

202th Division Meeting **Dynamics Systems and Control Division, ASME International**

Modeling, Estimation, and Control Conference (MECC) 2022, Jersey City, NJ Contacting the Division: dscd.exec@gmail.com

Date and Time: Monday, October 3, 2022 at 7:30 pm – 9:30 pm (ET)

Light refreshments will be served between 7:00-7:30 pm

In-person Location: Westin hotel at Jersey City Newport, Room Newport I & II

Virtual option via Zoom

AGENDA

7:30 pm 1. Chair's welcoming remarks

Xiaobo Tan

Xiaobo started the meeting at 7:35 pm and welcomed everyone on behalf of the DSCD ExComm.

7:35 pm 2. Approval of minutes

Kam Leang

Kam asked if anyone had any questions about the minutes from ACC 2022 (see attached). No questions were raised. Kam made a motion to approve the meeting minutes. Atul Kelkar seconded the motion. Votes in favor to approve the minutes from ACC 2022: YES 83 NO 0 ABSTAIN 0. The motion passed unanimously.

7:40 pm 3. Recognition of service to DSCD

Xiaobo Tan

Xiaobo recognized members of the community who served on DSCD committees, as well as AEs in TMECH and JDSMC who recently finished their terms. He also recognized recent ASME members who were elevated to Fellow status. See attached slides for details.

7:45 pm 4. Announcements

4.1 Call for nominations: open positions

Xiaobo Tan

Xiaobo announced open DSCD positions and encouraged the community to submit nominations. See attached slides for details on open position.

4.2 NSF updates

Harry Dankowicz

Harry gave updates on NSF programs of interest to the DSCD community. In particular, he focused on the revamped DCSD website and encouraged members

to take a look and reach out to him with questions on funding opportunities from NSF.

8:00 pm 5. Updates from the DSCD Executive Committee

5.1 ASME TEC Meeting

Xiaobo Tan

Xiaobo summarized the meeting between DSCD ExComm and ASME TEC meeting held back in July 2022. He went over the slides that were presented to TEC (see attached) and encouraged the community to provide input and feedback to ExComm. TEC encouraged the division to strenthen diversity and inclusion within the community.

8:15 pm 6. Select Division updates/activities

(rapid 5-mins/each updates, for more info see attached detailed reports)

6.1 Treasurer's report

Rajesh Rajamani

Raj gave the DSCD financial report. Please see slides for details.

6.2 Technical Committee updates

Atul Kelkar

Atul summarized recent activities of the DSCD TCs, see slides for details. He also encouraged members of the community to get involved with TCs.

6.3 ASME updates

Barbara Zlatnik

Barbara gave updates on ASME and discussed the structure of TEC and how TEC supports the DSCD and other ASME divisions. Barbara encouraged everyone to reach out if they had questions.

6.4 DSCD PodCast Series

Hao Su/Yao Mao

Hao gave updates on the DSCD PodCast Series. See slides for details. He encouraged the community to provide feedback and input.

6.5 2023 AIM updates

Santosh Devasia

Kam gave the AIM 2023 updates by summarizing the details of the upcoming AIM conference in Seattle, WA in June 2023. See attached slides. He encouraged the community to submit papers, particularly to the AIM/TMECH FS joint submission. Posters will be accepted for late-breaking results until May 2023.

6.6 MECC 2023 Atul Kelkar

Atul gave updates on MECC 2023 and encouraged the community to submit papers. Please see slides for details.

6.7 2022/2023 ACC report

Minghui Zheng/ Jun Zhang

Minghui gave the ACC report. See attached slides for details.

6.8 ASME Letters in Dynamic Systems and Control (LDSC)

Peter Meckl

Peter presented the report for the ASME LDSC (see slides). He encouraged the community to submit papers.

9:00 pm

7. Open discussion

7.1 Discussion: Diversity and Inclusion

Xiaobo Tan/Jordan Berg

Xiaobo started the discussion with the motivation that during the TEC meeting back in July 2022, TEC suggested the division to discuss ideas and ways to strengthen diversity and inclusion. He opened the floor for discussion and input from the community.

One division member noted that conference organizers can provide guidelines for paper and presentation preparation, such as how to choose fonts, style, formatting, etc., to help people who are color blind. Also, be mindful when creating content, for example, considering people in the audience who are light-sensitive.

During the discussion, one member pointed out that we should be mindful in the hiring process and consider best practices for diversity and inclusion. One member pointed out that in the room, not many students were still left in the meeting, so the focus should be on how to encourage student participation in division activities. Gathering input is good, but one needs to be mindful of how best to sample the community for input that is meaningful. A suggestion was to survey the community to better understand some of the key issues.

7.2 SWAT Analysis

Xiaobo Tan/ Barbara Zlatnik

Xiaobo summarized the details of the SWAT analysis (see slides). The slides will be shared with ASME TEC.

9:30 pm

7. Closure

Xiaobo opened the floor for final comments and questions. No questions or comments. He thanked everyone for attending. The meeting adjourned at 9:33 pm.

Attached Written Detailed Reports

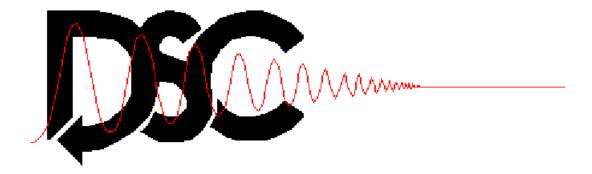
1.	Treasurer's report	Rajesh Rajamani
2.	Newsletter report	Huazhen Fang/Shu-Xia Tang/Changliu Liu
3.	Technical Committee report*	Atul Kelkar
4.	ASME updates	Barbara Zlatnik
5.	2022/2023 ACC report	Minghui Zheng/Jun Zhang
6.	2022/2023 AIM report	Kok-Meng Lee
7.	DSCD PodCast Series	Hao Su/Yao Mao
8.	MECC 2022/2023	Qingze Zou/Atul Kelkar
9.	ASME Letters in Dynamic Systems and Control	(LDSC) Peter Meckl
10.	ASME J. Autonomous Vehicles and Systems (Ja	AVS) Vladimir Vantsevich
11	Secretary's report: Membership numbers	Kam I gang

11. Secretary's report: Membership numbers Kam Leang

12. DSCD Website Diane Peters/Alireza Mohammadi/Barbara Zlatnik

13. Honors and Awards Committee Roberto Horowitz

^{*} Pending submission



201th Division Meeting Minutes **Dynamics Systems and Control Division, ASME International**

American Control Conference 2022, Atlanta, GA Contacting the Division: dscd.exec@gmail.com

Date and Time: Wednesday, June 8, 2022 at 7:00 pm – 9:30 pm (ET)

In-person Location: Atlanta Marriott Marquis, Room M304

A G E N D A and MINUTES

7:00 pm 1. Chair's welcoming remarks Jordan Berg

Jordan started the meeting at 7:00 pm and welcomed everyone.

7:05 pm 2. Approval of minutes Kam Leang

Kam made a motion to approve the meeting minutes from the Fall 2021 meeting. Jordan second the motion. Votes: 43 YES, 0 NO and 0 ABSTAIN. Minutes were approved.

7:10 pm 3. Announcements

3.1 NSF updates

Eduardo gave brief updates on NSF funding and made an announcement about upcoming opportunities that the DSCD community may find of interest. He encouraged everyone to reach out to him for more info.

7:20 pm 4. DSCD Community Meetings and Events

4.1 Survey Results and ASME TEC Meeting Jordan Berg

Eduardo Misawa

Jordan summarized details of recent survey results sent to DSCD community, and he presented overview of ASME TEC meeting slides (see attached). He noted that the meeting with TEC will take place in mid July.

4.2 Holding future division meetings Jordan Berg

Jordan asked members what their preference was for holding future fall Division meetings. Several members noted that MECC would be a good option. Jordan asked for a vote to see who would be in favor of holding fall meeting at MECC. Vote for holding fall Division meeting at MECC was 50 YES; 0 NO; 0 ABSTAIN.

4.3 Holding future DSCD Awards Ceremony

Xiaobo Tan/ Jingang Yi

Xiaobo mentioned that ASME supported and approved DSCD Awards Ceremony to be held at MECC. Barbara confirmed ASME's approval. Roberto gave update on the activities of the Honor and Awards Committee and summarized how papers are to be nominated for Kalman Best Paper award. He also reminded members to make nominations for upcoming awards.

7:50 pm 5. Select Division updates/activities

(rapid 5-mins/each updates, for more info see attached detailed reports)

5.1 Newsletter report Huazhen Fang

/Shu-Xia Tang/ Changliu Liu

Huazhen gave the newsletter update. No comments or questions were raised.

5.2 Treasurer's report

Rajesh Rajamani

Raj gave an update on the division's budget. He noted that the ExComm will further discuss the budget and upcoming requests during the next ExComm meeting. ExComm will prioritize student support, as well as support for industry involvement for activities proposed by division members.

5.3 Technical Committee report

Marcia O'Malley

Marcie gave update on TC activities. See slides for details.

5.4 ASME updates/Robotics Technical Group

Barbara Zlatnik/Manish

Kumar

Barbara gave updates on ASME activities. See slides for details. Manish summarized ASME's Robotics Technical Group and their focus to identify new opportunities in robotics to help engage community members.

5.5 2022/2023 ACC report

Minghui Zheng/

Jun Zhang

Minghui gave updates on ACC. See attachment for details.

5.6 2022/2023 AIM report

Kok-Meng Lee

Kok-Meng gave updates on AIM and upcoming AIM 2023 conference in Seattle. See slides for details.

5.7 DSCD PodCast Series

Hao Su/Yao Mao

Jingang Yi

Hao gave update on PodCast Series and encourage members to subscribe to get last updates.

5.8 MECC 2022

Qingze Zou

Qingze gave update on MECC 2022 in Jersey City. He encouraged everyone to attend.

