

183rd Division Meeting
Dynamics Systems and Control Division, ASME International
 2013 American Control Conference
Renaissance Washington, DC Downtown Hotel

Date and Time: 7.30PM – 10:30 pm, Monday, June 17, 2013
Location: Congressional A/B

A G E N D A

7:30 PM Social – light refreshments will be provided.

8:00 PM 1. Preliminaries and Self-Introductions Huei Peng

The attendees took turns to introduce themselves.

8:10 PM 1.1 Recognize student travel grant recipients Manish Paliwal

The student attendees were recognized and commended for their participation in the conference.

8:20 PM 2. Approval of Minutes Huei Peng

The minutes of the 182nd Division meeting at DSCC2012 were approved without changes.

8:30 PM 3. Strategic Plan Execution
 3.1 Review of Strategic Plan Huei Peng*

Huei Peng provided an update on the execution of the 2008 Division Strategic Plan. A recent survey of DSCD members indicates that Research, Organization Support, and Education are the top three areas in which improvement should be made. The slides presented can be found in the Appendix.

3.2 Discussion – Input from Division Members

The attendees were divided into six groups and asked to discuss areas in which the Division can improve and action items for improvement. The suggestions made by the groups were summarized and can be found in the Appendix.

Reports:

9:30 PM 4. Conference Activities (5 minutes per report)
 4.1 2013 ACC Sean Brennan*

Ranjan Mukherjee summarized the report prepared by Sean Brennan. The report provided statistics of the number of papers submitted and accepted at ACC, including those submitted by ASME members. The complete report can be found in the Appendix.

4.2 2013 DSCC Nejat Olgac*

Nejat Olgac presented an update on DSCC 2013 – see Appendix.

4.3 2014 DSCC Suhada Jayasuriya*

Suhada Jayasuriya informed the attendees that the 2014 DSCC will be held in the Marriott Plaza which is located in the heart of downtown San Antonio.

4.3 2015 DSCC Giorgio Rizzoni*

The 2015 DSCC will be held in the campus of Ohio State University. Rama Yedavalli made the announcement in the absence of Giorgio Rizzoni.

9:45 PM 5. Public Relations & Outreach

5.1 Newsletter Denise McKahn*

There was no report from the Newsletter Editor.

5.2 Student and Young Professional Committee Manish Paliwal*

There was no report from the Student and Young Professional Committee.

5.3 DSCD Magazine Galip Ulsoy*

Galip Ulsoy informed the group that two issues of the magazine have already been published and plans for the next three issues are already in place. The attendees were polled and a large number of them had noticed the magazine appear as a supplement to the Mechanical Engineering magazine. A fair number of the attendees had also read the articles that were published. In the future, Galip Ulsoy will conduct a poll of the Division members to determine if the magazine should be continued. Meetings with the ASME publications office will be held to get a breakdown of the cost of publication. The complete report can be found in the Appendix.

5.4 DSCD Website Melih Cakmakci*

There was no report from the webmaster.

10:00 PM 6. Standing Committee Reports

6.1 Honors Committee Brad Paden*

Andrew Alleyne presented the Honors Committee Report prepared by Brad Paden. The complete report is in the Appendix.

6.2 Advisory Committee Matt Franchek*

There was no report from the Advisory Committee.

6.3. Nominating Committee Dawn Tilbury*

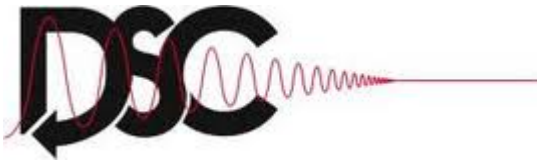
There was no report from the Nominating Committee.

10:15 PM 7. Open discussion Huei Peng

Huei Peng thanked all the attendees for participating in the Strategic Planning discussion. He also handed over the Chairmanship of the Division to George Chiu who was absent due to illness.

10:29PM 8. Closure Huei Peng

The meeting ended at 10.40 pm.



ASME DSCD Strategic Plan Review

Executive Committee
June 2013

2008 Strategic Plan Highlight

- **Vision**

Serve society by fostering innovation and education in the art, science, engineering and practice of Dynamic Systems and Control

- **Mission Statements**

1. Highlight and promote technical innovations in the field of Dynamic Systems and Control, particularly those with direct positive impact to society.
2. Promote multidisciplinary and industrial collaborations.
3. Provide effective, high quality forums for communicating and archiving technical advances, and assessment of societal needs in Dynamic Systems and Control.
4. Promote the development of professionals in Dynamic Systems and Control.
5. Develop and sustain an active, diverse and global membership.
6. Foster the development and promotion of leadership in industry, academia, and government with dynamic systems and control expertise.
7. Enhance public and governmental awareness of the societal relevance of the Division's activities.

