 2014 business meeting. Officers present at the 2015 business meeting determined to design a system to review input and

contributions to the newsletter before publication.

i. Nomination Committee: Fernando Gonzalez reported on the work of the nominating committee, which successfully attracted qualified and enthusiastic applicants for all open positions.

In accordance with the provisions for succession in the bylaws (see action item 2b from 2014), the Program Chair 2015 was installed as Division Chair 2016.

2015 SED Division Chair:

Dr. Saleh Sbenaty, Professor and Program Coordinator
Computer Engineering Technology
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Bio: Dr. Saleh M. Sbenaty, a professor of Engineering Technology, earned his Ph. D. and MS degrees in electrical engineering from Tennessee Technological University and his BS degree in electrical engineering from Damascus University, Syria. Dr. Sbenaty joined MTSU in 1993 and has been teaching graduate and undergraduate courses and actively engaged in curriculum development and assessments for technological education. He has authored and co-authored several industry-based case studies and participated in three major NSF-funded Advanced Technological Education grants. He is currently serving as a program evaluator for the Engineering Technology Accreditation Commission of ABET, Inc.

Dr. Sbenaty published and presented over thirty six refereed national and international articles and attended/conducted over 65 workshops in accreditation, curriculum development, assessments, using technology in the classroom, case-based learning, problem-based learning, Corporate Scholar Solution-based learning, just-in-time learning, and modular-based learning. He has been also conducting research in the area of mass spectrometry, power electronics, lasers, instrumentation, biosensors, electrical characteristics of concrete, digital forensics, and microcontroller applications. Dr. Sbenaty has several years of industrial and research experiences with Oak Ridge National Laboratory, Lockheed-Martin, TVA, and the Syrian Networks. He is the past Chair of the Robert G. Quinn Award for Excellence in Engineering Education and served as a Division Chair and Program Chair of the Instrumentation Division, American Society for Engineering Education, ASEE. Dr. Sbenaty is currently a member of the International Review Board, International Journal of Modern Engineering and served as a Guest Editor and on the Editorial Board, Journal of SMET Education: Innovations and Research.

Dr. Sbenaty's list of awards and honors include: The MTSU Foundation Outstanding Teacher Award in 2006; Outstanding Classroom Teacher, CBAS, in 2001; Faculty Achievement Award, CBAS in 1996; and Who's Who Among the Students in American Universities, Tennessee Technological University, in 1988. Top Graduating Student, College of Electrical and Mechanical Engineering, Damascus University, 1980. Dresden University Scholarship, Summer 1978, Dresden, Germany. He is a member of the Honor Society of Phi Kappa Phi, the National Honors Engineering Society of Tau Beta Pi, the Electrical Engineering Honor Society of Eta Kappa Nu and the International Honorary Society for Professionals in Technology,

Epsilon Pi Tau.

ii. In accordance with the provisions for succession in the bylaws (see action item 2b from 2014), the Secretary/Treasurer 2015 was installed as Program Chair 2016.

2016 SED Program Chair:

Oscar H. Salcedo

Research Institute for Manufacturing and Engineering Systems

University of Texas at El Paso

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Bio: Oscar is Director of Strategic Opportunities for the Research Institute for Manufacturing and Engineering Systems (RIMES). Oscar is an entrepreneur having launched several businesses and currently managing a business consultancy company and a second one in assistive software development. His certifications are in the area of Business Quality. Oscar is a mechanical engineer, holds a Master of Arts in political Science and is currently a PhD student in the Teaching Learning and Culture (TLC) doctoral program at the University of Texas at El Paso. His areas of research interests includes the use of history in the teaching of mathematics and engineering, the use of multiple representations in teaching mathematics, as well as affective processes in learning mathematics. In his current position Oscar is responsible for business development, organization and coordination of applied research teams, contract and budget negotiations, and definition of Statements of Work, milestones, and deliverables of work products. He is married to Sofia Carvajal and they have three adult children; Andrea, a Registered Flight Nurse pursuing a master in Public Health Nursing, Oscar Salcedo Jr., Bachelors in Computer Science and MBA, and Michael Salcedo currently completing Bachelor's in Business Administration at the University of Texas at El Paso.

Position of Secretary/Treasurer:

Dr. Radu Babiceanu was unanimously elected Secretary/Treasurer 2016.

Radu Babiceanu, Ph.D.

Associate Professor, Department of Electrical, Computer, Software, and Systems Engineering

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Bio: Dr. Radu Babiceanu is an Associate Professor of Systems Engineering with the Department of Electrical, Computer, Software, and Systems Engineering at Embry-Riddle Aeronautical University (ERAU) in Daytona Beach, Florida. He received his Ph.D. degree in Industrial and Systems Engineering from Virginia Tech in 2005. Dr. Babiceanu currently serves as the Program Coordinator for the ERAU Master of Science in Systems Engineering and teaches systems engineering and software engineering courses such as Fundamentals of Systems Engineering, and Software and Systems Requirements Engineering. His

research provides a systems engineering approach to modeling, operation, and evaluation of large-scale complex systems, such as aviation, manufacturing, supply chain, and transportation systems. Dr. Babiceanu published more than 50 papers in reputed journals and conference proceedings. He is a member of ASEE - Systems Engineering Division, INCOSE, IEEE, IIE, and INFORMS.

Directors:

Rafic “Ray” Bachnak, PhD, PE.
Director, Science Engineering & Technology
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Bio: Ray is Professor of Electrical Engineering, Science, Engineering and Technology at the Pennsylvania State University. Prior to coming to Penn State, Dr. Bachnak was professor of electrical and computer engineering and the chair of the Department of Engineering, Mathematics, and Physics at Texas A&M International University (TAMIU) in Laredo, Texas. Prior to joining TAMIU in 2007, he had held academic positions at Texas A&M - Corpus Christi, Northwestern State University (Natchitoches, La.), and Franklin University (Columbus, Ohio).