5.9 DSCD Website

Diane Peters/Alireza Mohammadi/Barbara

Zlatnik

Diane gave update on DSCD website. See document for details.

5.10 ASME J. Dynamic Systems, Measurement and Control (JDSMC)

Ranjan Mukherjee

Ranjan gave updates on JDSMC. See document for details. One division member asked about benchmark for success. Ranjan note that impact factor is a good measure for success, and he plans to continue to improve JDSMC's standing.

5.11 ASME/IEEE Trans. on Mechatronics (TMECH)

Jingang Yi

Jingang gave brief update on TMECH. See attached slides.

5.12 ASME Letters in Dynamic Systems and Control (LDSC)

Peter Meckl

Peter gave updates on LDSC. See slides for details.

5.13 ASME J. of Autonomous Vehicles and Systems (JAVS)

Vladimir Vantsevich

Vlad gave updates on JAVS. See slides for details.

9:00 pm 6. Open discussion

Jordan opened the floor for additional discussions. No other topics were discussed.

9:30 pm 7. Closure (Passing the gavel)

Jordan passed the gavel and welcomed new Division Chair, Xiaobo Tan. Jordan thanked everyone for attending and closed the meeting.

Special Service to DSCD

Jordan Berg: Executive Committee Chair (2021-2022)

Tsu-Chin Tsao: Honors Committee (2019-2022)

George Chiu: Honors Committee (2019-2022)

Kim Stelson: Honors Committee (2016-2022)

Rama Yedavalli: Honors Committee (2016-2022)

Peter Meckl: Advisory Committee (2018-2022)

Nicole Abaid: DSCD Student Travel Grant Coordinator (2019-2022)

Qian Wang: CEB Chair (2019-2022)

Thank you for your service!

Congratulations! New DSCD ASME Fellows (July 2021 – Oct. 2022)

Brian Olson, Johns Hopkins Univ Stephen Spottswood Nabil Simaan Mark Campbell, Cornell University

George Haller

S.O. Reza Moheimani, Univ. of Texas at Dallas

Pablo Tarazaga, Texas A & M University

Qingsong Xu, University of Macau

Prasad Akella

Pinhas Ben-Tzvi, Virginia Tech

Tony Schmitz

Tetsuya Iwasaki, UCLA

Francesco Bullo, UC Santa Barbara

Giorgio Rizzoni, The Ohio State University

Brendan Chan

Alan Bowling, Univ of Texas at Arlington

Michael Murphy

DR Manuel Collet, CNRS LTDS

Ya Wang, Texas A&M University

Journal of Dyn. Systems, Measure. and Control Associate Editors Completing their Terms in 2022

Shorya Awtar, University of Michigan

Hanz Richter, Cleveland State University

Mo Rastgaar, Purdue University

Yunjun Xu, University of Florida

Richard Bearee, Arts et Metiers

Chuangfeng Wang, Georgia Tech

Thank you for your service!

ASME Letters in Dynamic Systems and Control Associate Editors Completing their Terms (Member of ASME)

Jordan Berg (2019-2022)

Warren White (2019-2021)

Thank you for your service!

Call for Nominations/Volunteers

ASME DSCD Open Positions

DSCD Executive Committee Junior Member

Tenure: Voting members serve for 5 years; enter as Junior Member and then become Senior Member, Vice Chair, Chair and Past Chair, respectively, in successive years Non-voting members serve for 3 years

Election/Appointment: One new member is elected each year following the procedures outlined in Article V of ASME-DSCD ByLaws

Appointment: July 1, 2023 to June 30, 2028

The junior incoming member is responsible for reporting on the Technical Committee activities at the Division meetings and is responsible for soliciting TC chairs to nominate at least two tenured members from their respective TCs to serve as Associate Editors for the journals managed by the DSCD. The senior incoming member is responsible for reviewing and updating, if necessary, the DSCD Operating Guide annually. Other specific duties of the two incoming members are left to the direction of the chair; it may be effective for one member to focus on the same topic for two years in a row rather than rotating through different jobs. Specific tasks for the two incoming members may include, but are not limited to:

- Review, oversight, and updating of the Strategic Plan
- Implementing (or coordinating the implementation of) some part(s) of the strategic plan
- Membership and marketing activities, including young engineers, student affairs, and/or the DSCD website Some of these tasks are mandatory, and if not performed by the incoming members of the ExComm, will need to be handled by the Chair and/or Vice-Chair or delegated to an Ad-Hoc Committee(s).

DSCD Conference Program Representative (Alternate Member)

Number of Members: 2 (Representative and an Alternate)

Tenure: 2-year appointment

Tenure: The Representative serves for 1 year. The Alternate then becomes the Representative and a new Alternate is appointed.

Election/Appointment: Chair of the ExComm shall appoint division representatives based on nominations produced by the Nominating Committee prior to January 1 of each year with the advice and consent of the ExComm.

Responsibilities: The responsibilities of DSCD conference representative mainly include compiling and presenting conference reports (for both ACC and DSCC), and making arrangements for DSCD meetings (ACC only). Details in reports, including numbers of submissions, etc., can be obtained by contacting the conference program chair and invited/tutorial/special session chairs. Reaching out to chairs of the individual TCs is also advised.

Appointment: December 1 to November 30

Student Travel Grant Coordinator (Alternate)

Tenure: Appointed by ExComm for a variable term (typically 2-3 years)

Appointment: July 1 to June 30

Student travel funds have been allocated DSCD-sponsored events to be administered by the student travel grant coordinator. These funds are dispersed to the students by the Student Travel Grant Coordinator. Students with accepted papers apply for the grant; for ACC, reimbursement is coordinated with the ACC Student Affairs Chair.

Newsletter Editors

Number of Members: 3 (1 Editor and 2 Associate Editors) – open position: Associate Editor role

Tenure: 2-year term. An Associate Editor often (but not necessarily) becomes an Editor. Note that Newsletter Committee consists of three people: one Editor and two Associate Editors. Therefore, everyone serves three years, one as incoming Associate Editor, one as senior Associate Editor, and one as Editor.

Election/Appointment: Appointed by ExComm

Appointment: Jan 1 to Dec 31

Podcast Producers

Number of Members: 4

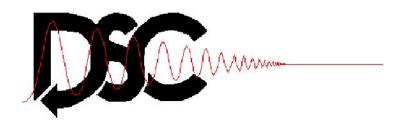
Tenure: two-year term

Election/Appointment: Appointed by ExComm

Responsibilities: The mission of the ASME DSCD Podcast Series is to promote communication among Division member and facilitate outreach to the broader community. The Producers are responsible for 1) identifying podcast topics and featured guests, 2) developing and refining interview questions, 3) conducting and recording interviews, 4) editing the recordings and disseminating the episodes. One producer, assigned by the ExComm with input from the entire set of producers, will be coordinating the production of podcast episodes. The frequency of the episodes will be monthly or higher.

Appointment: July 1 – June 30





Dynamic Systems and Control Division Goals and Activities

Presented by ASME DSCD ExComm

Xiaobo Tan (Chair), Jordan Berg (Past Chair), Jingang Yi (Vice Chair), Marcia O'Malley (Senior Member), Atul Kelkar (Junior Member), Kam Leang (Secretary) and Rajesh Rajamani (Treasurer)

Division goals and activities

DIVISION ACTIVITIES		DIVISION GOALS									
		INTERACTION			DISSEMINATION/ OUTREACH			COMMUNITY GROWTH			DIVERSITY
		Engage DSCD community	Interact with other ASME subunits	Bridge other societies	Disseminate technical work	Outreach with industry	Policy and standards	Mentor members	Involve students	Recruit new members	& INCLUSION
	Website/ newsletters	V								V	
Communication	Division meetings	V							V	V	V
	PodCast Series	V			V						✓
Dissemination of	Conferences	<u>~</u>		V	V	V		<u> </u>	V	V	<u> </u>
technical content	Publications	V	V	V	<u> </u>						
Manakan	TC activities	<u>~</u>	V	V		V			V	V	V
Member activities	Division-sponsor ed activities	V		V	~	V		V	V	V	V
	TEC interaction	V	V		V	V					<u> </u>
Committees	Division committees	V	V	<u> </u>			V	V		V	<u> </u>

Communication

DSCD Website:

- Maintained by ASME
- Archives DSCD information

<u>Get Involved</u> > <u>Technical Divisions</u> > <u>Technical Division Pages</u> > Dynamic Systems & Control Division

Dynamic Systems & Control Division

Dynamic Systems & Control Division (DSCD) evaluate, discuss, analyze and publish new technical results; stimulate research and education innovations; enhance research and education in dynamic systems and control; setting directions for the field.



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News and Updates

DSCD Podcast Series

Events

Governance Leadership

Honors & Awards

Honors & Awards Committee

Division Meetings

Publications

Technical Committees

About

The Dynamic Systems and Control Division provides a national and international forum to evaluate, discuss, analyze, and publish new technical results in the field; stimulate and encourage research and education innovations; enhance manpower in research and engineering education in dynamic systems and control; and lead in setting directions for the field in the future. It encompasses all aspects of the modeling, design, and control of physical systems involving forces, motions, the dynamics and control of mechanical, chemical, biological, and human-related systems, plus transportation, energy, robotics, manufacturing, processing, environmental, computational, and man-machine systems.

Dynamic Systems and Control is a fast growing and pervasive engineering field. There is rarely an engineering endeavor that does not involve the careful control, analysis, and/or synthesis of physical, dynamic systems. Be it fluids, thermodynamics, heat transfer, machine design, or materials engineering, systems and control contributions are essential.

The Dynamic Systems and Control Division (DSCD) is one of 36 technical divisions in the American Society of Mechanical Engineers (ASME). The mission of the Division is to provide a national and international forum to: evaluate, discuss, analyze, and publish new technical results in the field; stimulate and encourage research and education innovations; enhance manpower in research and engineering education in dynamic systems and control; and lead in setting directions for the field in the future.