2008 Strategic Plan Highlight

- **Strategic Areas**

1. Industrial participation
2. Research
3. Education
4. Global presence
5. Membership diversity
6. Outreach
7. Organizational support

Industrial Participation (Dawn)

- **Critical Issues**

- The division does not have adequate industrial participation in its membership and activities.
- The division may not be promoting sufficient multidisciplinary and industrial collaboration activities.
- The division may not be fulfilling the needs of its industrial membership.

- **Goal**

- To increase the division's industrial membership participation in the planning and attendance of its activities, as well as in its governance.

- **Accomplishments**

- Industrial Advisory Board (IAB) established in 2011
- List of action items to increase industrial relevance & participation, rank-ordered
 - Add industry members to Honors & Award Committee (done)
 - Organize conference sessions according to application area instead of theoretical basis (ongoing)
 - Technical committees organized around application area (new: Energy & Biosystems)

Research (Andrew)

- **Critical Issues**

- The division needs to assert a more prominent leadership position in postulating and advancing new and emerging research areas.
- The division should embrace and encourage research and development of technologies that will have direct beneficial impact on society..

- **Goal**

- Leverage membership expertise, excellence and connections with other industrial or professional organizations to identify emerging high impact research areas with positive societal impact, where DSC can have a significant role. Promote the continuing education and research development of the division membership in these emerging areas..

- **Accomplishments**

- By launching the DSC magazine, the division has aspired to highlight and position member research accomplishments in an international forum
- Sponsored workshops have been planned for key topics ,of high societal relevance, in which divisional members will be able to take a lead role

Education (Huei)

- **Critical Issues**

- The division needs to keep pace with changes in the engineering curricula and innovations in pedagogy.
- The division needs to encourage and enable early exposure of dynamic systems and control concepts both within and outside of its core discipline.
- The division should instill a strong sense of service and ethics within the next generation of professionals and foster activities that meet societal needs.

- **Goal**

- To address the above three issues.

- **Accomplishments**

- 2009 DSCC: Tutorials all cancelled.
- 2010 DSCC: One Education/frontier session held.
- 2011 DSCC: Engineering Education plenary talk in, panel discussion on “**Transforming Engineering Education**”, industrial sessions (Mathworks, NI).

Global Presence (Kok-Meng)

- **Critical Issues**

- The division is not well-recognized at the international level and does not have adequate international participation in its membership and activities..

- **Goal**

- To increase the division's international standing and recognition of its members by expanding its international membership, creating international chapters, and increasing the participation of its membership in international activities and organizations.

- **Accomplishments**

- Hold TC-Mech meetings at DSCD cosponsored IEEE/ASME AIM conferences: AIM 2008 (China); AIM 2009 (Singapore); AIM 2010 (Canada); AIM 2011 (Hungary); AIM2012 (Taiwan); AIM 2013 (Australia); AIM 2014 (France); AIM 2015 (Korea)
- DSCC brings in international participation: DSCC 2009/2011 Bath/ASME Symposium on Fluid Power and Motion Control; DSCC2010 (IFAC Sym. on Mechatronic Systems); DSCC/MOVIC 2012
- JDSMC/TMECH International Editors/Authors become DSCD members

Membership Diversity (George)

- **Critical Issues**
 - The leadership and membership of the division does not have a sufficiently diverse composition.
- **Goal**
 - To increase the diversity of the division's membership and governing body.
- **Accomplishments**
 - Continuing support and fostering of the Women in DSC group, such as luncheons at DSCC
 - Seek diversity in leadership and volunteer positions

Outreach (Ardalan)

- **Critical Issues**
 - The division presently lacks a cohesive and effective marketing strategy.
- **Goal**
 - To develop an effective web presence and successful marketing and recruitment strategies, as well as to enhance the division's interactions with other ASME divisions and other professional societies.
- **Accomplishments**
 - The DSC Magazine: The idea was conceived and the first issue was published in March 2013 as part of the ASME Mechanical Engineering Magazine which has a wide circulation. The plan is to publish DSC Magazine quarterly during 2013 and 2014 as part of ASME Mechanical Engineering Magazine, and perhaps stand along there after.
 - We have an up-to-date organized website and a newsletter.
 - We have worked with IFAC and Division of Fluid Power Systems in organizing joint conferences.