Alice F. Squires, PhD, PMP, CSEP-Acq
Associate Professor,
Engineering and Technology Management,
Washington State University
(alice.squires@wsu.edu)

Bio: Alice Squires joined the Engineering and Technology Management (ETM) department of the Voiland College of Engineering and Architecture (VCEA) at Washington State University (WSU) as an Associate Professor in the Fall of 2014. Prior to joining WSU, Alice has served in a variety of positions including Manager of Systems Engineering at Aurora Flight Sciences, Senior Researcher and Online Technical Director at Stevens Institute of Technology, Senior Systems Engineer consultant to Lockheed Martin, IBM, and EDO Ceramics, Senior Engineering Manager at General Dynamics, Senior Engineering Manager at Lockheed Martin, and Advisory Engineer/Scientist at IBM. Alice is a contributing author and editor to the Systems Engineering Body of Knowledge (www.sebokwiki.org) and the Graduate Reference Curriculum for Systems Engineering (www.bkcase.org/grcse).

Satinderpaul Devgan
Professor and Head of Electrical and Computer Engineering
Tennessee State University
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Bio: Dr. Devgan received his M.S. and Ph.D. degrees in Power Systems from Illinois Institute of Technology before joining Tennessee State University in 1970. He has developed and implemented M.S. and Ph.D. in Computer and Information Systems Engineering (CISE) programs, and has published in IEEE and ASEE Conference Proceedings. He is a recipient of Outstanding Researcher of the Year award in 1994 from Tennessee State University and was inducted to its Million Dollar Research Club. He is past-chairman of Southeastern Association of Electrical Engineering Department Heads (SAEEDH) and is

currently serving as Secretary of the BOD of Southeastern Center for Electrical Engineering Education (SCEEE). He also served as Editor of ECEDHA Newsletter from 2001 to 2006.

Past Chair:

Peter Golding, Ph.D., C.P.Eng., F.I.E.Aust.
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12. GENERAL INFORMATION

Information shared by Dr. Alice Squires:

The BKCASE project involves the SEBoK wiki (sebokwiki.org) and the Graduate Reference Curriculum on Systems Engineering (GRCSE) - see bkcase.org. The SEBoK has an update twice a year. I put together the presentation attached as an overview and it also contains the SEBoK wiki publishing cycle, this is something we can include in our newsletter (see attached) as well as some of the links. The BKCASE newsletters contain information that can be helpful in keeping up to date on the project. Note that past newsletters are here: <http://www.bkcase.org/about-bkcase/bkcase-newsletters/>. Anyone can subscribe to the newsletters (future ones will be sent to your email) from bkcase.org. The plan is to update GRCSE in 2016. Anyone interested in participating in that work should notify Rick Adcock, r.d.adcock@cranfield.ac.uk.

The INCOSE Academic Council is the part of INCOSE that is primarily of interest to ASEE SED and they were very supportive this year, providing brochures and the 50 copies of the Academic Directory of IE and SE programs also obtainable from this link: <http://www.incose.org/AboutSE/SEEducation/SEProgramDirectory>. INCOSE also sent 50 books of the Systems Engineering Vision - see <http://www.incose.org/AboutSE/sevision> - all of which had been taken up at ASEE by the end of the Division mixer. The ASEE tutorial/workshop we provided on Sunday summarized the work completed at the INCOSE Academic Forum in May, and more information on that can be found here: <http://www.wpi.edu/research/seli/incose61.html>. The ASEE workshop presentation furthering the INCOSE Academic Forum workshop, is attached. We are going to add more to the information with an ASEE workshop report, I will add the EC distribution to the report out.

Dr. Alice Squires indicated the INCOSE Handbook v4 will be out in June 2015; the delay was due to the need to wait for the release, during May 2015 of ISO/IEC/IEEE 15288:2015.

Dr Alice Squires shared the link for the INCOSE SE Vision 2025: <http://www.incose.org/AboutSE/sevision>

The new Program Chair will be asked to develop a Call for Papers for the 2016 ASEE Annual Conference; to be held in New Orleans, LA, during June 14 through 17, 2015. Suggestions of ideas and themes to be included are relationship to NSF goals, and opportunities, encouraging Systems Engineering at the high

school level, and online systems education. Consider joint sessions, including with the Industrial Engineering Division and with the Management Division.

13. NEW BUSINESS: Alice Squires suggested that the SED needs to develop a process for review of both the SED website and newsletter prior to making these two SED artifacts public. This motion was seconded by Fernando Gonzales who suggested that both the website and newsletter be kept private until such time as the EC agreed that they were ready for public view. Note: The EC needs to come to an agreement and publish, as part of the division's working documents, how the website and newsletter creation and publication will be handled including the initial website and newsletter developed.

14. OTHER BUSINESS FROM 2014 NOT DISCUSSED IN THE 2015 BUSINESS MEETING: Items raised for further consideration by the SED executive committee and members, and informally discussed prior to the ending of the meeting, included:

- Involve graduate students? How do we better involve them?
- Partnering with other divisions – link up with multidisciplinary division in capstone courses?
- Strengths in graduate programs, so we can advise ASEE how to be more active at the graduate level.
- Consider student first author Best Paper Award. Reach out to the student division.
- The need for updates to the current Operating Manual.

15. ADJOURNMENT:

A motion to adjourn was passed and the business meeting closed at 8.20 PM.