The Division has actively developed and broadened its scope since its organization in 1943 from instruments and regulators, to automatic control, to coverage of all aspects of the modeling, design, and control of physical systems that involve forces, motions, and/or the flow of energy or material. In 1978 the name was changed from the "Automatic Control Division" to the "Dynamic Systems, Measurement and Control Division" to

DSCD Newsletter:

- Published twice annually (sum/winter)
- Summarizes division activities/announcements
- Highlights researchers
- Book reviews, student highlights, etc.

DSCD NEWSLETTER SUMMER 2021



Editor's Note

Dear colleagues

As we bring the summer 2021 newsletter of ASME DSCD, we hope that all members of the community are safe and healthy. This issue reports several exciting news and updates.

We introduce the IEEE Open Access Journal of Control Systems, which is a new journal that aims to publish high-quality papers on the theory, design, optimization, and applications of dynamic systems and control. The journal announces a special section on Machine Learning and Control

In Honors and awards, Dr. Marcia O'Malley was named Associate Dean for Research and Innovation for the George R. Brown School of Engineering at Rice University, effective May 1, 2021. In addition, we report Dr. Rajesh Rajamani's research on smart bicycles that has received wide publicity. It was featured in IEEE Spectrum as well as on the NPR.

Next an interview of Prof. Clarence W. de Silva is presented where he talks about the origin, myths, current trends and opportunities in robotics. We hope you will enjoy reading it.

We report the release of a book titled Force and Position Control of Mechatronic Systems b Tong Heng Lee, Wenyu Liang, Clarence W. de Silva and Kok Kiong Tan.

We next post an announcement of the MECC 2021, an announcement from the IEEE/RAS Technical Committee for Telerobotics and an MECC 2021 workshop announcement on Safe Control and Learning under Uncertainty. This is followed by calls for papers in two upcoming focused sections/special issues, in IEEE Open Access Journal of Control Systems and in IEEE/ASME Transactions in Mechatronics.

We hope all DSCD members enjoyed a happy and relaxing summer 2021. Thank you for your continued support of the DSCD Newsletter and we look forward to your future submissions.

Best Regards, Editor: Tuhin Das, University of Central Florida Associate Editor: Huazhen Fang, University of Kansas

New Journal

Honors and Awards

Interview: Robotics—Origin, Myths, Current Trends, and Op-

New Book

Announcements

CFPs for Upcoming Focused Sec-

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Division Meetings:

- ExComm meetings
- TC Meetings
- DSCD General Division meetings
 - Fall and Spring
 - 100-200 attendees
 - Member recruiting
 - Builds community

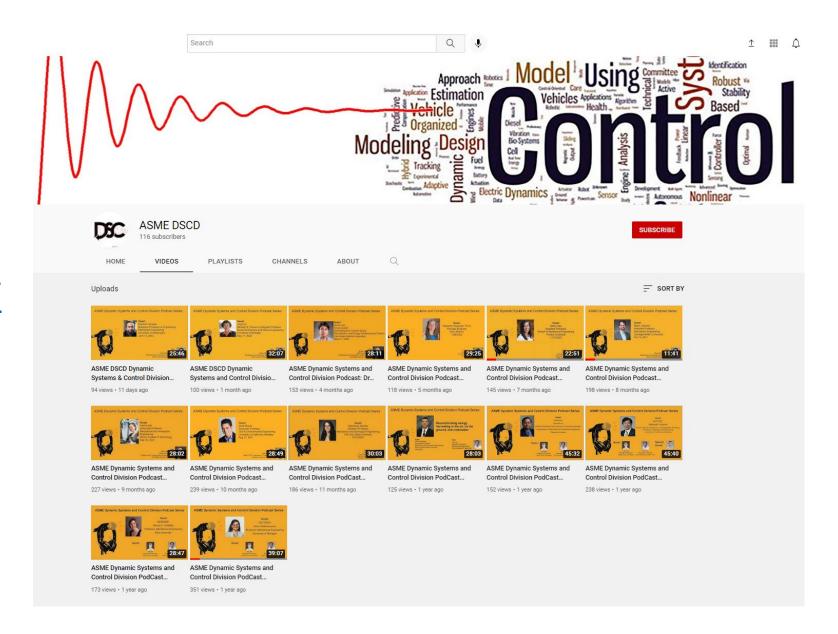


Listservs

- DSCD Google list
- ASME division mass email list

Communication: DSCD PodCast Series

- Purpose: to facilitate better communication and build closer community by featuring our community members (researchers, student leaders, journal editors, etc.) through a casual, conversation setting
- https://www.youtube.com/chan nel/UCKZDGbU2OsXtBvX4d7i wYTA/videos
- Monthly release via ASME DSCD Youtube channel, disseminated via DSCD website
- 14 guests since Feb. 2021



Dissemination of Technical Content

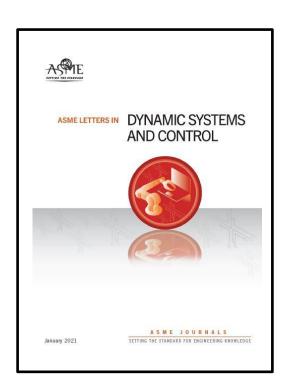
Division-sponsored journals



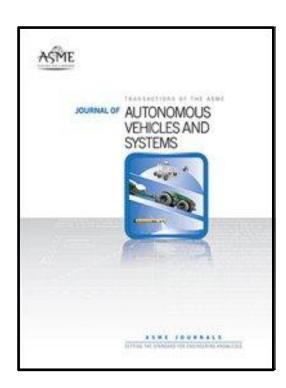
Division flagship journal



Cross-society (IEEE/ASME)



Newly launched by DSCD



Cross-division (DSCD & Design)

Dissemination of Technical Content

Division members play leading roles in all these division co-sponsored conferences

American Control Conference (ACC)

- Co-sponsored by 9 societies (IEEE, ASME, AIAA, etc.) under American Automatic Control Council (AACC)
- Hosts spring DSCD General division meeting

IEEE/ASME Int. Conference on Advanced Intelligent Mechatronics (AIM)

Cross-society (co-sponsor with IEEE)

International Symposium on Flexible Automation (ISFA)

Cross-division (Design division)

Modeling, Estimation, and Control Conference (MECC)

- Cross-society (AACC, IFAC, etc)
- Approved by ASME to host upcoming DSCD Awards Ceremony

DSCD Awards

Honors / Recognition of Members - DSCD's Honors and Awards Committee selects the following awards:

- Rudolf Kalman Best Paper Award
- Nyquist Lecture
- Charles Stark Draper Innovative Practice Award
- Yasundo Takahashi Education Award
- Outstanding Young Investigator Award
- Henry M. Paynter Outstanding Investigator Award
- Michael J. Rabins Leadership Award
- Rufus Oldenburger Medal



The division's technical committees provide best paper awards in their technical areas for conferences run by DSCD.

Awards are presented at annual DSCD Awards Ceremony with lectures.

Member Activities: Technical Committees

DSCD Technical Committees:

Automotive and Transportation Systems: 188 members

Biosystems and Health Care: 62 members

Energy Systems: 257 members Mechatronics: 173 members

Robotics: 55 members Vibrations: 48 members

TC Activities:

- Recognize accomplishments through paper awards
- Organize and lead invited sessions at conferences
- Develop and run tutorial sessions and other special events, for example:
 Automotive and Transportation Systems: "Underrepresented Stories in Control..." Special Session at MECC 2021; 1 journal special issue in JDSMC, 2 journal special issues in IEEE-Veh Tech Magazine
- Engage with industry

Member engagement across ASME

- Robotics Technology Group
 - Robotics roadmapping workshop
- Member-at-large: Committee on Government Relations
- Robotics Public Policy Task Force (RPPTF)
- DSCD members involvement with ASME TEC Talks



Committees

DSCD ExComm



Xiaobo Tan Michigan State Univ. *Chair*



Jordan Berg NSF Past Chair



Jingang Yi Rutgers Univ. Vice Chair



Marcia O'Malley Rice Univ. Senior Member



Atul Kelkar Clemson Univ. Junior Member



Barbara Zlatnik ASME Rep.



Rajesh Rajamani Univ. of Minnesota Treasurer



Kam Leang Univ. of Utah Secretary

DSCD Committees

Standing Committees:
Executive Committee
Honors Committee
Advisory Committee
Nominating Committee
By-Laws Committee

Technical Committees:

Automotive and Transportation Systems (ATS)
Bio-Systems and HealthCare (BSHC)
Mechatronics
Robotics
Vibration & Control of Smart Structures (VCSS)

Vibration & Control of Smart Structures (VCSS) Energy Systems (ES)

Ad-Hoc Committees:

Conference Committee
Transaction on Mechatronics
Management Committee
Industrial Advisory Board

Other Positions:

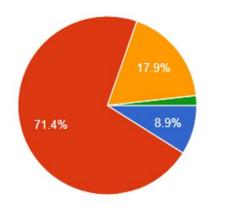
Systems and Design Group
Representative
AACC Director
JDSMC Editor
Chair of Conference Editorial Board
ACC Program Representative
Newsletter Editors
Student Travel Grant Coordinator
Webmasters
DSCD PodCast Series Producers

How effective are we as a division in serving our members?