Organizational Support

- The following committees are to be established in order to enable the execution of the strategic action items:
 - DSCD Webmaster
 - Ad Hoc Committee for globalization
 - Ad Hoc Committee on DSCD Lecture Series
 - Education (Technical) Committee
 - Diversity Action Committee
 - Industrial Advisory Committee
- **Accomplishments**
 - Creation and maintaining the DSCD website
<http://www.asme-dscd.org/>
Current webmaster is Melih Cakmakci
 - Formation of the Industrial Advisory Board (IAB)
4 members from industry and Chair of Executive-Committee
Current chair of IAB is Tony Phillips (Ford)

Survey of Importance (2013)

People that **will** attend strategic planning meeting (14 responses)

People not
Attending (7)

	1	2	3	4	5	6	7	Ranking	
Industrial Participation	0	4	1	3	2	2	2	3.79	3.86
Research	4	0	0	0	0	2	8	2.86	4.29
Education	0	2	3	4	1	4	0	3.86	4.00
Global Presence	2	1	3	1	5	2	0	4.14	5.00
Membership Diversity	2	3	2	3	2	1	1	4.50	3.57
Outreach	3	3	2	2	2	2	0	4.79	4.43
Organizational Support	3	1	3	1	2	1	3	4.07	2.86

the lower the better

Three Topics Still Viewed as Important in 2013

- Research, Organization Support, and Education, with industrial participation being a possible cross-cutting highlight.
- Membership diversity as a very close next in line.
- Global presence and outreach being viewed as least important.

Goal of 2013 (this meeting)

- Focused effort in 3 areas
- No more than 1-2 actions in each area
- Execution, and not just “strategic plans”
- Need leading volunteers in each action

Summary of discussions

Industrial collaborations

- Create tracks for industry in conferences, with presentations only.
- Workshop for faculty working with industry already, presenting and inspire others on how to work on industrial relevant problems.
- Better communication

Summary of discussions

Organization Support

- Broader announcement and communication of Division/TC activities (e.g., call for papers, TC activities), using website or newsletter.
- Journal review is sometimes too long. Some delays caused by communications (e.g., waiting for copyright forms)
- Good DSCC papers can be accepted in JDSMC
- ASME support is poor, including time to appearance in google search; and accessibility to ASME digital library

Summary of discussions

Global Presence

- Global presence should be considered more important

Summary of discussions

Education

- Participation of undergrad/local participation in DSCC is low, and should be encouraged
- We have too few tutorial sessions in DSCC

Summary of discussions

Miscellaneous

- Involvement of funding organizations. We involve NSF but we should involve others such as DOE, involve their program directors in our activities. Can hold workshop within the window of DSCC (not in extra day)
- Student involvements: make them feel this is their home organization
 - Events at conferences for ice breaking
 - They may help future industrial participation
- Extend support to new faculty members with low funding

2013 Report from the DSCD representative to the ACC

2013 American Control Conference, Washington DC, June 17-19

Prepared by Sean Brennan, sbrennan@psu.edu with numbers from Danny Abramovitch, 2013 ACC Program Chair, danny@agilent.com.

Conference statistics:

Total submissions: 1864 (down from 2008 submission last year)

Acceptance rate: 61% (up from 55% last year)

Invited sessions: 29

Parallel tracks of sessions: 22

ASME statistics:

ASME Regular submissions: 163 submissions (down from 173 last year)

ASME Regular papers accepted: 113 accepted (up from 96 last year), 50 rejected

ASME Regular paper acceptance rate: 69% (up from 55% last year)

ASME Invited sessions: 29 (down from 42 last year), 2 were rejected but some of their papers were accepted through regular track. Note: ALL invited sessions this year appear to be from ASME!

ASME Invited papers: 176 received, 158 accepted, 16 rejected, 2 withdrawn

ASME Tutorial sessions: 12 sessions (do not have numbers from last year), with 12 lead tutorial papers and 35 regular tutorial papers

DSCD statistics:

DSCD-hosted invited sessions: (more than 10, from >10 last year):

- Modeling, Estimation and Control of Advanced Engine Sensing and Actuation
- Modeling and Control of Advanced Combustion Systems
- Stochastic Models, Control and Algorithms in Robotics
- Modeling, Estimation and Control of Advanced Engine Air Path Systems
- Energy Management and Control of Advanced Propulsion Systems
- Modeling and Control of Driveline and Vehicle Dynamics

Plus what seems to be about 5 more. However, the sponsorship of individual invited sessions can be unclear as many are historically co-sponsored by several different groups (IEEE / ASME)

DSCD technical committee meetings include:

- Automotive (Tuesday 18th June, 11:30 am, Room 10/11)
- Mechatronics (Monday 17th June, 5:30pm, Room 10/11)
- Typically, the TC on Robotics meets during the ACC, but as of yet I have no record of their scheduled meeting.
- Energy Systems (Tuesday June 18th from 6:00pm pm in Room 7)