Surveyed DSCD membership through DSCD email list: reached over 650 members; received 56 responses

1. What is your preference for holding the annual Fall General Division Meeting? Hold meeting at:

56 responses



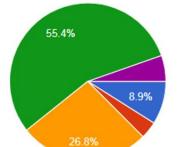
ASME International Mechanical
 Engineering Congress & Exposition
 (IMECE) conference

 Modeling, Estimation, and Control Conference (MECC)

Virtual (for example via Zoom)

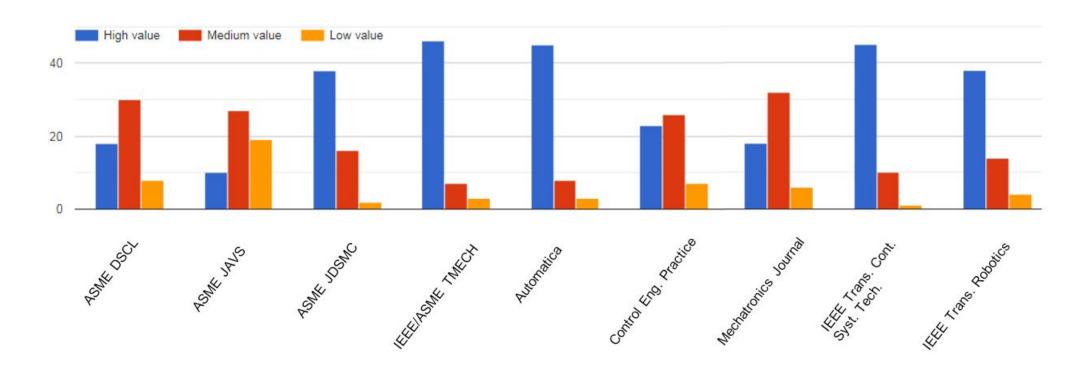
Other



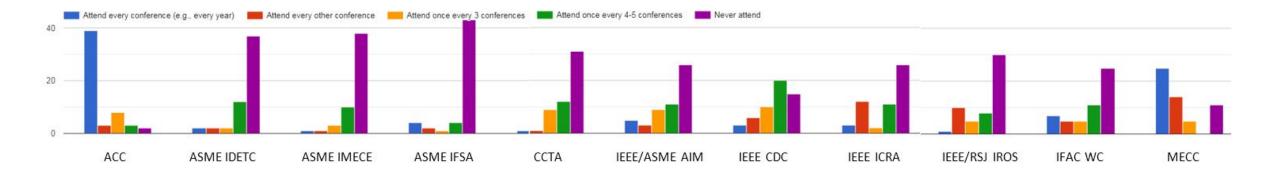


- ASME International Mechanical Engineering Congress & Exposition (IMECE) conference
- ASME International Design Engineering Technical Conferences (IDETC)
- American Control Conference (ACC)
- Modeling, Estimation, and Control Conference (MECC)
- Virtual (for example via Zoom)
- Other

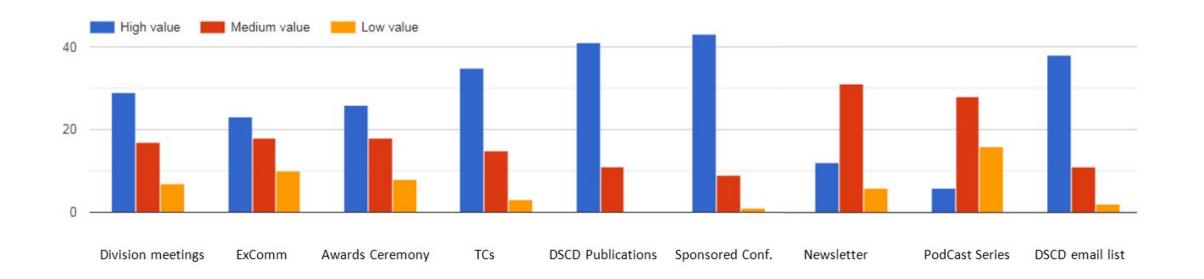
3. How do you value these journals?



4. How frequently do you attend the following conferences?



5. What value do the following ASME DSCD activities provide to you?



DSCD Financial Update

Rajesh Rajamani

University of Minnesota

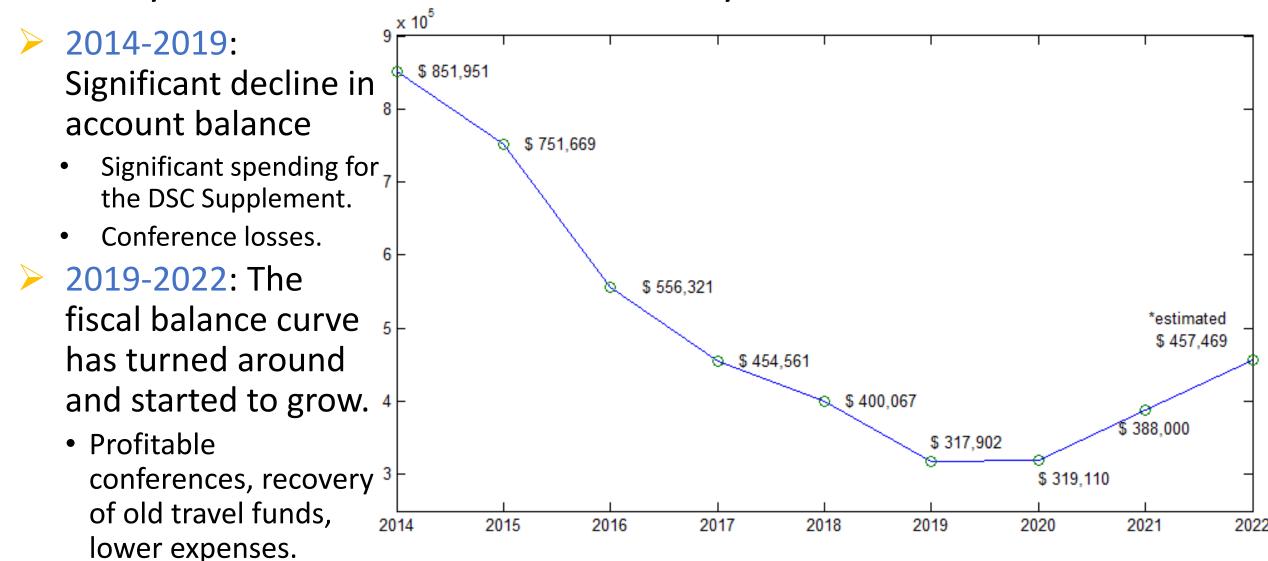
DSCD Treasurer

October 3, 2022

Division Meeting at the 2022 MECC

DSCD Segregated Account Summary

History of account balance over recent years



Current Fiscal Year Conference Revenue

 All conferences in FY22 were profitable and will contribute positive returns to DSCD.

2021 ACC

- > ASME Portion of ACC Surplus: \$77,991.58
- > Expenses for student registrations at ACC: \$1,025.00
- > Net surplus return to ASME: \$76,966.58

2021 MECC

- Net conference surplus: \$24,869.39
- Registrations by Society membership were not tracked in 2021.
- The portion of surplus that will be returned to ASME will be determined according to the Society registrations for the 2022 MECC.

2021 AIM

> ASME Portion of conference surplus: \$6,025.

Spending Plan for Fiscal 2023

Categories	Definition	FY 22	FY 23 (w/o TCs)	FY 23 (TCs)	Total
ASME Event Support	Registration, travel, lodging, food, etc	\$ 2,000	\$ 2,000		\$ 2,000
Face-to-Face Meetings	Leadership meetings, planning meetings, etc	\$ 5,950	\$ 5,000	\$ 2,700	\$ 7,700
Honors & Awards	Division and TCs	\$ 10,800	\$ 4,000	\$ 6,800	\$ 10,800
New Initiatives	New products, conferences, etc	\$ 2,450	\$ 0	\$ 1,500	\$ 1,500
Newsletter and Communications Activities	Publications, publicity, etc.	\$ 500	\$ 500		\$ 500
Programs and Philanthropy	ASME Foundation, STEM competitions, etc	\$ 0	\$ 0		\$ 0
Student and Early Career Activities	Collegiate council, student support, etc	\$ 12,000	\$ 19,400		\$ 19,400
Volunteer and Member Support	Non-ASME conference support	\$ 2,000	\$ 5,000		\$ 5,000
Total		\$ 35,700	\$ 35,900	\$ 11,000	\$ 46,900

- Major categories of spending: Student activities (\$19,400), TC budgets (\$11,000), cost of meetings at conferences (\$14,700) and honors & awards (\$4,000).
- Special student events for rejuvenating in-person participation.

202th DSC Division Meeting

ASME DSCD Technical Committees Report

Modeling, Estimation, and Control Conference (MECC) 2022, Jersey City, NJ

Monday, October 3, 2022. 7:30 pm – 9:30 pm

Atul Kelkar, Clemson University



Technical Committee Leadership

Technical Committee	Chair	Vice Chair
Automotive and Transportation Systems (ATS)	Mahdi Shahbakhti, University of Alberta	Yan Chen, Arizona State University
Bio-Systems and Health Care (BSHC)	Wenlong Zhang, Arizona State University	Amirhossein Ghasemi, University of North Carolina at Charlotte
Mechatronics	Sandipan Mishra, RPI	Kira Barton, University of Michigan
Robotics	Davide Piovesan, Gannon University	Biswanath Samanta, Georgia Southern University
Vibrations	Phanindra Tallapragada, Clemson University	Matteo Aureli, University of Nevada, Reno
Energy Systems (ES)	Scott Moura, University of California at Berkeley	Chris Vermillion, North Carolina State University
Model Identification and Intelligent Systems (MIIS)	Giscard Kfoury, Lawrence Tech	Tulga Ersal, University of Michigan

TC Meeting Schedule at MECC 2022

Room	Technical Committee				
America I & II	Robotics TC - on Tuesday, Oct 4, 2022, 8-9PM				
Liberty II	Mechatronics TC – on Wednesday, Oct 5, 2022, 11:30- 12:30PM				
Liberty III	Energy Systems TC – on Wednesday, Oct 5, 2022, 12:30- 1:30PM				
Liberty II	Vibrations – on Monday, Oct 3, 2022, 11:30-12:30PM				
Liberty III	Biosystems & Health Care – on Monday, Oct 3, 2022, 12:30-1:30PM				
America I & II	Automotive & Transportation - on Tuesday, Oct 4, 2022, 7-8PM				

Robotics Technical Committee

Initiatives

- MECC 2022 Invited session: Bioinspired Techniques for the Control and Assessment of Robotic Motion
- Assessment of Neuromuscular Fatigue from Muscle Synergies in Hand Poses By Avinash Baskaran has been chosen as the best paper award and will receive a \$500 monetary award from the Robotics TC.
- Frontiers collection titled "Wearable Robots and Sensorimotor Interfaces: Augmentation, Rehabilitation, Assistance or substitution of human sensorimotor function."

Leadership

- Davide Piovesan (Incumbent)
- Biswanath Samanta (Incoming Chair)
- Yan Gu (Incoming Vice Chair)
- Chad Rose (Secretary To be confirmed)

Mechatronics Technical Committee

Invited sessions activity:

- 1 invited session at ACC 2022 (Advanced Manufacturing)
- 3 submitted invited sessions to ACC 2023 (2 on advances in mechatronics, and 1 on soft robotics)
- 1 planned invited session on manufacturing at CCTA 2023
- Ellen Mazumdar (TC Secretary) organized "Rising Stars in Mechatronics" at MECC 2022.
- Best paper and best student paper in Mechatronics award have been finalized will be announced and presented at MECC 2022 TC meeting (Wednesday, 1130 am)
- Workshop on Mechatronics Education planned at AIM 2023
- New TC officer: Professor Vishesh Vikas (University of Alabama)

Automotive and Transportation Technical Committee

Initiatives

- 4 (MECC 2021), 4 (ACC 2022), 4 (MECC 2022), 5 (ACC 2023)
- Industry session titled "Industry Stories in Controls" @ MECC 2022; Contribute for planned student-centered event for ACC 2023
- Open track for IFAC World Congress for Al applications on Automotive Powertrain
- 1 (ACC 2022), 1 (MECC 2022)

Leadership

Chair: Mahdi Shahbakhti (Univ. of Alberta)

Vice Chair: Yan Chen (Arizona State)

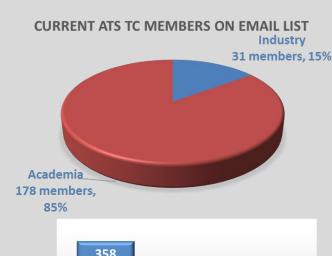
Recording Sec.: Carrie Hall (Illinois Inst. of Technology)

Session Org.: Pingen Chen (Tennessee Tech. Univ.)

Industry Liaison: Selina Pan (Waymo)

Student Liaisons: Joe Drallmeier (U. Michigan – Ann Arbor),

Mehmet Fatih Ozkan (Texas Tech. Univ.)





Energy Systems Technical Committee

Notable activities and accomplishments

- 7 invited sessions at ACC 2022
- Battery modeling and control workshop at ACC 2022
- Well-attended (60 students, 9 professionals) student networking event at ACC 2022
- 2 invited sessions at MECC 2022

Plans

- Initiating two working groups in the TC: (i) diversity, equity, and inclusion; (ii) young faculty/professional networking
- Planning a regular (monthly, bi-monthly, or quarterly) Zoom-based brown bag lunch-and-learn/beer summit for TC members
- Planning an energy-themed special issue for JDSMC
- Continuing to organize invited sessions at both ACC (9 submitted) and MECC

Vibrations Technical Committee

Activities

- One invited session at ACC 2022.
- One invited session at MECC 2022.
- Vibrations of Continuous Systems at IDETC 2022.
- An award for the best paper in Vibrations was also selected from the amongst the conference submissions.
- ASME/DSCD Rising Stars in Vibrations and Energy Systems Matteo Aureli (Vice Chair of TC) is organizing this.

Future Activities

- The TC plans to similarly hold invited sessions at ACC, MECC, IDETC and IEEE International Conference on Advanced Intelligent Mechatronics (AIM) in the 2022-2023 year.
- Membership The Vibrations TC has about 45 members.
 - Phanindra Tallapragada Chair
 - Matteo Aureili Vice Chair
 - Sichen Yuan Secretary
 - Zhenhua Tian Publicity Chair

Rising Stars Invited Sessions

Initiatives

- 27 senior students and postdocs were split into 5 sessions:
 - Robotics 6 talks in session
 - Mechatronics 5 talks in session
 - Biomedical Systems 6 talks in session
 - Automotive Systems 5 talks in session
 - Energy/Vibrations (talks for these two TCs have been combined into a single session) - 5 talks in session

Organizer

Ellen Mazumdar, Student and Young Members Chair

Note: Detailed list of talks titles and authors are in the report filed.

ASME/DSCD Rising Stars in Mechatronics

Session Chair: Doug Bristow

MoBT7 Special Session, Newport III,IV,&V

Monday 14:00-15:30

• Talk 1:

- Alejandro Astudillo (Postdoc) from KU Leuven in Belgium
- Title: Fast Model Predictive Control for Robotic Systems: Efficient Operations and Applications

• Talk 2:

- o Noah Kohls (Ph.D. Student) from Georgia Tech
- Title: Soft Electromagnetic Actuators with Liquid Metal Conductors and Compliant Permanent Magnets

• Talk 3:

- Uduak Inyang-Udoh (Postdoc) from Purdue
- Title: Physics-Guided Machine Learning (PGML) for Feedback Control in Additive Manufacturing (AM)

Talk 4:

- o Nancy Deaton (Ph.D. Student) from Georgia Tech
- Title: Towards Micro-scale and Meso-scale Robots with Integrated Shape sensing for Minimally Invasive Surgery

• Talk 5:

- o Karishma Patnaik (Ph.D. Student) from Arizona State University
- o Title: Passive Flexible Multirotors with Physical Interaction Capabilities

ASME/DSCD Rising Stars in Robotics

Session Chair: Minghui Zheng, Yi Mazumdar

TuBT5 Special Session, Liberty II

Tuesday 14:00-15:30

- Talk 1:
 - o Jared Miller (Ph.D. Student) from Northeastern
 - o Title: Bounding the Distance to Unsafe Sets with Convex Optimization
- Talk 2:
 - o Lasitha Weerakoon (Ph.D. Student) from the University of Maryland College Park
 - o Title: Swing up Control of a Soft Inverted Pendulum with a Revolute Base
- Talk 3:
 - Vipin Agarwal (Postdoc) from the University of Michigan
 - Title: Nonlinear Dynamics of a Kresling-pattern Origami under Harmonic Force Excitation
- Talk 4:
 - o Jiefeng Sun(Ph.D. Student) from Colorado State University
 - Title: Physics-Based Modeling of Twisted-and-Coiled Actuators for Programmable Soft Robots
- Talk 5:
 - Steffan Lloyd (Ph.D. Student) from Carleton University
 - o Title: Fast and Robust Inverse Kinematics of Serial Robots using Halley's Method
- Talk 6:
 - o Namrata Nayar (Ph.D. Student) from Georgia Tech
 - Title: Towards the Design, Modeling and Control of a Robotic Transcatheter used for Implant Delivery to treat Mitral Regurgitation

ASME/DSCD Rising Stars in Vibrations and Energy Systems

Session Chair: Matteo Aureli

TuCT5 Special Session, Newport III

Tuesday 16:00-17:30

- Talk 1:
 - o Jia Mi (Ph.D. Student) from Virginia Tech
 - Title: Ocean Wave Powered Reverse Osmosis Desalination
- Talk 2:
 - o Roghieh Abdollahi Biroon (Postdoc) from Clemson
 - o Title: Renewables Integration to the Power System and Frequency Regulation
- Talk 3:
 - o Heejin Kim (Ph.D. Student) from the University of Michigan
 - Title: Toward Intelligent Manufacturing Machines enabled by Dynamics and Control
- Talk 4:
 - o Drew Steeves (Ph.D. Student) from UC San Diego
 - Title: High-Performance Regulation with Robustness and Safety for Robotic,
 Vehicular and Beam Systems
- Talk 5:
 - o Aaron Kandel (Ph.D. Student) from UC Berkeley
 - Title: Distributionally Robust Surrogate Optimal Control for High-Dimensional Systems

ASME/DSCD Rising Stars in Biomedical Systems

Session Chair: Minghui Zheng, Yi Mazumdar

WeBT5 Special Session, Newport III

Wednesday 14:00-15:30

- Talk 1:
 - Qiang Zhang (Postdoc) from University of North Carolina
 - Title: Evaluation of a Fused Sonomyography and Electromyography-based Control on a Cable-Driven Ankle Exoskeleton
- Talk 2:
 - o Kevin Green (Ph.D. Student) from Oregon State
 - o Title: Learning as a Tool for Agile Bipedal Locomotion
- Talk 3:
 - Ahmed Ramadan (Postdoc) from University of Minnesota Twin Cities
 - o Title: Disentangling the human neural controller by system identification
- Talk 4:
 - o Ziming Liu (Ph.D. Student) from the University of Tennessee
 - o Title: Multi-modal Vision-Language Modeling for Dementia Diagnosis
- Talk 5:
 - o Fengpei Yuan (Ph.D. Student) from the University of Tennessee
 - Title: Cognitive Rehab for People with Dementia Based on Human-Robot Communication Modeling
- Talk 6:
 - o Waiman Meinhold (Postdoc) from Georgia Tech
 - Title: Neurological disease diagnosis and treatment via precise robotic intervention

ASME/DSCD Rising Stars in Automotive and Transportation Systems

Session Chair: Mahdi Shahbakhti, Yan Chen

WeBT7 Special Session, Newport V

Wednesday 14:00-15:30

- Talk 1:
 - Chen Tang (Ph.D. Student) from UC Berkeley
 - Title: Designing Explainable Autonomous Driving System for Trustworthy Interaction
- Talk 2:
 - o Mehmet Ozkan (Ph.D. Student) from Texas Tech
 - o Title: Socially Compatible Control Design of Automated Vehicle in Mixed Traffic
- Talk 3:
 - o Hamza Anwar (Ph.D. Student) from Ohio State
 - Title: Comprehensive Energy Footprint Benchmarking Framework for Electrified Commercial Vehicles
- Talk 4:
 - Shobhit Gupta (Ph.D. Student) from Ohio State
 - o Title: Energy-Efficiency Improvement of Connected and Automated Vehicles
- Talk 5:
 - o Jaskaran Singh Grover (Ph.D. Student) from Carnegie Mellon University
 - o Title: Learning and Control of Multiagent Systems Through Interactions