To : DSCD ExCom

From : Nejat Olgac, General Chair, **DSCC 2013**

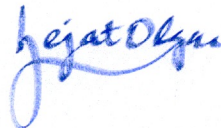
June 17, 2013

Dear ExCom members,

DSCC 2013 related activities:

- Deadlines are being followed closely.
- Final papers are uploaded. **289 papers** in total . On track.
- Pre-registration period is on.
- 24 nations have submitted papers.
- Experimental session is being formed – members are encouraged to submit
- Despite important hurdles encountered still progressing.
- **ASME-DSCD interactions, their destiny and the direct influence on DSCC need to be discussed at the “Strategic Planning Meeting” after ACC 2013.**

With best regards,



Prof. Nejat Olgac

Report for Division Meeting, 2013 ACC, Washington, DC by A. Galip Ulsoy

Dynamic Systems and Control Magazine

The *Dynamic Systems and Control Magazine* (DSCM) is coming along well. Two issues have appeared, and the division has been billed and has paid ASME \$12,000 for the first issue. The total cost per year, for the first two years, will be \$48,000 as agreed to previously. During the first two years the DSCM will be published as a 24 page quarterly supplement to ASME *Mechanical Engineering Magazine* and distributed to all 110,000 ASME members. Members who do not receive a hardcopy can login to their ASME web account, and view the magazine online.

The first issue of DSCM appeared as a supplement to the ASME *Mechanical Engineering Magazine* in the March 2013 issue. The topic was electrified vehicles with two articles from Ford Research and one article by Giorgio Rizzoni and Huei Peng. The first issue also contained news articles about the division, and a “house ad” for our 2013 ACC and DSCC conferences.

The second issue appeared as a supplement to the ASME *Mechanical Engineering Magazine* in the June 2013 issue. This issue contained six articles from the Center for Compact and Efficient Fluid Power, as well as an article by David Auslander analyzing the publications that have appeared in JDSMC during the past 20 years. The issue also contained the same “house” ad publicizing the 2013 ACC and DSCC.

The third issue will be focused on wind power, and will also include news stories from the Division. It will appear as a supplement to the ASME *Mechanical Engineering Magazine* in the September 2013 issue. The fourth issue will focus on monitoring and diagnostics and is planned for December 2013. Several articles are also in the works for the 2014 issues, including security of industrial controllers, energy systems, battery dynamics and control, etc.

The cooperation from John Falcioni, Editor, and his staff, of the ASME *Mechanical Engineering Magazine* has been excellent. Peter Meckl will be the future Editor of DSCM if we decide to continue publication after the first two years. Peter has been involved in all meetings with ASME and kept informed of progress on each issue. He is also getting experience by taking on responsibility for editing the December 2013 issue of DSCM. Rifat Sipahi has been serving as the news editor for DSCM and has also prepared the “house ads” for our conferences.

Honors and Awards Committee Report to ExComm
June 17, 2013

We are pleased to announce that the Oldenburger Award will be given to Graham Goodwin this year. The ASME Committee on Honors has approved our recommendation and asked that we retain the unselected nominations for 1 year for reconsideration. Graham and his wife Rosslyn will attend the DSCC this fall.

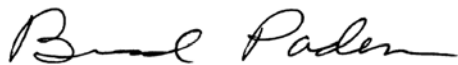
Nominations are due by June 30th for the Yasundo Takahashi Education Award and the Outstanding Young Investigator Award. A solicitation has been emailed.

Karl Kedrick received a weak response from the Journal associate editors on nominations for the Kalman Best paper award. We decided, with Huei's and Karl's concurrence, to solicit nominations from the Division directly. There are some on the H&A committee who think this should be the standard practice and we will revisit the issue as a possible permanent change.

The DSCD Honors and Awards Committee requests 2 new member nominations from the Nominating Committee to replace 2 members who are completing their terms. One of the new members should be selected as Vice-Chair so that they can advance to Chair in the second year and then be available as Past Chair in their 3rd year.

Matt Franchek, next year's H&A Chair, and I hereby submit the attached proposed edits to the By-Laws committee for consideration. The reasoning is included in the attachment.

We would like to update the web documents to harmonize them. For example, the Operating Guide has statements like "Winner receives \$750 plus a plaque" and other documents on the web have statements such as "at least \$500" and "plaque or framed certificate." Can ExComm appoint a person, maybe someone who would learn from the exercise, to review and update our web documents? Alternatively, please advise me on the approval process and I will submit suggested changes to the H&A documents.



Brad Paden
2012-2013 Chair
DSCD Honors & Awards Committee