ASME Update

Prepared for the
Dynamic Systems and Control Division
for their
October 3, 2022
Executive Committee and General Division Meetings

Barbara Zlatnik, CAE
Senior Manager, TEC Operations
zlatnikb@asme.org



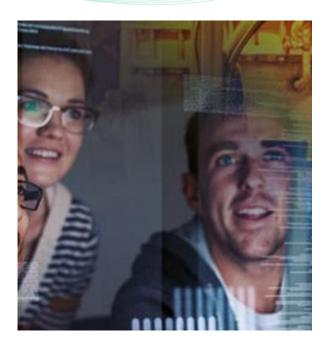
Manager, TEC Ops Role for DSCD

- » Serve as primary staff support for several divisions, including DSCD
- » Ensure volunteer leadership have the tools and resources they need
- » Support these groups administratively so volunteers focus on what they do best.
- » Assist groups on a strategic level
- » Long-term planning
- » Succession planning
- » Budgeting
- » Conferences Overall administration and future planning
- » Consultant and cheerleader for divisions



Technical & Engineering Communities Sector

The Technical and Engineering Communities (TEC) Sector oversees technical divisions and research committees to engage the extraordinary talents of our members' expertise for the advancement of engineering. ASME membership represents a uniquely powerful resource for planning, developing and delivering technical content for conference and events. Through these efforts, members grow and develop personally and professionally.



TEC Sector Senior Vice President: Bob Stakenbourghs

Staff Lead:
Angelique Vesey, Director, TEC
Operations



TEC Sector Structure

- » Divisions have direct-line reporting to the TEC Sector
- » Monthly Assembly of Division meetings with the TEC Sector leaders and staff provide an opportunity for the Division to receive updates and information as well as the ability to bring issues and ideas to the highest levels of the Society.
 - Assembly meetings foster collaboration among divisions as well as with the TEC Sector leadership



TEC Sector – Division Strategic Planning

- » Divisions are all working on a SWOT Analysis for their groups
- » These will be used at an all-day strategy session for divisions on October 30.



Technology Groups



The TEC Sector formed Technology Groups under the TEC Council to:

- Provide opportunities for engaging a network of high-level subject matter experts to form a think tank or solve a grand challenge
- Foster collaboration with Divisions, other Technology Groups, and ASME Sectors
- Identify white space that ASME can quickly enter into, develop and create a new product or service in a particular technology area of interest



Robotics Technology Group conducted a Successful Workshop at IDETC – work continues on a Roadmap



ASME Robotics



Roadmapping Workshop

Sunday, August 14, 2022
In conjunction with IDETC-CIE, St. Louis, MO
St. Louis Union Station Hotel
https://event.asme.org/IDETC-CIE

Help shape the Society's robotics strategy!



ASME Robotics Roadmap Robotics Technology Group

Goal

Create a Robotics Roadmap with a set of implantable recommendations for ASME, which will be published in a co-authored open-access ASME publication.

DSCD is represented on the Technology Group and this project by Manish Kumar. Manish is serving on a working group on Robot-Robot – human collaboration



<u>Get Involved</u> > <u>Technical Divisions</u> > <u>Technical Division Pages</u> > Dynamic Systems & Control Division

New Web Presence for

DSCD

https://www.asme.org/getinvolved/technicaldivisions/technical-divisionscommunity-pages/dynamicsystems-control-division

Subpages for TC's coming soon!

Dynamic Systems & Control Division

Dynamic Systems & Control Division (DSCD) evaluate, discuss, analyze and publish new technical results; stimulate research and education innovations; enhance research and education in dynamic systems and control; setting directions for the field.



About

News and Updates

DSCD Podcast Series

Events

Governance

Leadership

Honors & Awards

Honors & Awards Committee

Division Meetings

Publications

Technical Committees

About

The **Dynamic Systems and Control Division** provides a national and international forum to evaluate, discuss, analyze, and publish new technical results in the field; stimulate and encourage research and education innovations; enhance manpower in research and engineering education in dynamic systems and control; and lead in setting directions for the field in the future. It encompasses all aspects of the modeling, design, and control of physical systems involving forces, motions, the dynamics and control of mechanical, chemical, biological, and human-related systems, plus transportation, energy, robotics, manufacturing, processing, environmental, computational, and man-machine systems.

Dynamic Systems and Control is a fast growing and pervasive engineering field. There is rarely an engineering endeavor that does not involve the careful control, analysis, and/or synthesis of physical, dynamic systems. Be it fluids, thermodynamics, heat transfer, machine design, or materials engineering, systems and control contributions are essential.

The Dynamic Systems and Control Division (DSCD) is one of 36 technical divisions in the American Society of Mechanical Engineers (ASME). The mission of the Division is to provide a national and international forum to: evaluate, discuss, analyze, and publish new technical results in the field; stimulate and encourage research and education innovations; enhance manpower in research and engineering education in dynamic systems and control; and lead in setting directions for the field in the future.



TEC Talks Webinar Series



Very successful August webinar provided by DSCD!

Haptics: A Hot Topic with Controls at its Core

Sponsored by DSCD

Speaker: Marcia K. O'Malley, PhD.

Rice University

https://www.asme.org/membership/tec-talks

ASME Webinar Series – hosted by and highlights a different division each month

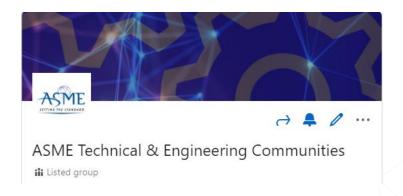
- » Hosted by ASME; it's a member benefit so it's free!
- » Highlights a different division each month
- » Divisions provide content, topic and speakers
- » Opportunity to introduce the Division to a wide audience
 - Registration has been between 200 and 600 people!



TEC Sector on LinkedIn

Join our Group

https://www.linkedin.com/groups/914902/





ASME Dynamic Systems and Control Division Podcast Series

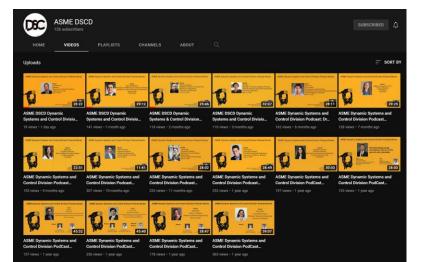
Update at DSCD General Meeting October 3rd, MECC 2022

Selina Pan, Bryan Maldonado, Hao Su, Yao Ma

ASME DSCD Podcast Series

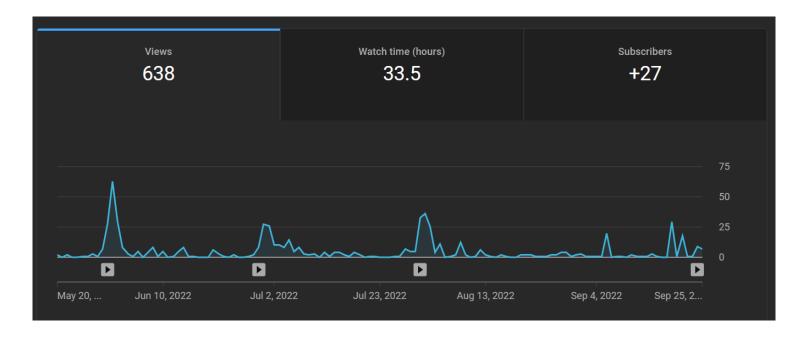
- ASME DSCD YouTube Channel:
 - https://www.youtube.com/channel/UCKZDGbU2OsXtBvX4d7iwYTA/videos
- ASME DSCD Website:
 - https://www.asme.org/get-involved/technical-divisions/technical-divisions-community-pages/dynamic-systems-control-division#dscd-podcast-series
- Total of 16 Episodes since 02/2021, 2.8k views, 183.5 hours, 126

channel subscribers



Channel Updates

- Since the last meeting (05/2022)
 - Four episodes released



Channel Updates

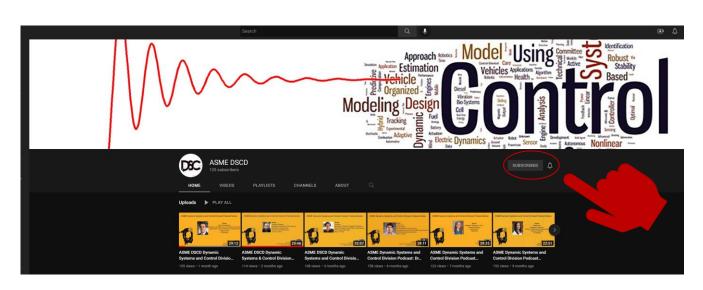
- Since the last meeting (05/2022)
 - 05/2022, Prof. Jing Sun, University of Michigan
 - https://youtu.be/87p-HrBUtDs
 - 06/2022, Prof. Santosh Devasia, University of Washington
 - https://youtu.be/BRBVq3tzSMI
 - 07/2022, Prof. Azim Eskandarian, Virginia Tech
 - https://youtu.be/1jWKvn4Z2R4
 - 09/2022, Prof. Lars Eriksson, Linköping University
 - https://youtu.be/EnB9SbO2dAs

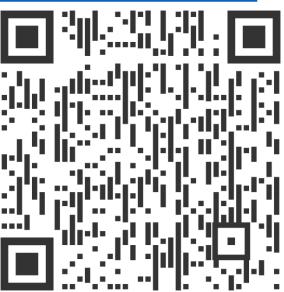


Upcoming Release

- Dr. Carrie Bobier-Tiu, Woven Planet
- Prof. Zhaojian Li, Michigan State University
 - Inviting guests!
- Subscribe Here:

https://www.youtube.com/channel/UCKZDGbU2OsXtBvX4d7iwYTA



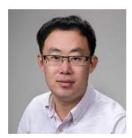


Podcast Team

- Hosts
 - Selina Pan, Waymo
 - Bryan Maldonado, ORNL
 - Hao Su, NCSU
 - Yao Ma, TTU
- YouTube Dissemination
 - Kam Leang, U of Utah
- Advisors
 - Xiaobo Tan, MSU
 - Jingang Yi, Rutgers















2023 AIM Update

http://www.aim2023.org/





Location and Date

- Seattle, June 28-30 (Wed-Fri), 2023
- Good time to visit Seattle
- No other major conferences at that time
 - American Control Conference 2023
 May 31, 2023 to Friday, June 2
 - CCTA 2023 Wed, August 16, 2023 –
 Fri, August 18, 2023

OPCOM















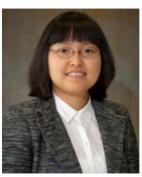


















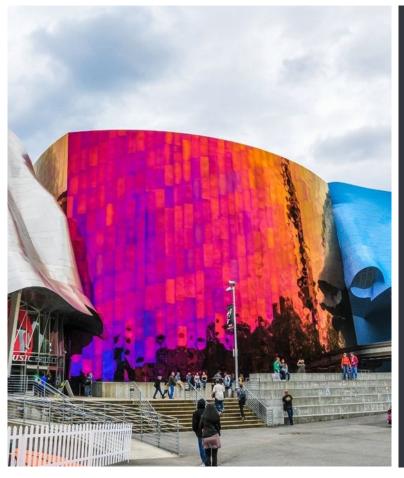




Lots of things to do







- Museums (Space Needle, Boeing Flight Museum, Art Museum, Experience Music Project, Chihuly Art Museum).
- Nature Nearby Olympic National Park (5.5 hr), Mount Rainier (3 hrs); Mt St. Helens Volcano (3.5hrs)





Cruises from Seattle

- Ranked No 1
 US West Coast departure ports
- Alaska, Hawaii,
 South America,
 Panama Canal





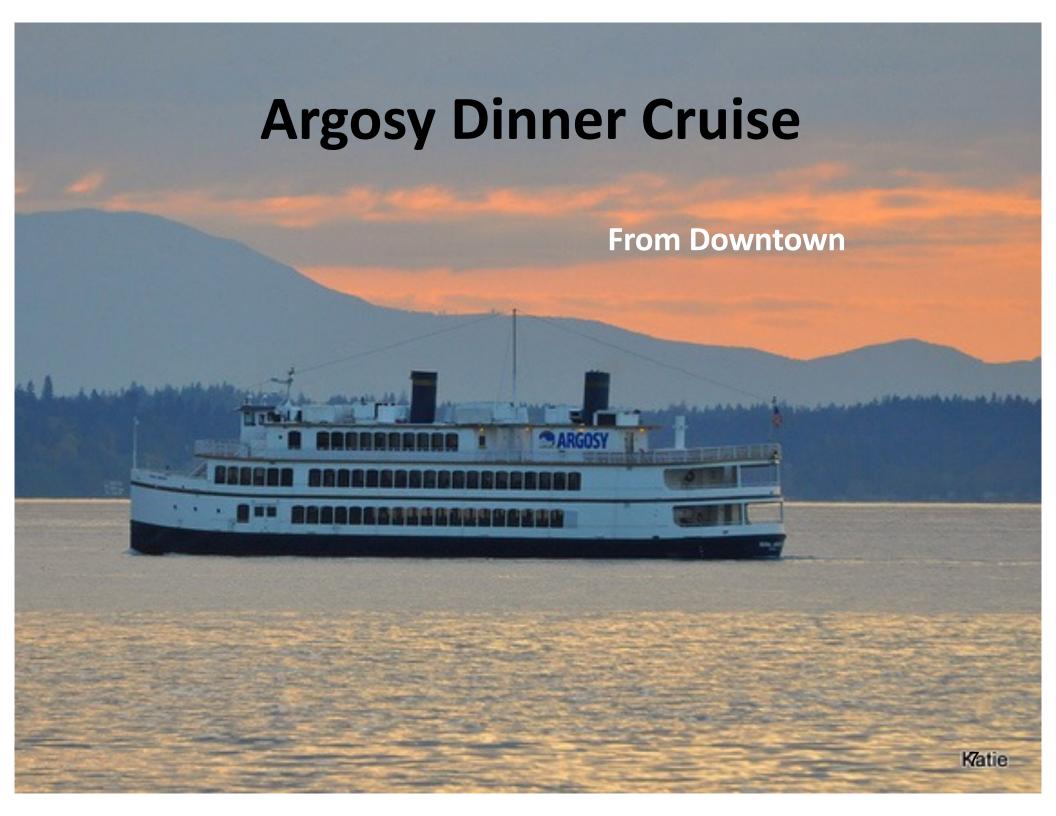
Seattle Seafood is Exceptional

- Dungeness Crab
- Oysters
- Salmon
- Clams/Mussels







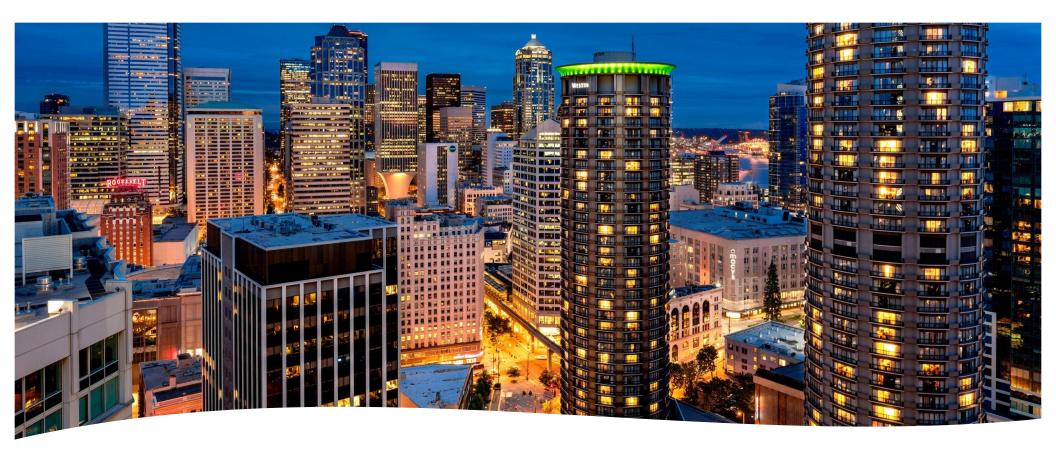


Technical Museums

- Boeing Museum of Flight (near downtown)
- Boeing Future of Flight (Tours of manufacturing facilities – about 45 minutes north)







Hotel

- The Westin Seattle, June 28-30 (Wed-Fri), 2023
- \$212 per night (Single/Double) typical Seattle downtown rates are 250+ per day at this time. Mainly due to cruise activities (which has come back strong)
- Complimentary Guest room high-speed WiFi/Internet

https://www.marriott.com/hotels/travel/seawi-the-westin-seattle/

Deadlines

- TMECH/AIM Focused Section Submissions: January 6, 2023
- Invited/Workshop/Special Session Proposals: January 27, 2023
- Contributed and Invited Papers and TMECH Presentation Only: February 1, 2023

Hope to see you in Seattle in 2023

\equiv

202th Division Meeting Dynamics Systems and Control Division, ASME International

MECC 2023 Status Report

Modeling, Estimation, and Control Conference (MECC) 2022, Jersey City, NJ

October 3, 2022

Atul Kelkar, General Chair, MECC 2023 Manish Kumar, Program Chair, MECC 2023



MECC 2023 Status Report

- MECC 2023 General Chair and Program Chair appointments approved by AACC Board of Directors in March 2022.
- In June AACC Steering Committee meeting three potential locations for MECC 2023 were approved for further consideration.
- Per IFAC's policy, MECC has to alternate between east and west coasts; MECC 2023 to be held west of TX/KS.
- After review of several proposals the location has been determined and will be announced during the banquet!
- The hotel contract negotiations are underway and will be finalized soon.
- Organizing committee is in-place except one or two positions

MECC 2023 Organizing Committee

General Chair	Atul Kelkar	Clemson University, USA
Program Chair	Manish Kumar	University of Cincinnati, USA
Finance Chair	Tuhin Das	University of Central Florida, USA
Registration Chair	Ren Juan	Iowa State University, USA
CEB Chair	Marcello Canova	The Ohio State University, USA
Invited and Special Sessions		
Chair	May-Win Thein	University of New Hampshire, USA
Workshop and Tutorials Chair	Kam Leang	University of Utah, USA
		Missouri University of Science and
Publications Chair	Douglas Bistrow	Technology, USA
Publicity Chair	Yue ('Sophie') Wang	Clemson University, USA
Student & Young Members Chair	Satadru Dey	Pennsylvania State University, USA
Local Arrangements Chair	Jun Zhang	University of Nevada, Reno, USA

MECC 2023 Committees

International Program Committee						
Chair	Jongeun Choi	Yonsei University, South Korea				
Co-Chair	Yildiray Yildiz	Bilkent University, Turkey				
Co-Chair	Ramkrishna Pasumarthy	Indian Institute of Technology, Madras, India				
Co-Chair	Ryozo Nagamune	The Univ. of British Columbia, CA				
Co-Chair	Toru Namerikawa	Keio University, Yokohama, Japan				

Steering Committee						
Member	Qingze Zou	Rutgers the State University of New Jersey, USA				
Member	Xu Chen	University of Washington, USA				
Member	Hosam Fathy	University of Maryland, USA				
Member	Junmin Wang	University of Texas, Austin, USA				

MECC 2023

- The Organizing Committee is inviting Division membership to:
 - Propose exciting technical sessions on multitude of interdisciplinary and emerging topics
 - Propose innovative sessions discussion panels, interactive, demonstrations, design competitions, tutorials, etc.
 - Encourage student and young members to participate
 - Suggest ideas to engage industry
 - Propose ways to foster participation from underrepresented groups
 - Propose special sessions on contemporary topics
 - Propose technical events that could be unique to MECC and not seen in other competing conferences

Let's make MECC 2023 the best attended conference!

Report on 2022 and 2023 American Control Conferences

Dynamic Systems and Control Division Meetings at MECC, Oct 3rd, 2022

Compiled by Minghui Zheng and Jun Zhang @ Sep 27, 2022

Paper Submissions	2022	2023
Accepted (submitted) papers / acceptance rate	840 (1332) / 64%	N/A ²
Accepted (submitted) papers / acceptance rate through ASME	52 (85) / 61%	N/A ²

Invited, Tutorial, and Special Sessions	2022	2023
Total number of invited / tutorial / special sessions	33 / 6 / 91	N/A ²
Total number of invited / tutorial / special sessions organized by ASME	13 / 0 / 11	N/A ²

¹ The numbers of invited, tutorial, and special sessions refer to the accepted session proposals, not the submitted ones.

² The statistics for ACC 2023 are not available yet as the paper and invited session proposal submission deadline is Oct 3rd. Data will be collected as soon as the submission is closed.

ASME LETTERS IN

DYNAMIC SYSTEMS AND CONTROL



Peter Meckl
Technical Editor, Letters-DSC
Presentation at 2022 MECC, Oct. 3, 2022

Current Published Issues

Issue	Number of	Number of
	Full Papers	Pages
Jan 2021	17	102
Apr 2021	12	81
July 2021	15	100
Oct 2021	14	95
2021 Totals	58	378
Jan 2022	10	64
Apr 2022	10	67
July 2022	10	70
Oct 2022*	5	30

^{*}Stats as of 9/28/2022

Review Statistics

Year	Total Number of	Total Number	Rejected	Total Number of Papers	Total Number of	Accepted
Submitted	Papers	Papers	Paper %	Withdrawn	Papers	Paper %
	Submitted	Rejected			Accepted	
2019	31	8	26%	0	23	74%
(DSCC)						
2019	10	4	40%	1	4	40%
(other)						
2019	41	12	29%	1	27	66%
(Total)						
2020	28	6	21%	0	22	79%
(DSCC)						
2020	50	28	56%	4	18	36%
(other)						
2020	78	34	44%	4	40	51%
(Total)						
2021	50	21	42%	7	22	44%
2022*	31	16	52%	1	9	29%

^{* 5 2022} papers still in progress as of 9/28/2022

Statistics for Time in Process

Year	No. of Papers	Assign to AE (days)	Time in Review (days)	AE Decision (days)	TE Decision (days)	TE Approval (days)	Submit to TE Decision (months)	Submit to TE Approval (months)	Submit to Publication (months)
2019	41	18	44	19	23	8	3.568	4.142	5.060
2020	78	26	56	9)	8	9	3.187	5.224	8.769
2021	50	16	89	9	12	4	3.136	5.423	9.597
2022*	31	8	41	6	4	2	1.979	2.748	5.417

^{*}Stats as of 9/28/2022

Editorial Board

Garrett M. Clayton

Levi D. DeVries

Murat Inalpolat

Kam K. Leang

Alexander Leonessa

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Yen-Chen Liu

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Javad Mohammadpour Velni

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Peiman Naseradinmousavi

Diane Peters

Biswanath Samanta

Reza Tafreshi

Qian Wang

Zhen Zhang

Guoming (George) Zhu

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United States Naval Academy, USA

UMass Lowell, USA

The University of Utah, USA

Virginia Tech., USA

General Motors Global R&D, USA

National Cheng Kung University (NCKU), Taiwan

University of Cyprus, Cyprus

University of Georgia, USA

IIT Palakkad, India

San Diego State University, USA

Kettering University, USA

Georgia Southern University, USA

Texas A&M University at Qatar, Qatar

The Pennsylvania State University, USA

Tsinghua University, China

Michigan State University, USA

Concerns

- It's still taking longer to process papers than I'd like. I will keep working on this.
- 2. I still need to attract more unsolicited papers to the Letters. I've advertised the Letters in the DSCD newsletters but need to do more to encourage authors to submit to the Letters.
- 3. I could still use more diverse AEs, i.e., more women, more geographic diversity, and better coverage of technical areas.
- 4. My secretary resigned so I need to find a new assistant.

Future Plans

- 1. Feature papers from IMECE in Oct 2022 issue.
- 2. Work with AIM and MECC organizers to invite papers from those conferences.
- 3. Solicit papers for the Letters, e.g., review papers.
- 4. Identify authors in emerging areas to submit papers. See next slide to submit special issue proposals.
- 5. Work with AEs to identify more women, more international candidates, and more industry members for the Editorial Board.
- 6. Identify additional AE candidates to better cover emerging technical areas.

Proposal for Focused Special Topic Section

- Special Topic Section Title
- Organizer names for Special Topic Section
- Description of Special Topic Area
- Potential Authors (roughly 6) for Special Topic Section
- Please send to me at meckl@purdue.edu

SWOT Analysis of ASME Dynamic Systems and Control Division

	Helpful	Harmful
Intern al	 Strengths: Interdisciplinary and systems perspective/thinking, allowing the community to address diverse sets of problems/applications Integrating theory with applications, making us unique compared to some competing groups Healthy technical publications Active technical committees Members engage in mentoring/developing next leaders of the division Thriving interactions with other professional societies 	 Weaknesses: Diversity of members and officers (gender, underrepresented minorities) Interaction with industry Engagement of members who usually don't attend division cosponsored meetings/conferences Relatively low impact factor for some journals and inadequate journal management system Mixed levels of engagement from Technical Committees (TCs) We don't take full advantage of opportunities to promote division activities
Extern al	 Opportunities: The increasing consensus on the importance of DEI values Tools for virtual and hybrid meetings, allowing us to broaden the reach Opportunities for reaching out through social media (Youtube, twitter,) Increased partnerships with other professional organizations and societies in areas where we have overlap 	 Threats: The general lack of diversity in the engineering fields Lots of competing conferences and journals Unclear value proposition in a highly competitive environment Declining DSCD membership Inflexibility of operations hinders recruitment and retention of volunteers and members

Updates on the DSCD Newsletter

Huazhen Fang Shuxia Tang Changliu Liu



Cover Note

D------

Hope you are enjoying the summer. We are pleased to share with you the new issue of ASME DSCD Newsletter. This is the first issue handled by the new editor team. Our aim is to make the Newsletter a people-centered platform to connect and sever all DSCD colleagues and YOU. Through the Newsletter, we want to offer a channel for constructive communication between DSCD and everyone, inform the community of significant news, cheer achievements of our people, introduce new colleagues, and promote sharing of career experiences and opportunities.

In this issue, Prof. Jordan Berg, the outgoing chair of DSCD, phares a netrospective while reflecting on the challeges and opportunities. Prof. Kam Leany as DSCD's scretary reports the personnel changes in the DSCD ExComm, introducing the outcoming and incoming members. Our delight these goes to screent horors and awards seared by a contract of the contract of the

Editor: Huazhen Fang, University of Kansas Senior Associate Editor: Shuxia Tang, Texas Tech University Associate Editor: Changliu Liu, Carnegie Mellon University Outgoing Chair Message
Page 2

DSCD ExComm Updates
Page 3

Honors, Awards & Speeches
Page 3

New Faces Spotlight
Page 6

Interview with Recent
NSF CAREER Awardees
Page 7

Journals & Conferences
Page 33

Overview of the Summer 2022 Issue

- Initial announcement in late March
- Second and third call in early May and June
- Received 27 messages in total
- Released in early July
- Goal: Make the Newsletter a people-centered platform to connect and serve all DSCD colleagues
 - Set up new columns
 - Highlight new faces and achievements
 - Share experiences by early-career faculty
 - Reach out to colleagues to solicit contributions

Highlights of the Summer 2022 Issue

- Outgoing chair retrospective, contributed by Dr. Jordan Berg
- ExComm updates, contributed by Dr. Kam K. Leang
- Announcement of awards for Drs. Masayoshi Tomizuka, Galip Ulsoy, Miroslav Krstic and Bryan Maldonado
- New faces spotlight: Drs. Satadru Dey, Tianyi He, Yao Ma, Bryan Maldonado, Xi Yu and Dong Zhang













More Highlights of the Summer 2022 Issue

• Interviews with recent NSF CAREER awardees: Mehmet Kurt, Zhaojian Li, Xinfan Lin, Changliu Liu, Aimy Wissa, Ye Zhao and Minghui Zheng

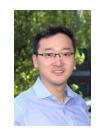














- Call for Papers of ASME Letters in Dynamic Systems and Control
- Upcoming conferences, including MECC 2022, ACC 2023, AIM 2023, CCTA 2023
- Multiple PhD and faculty openings

Thanks to all contributors, for your time and effort!

What's Next?

• Do better to make the Newsletter a people-centered platform.

New call to be announced soon.

- Tentative new columns in the next issue open to discussion/approval
 - Announcement of new ASME Fellows in the DSCD community
 - Updates/meeting reports from the TCs of DSCD
 - Any more ideas?

You Can Help Us to Make the Newsletter Better.

• Never hesitate to send us your messages.



• Your submission, our passion!

• "Hesitate" to say no if we solicit your contribution.



• Encourage your friends, students and postdocs to reach out to us and share their achievements.

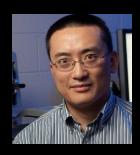
• Send us your suggestions.



2022 2nd Modeling, Estimation and Control Conference (MECC 2022) Report

Qingze Zou, General Chair Xu Chen, Program Chair

MECC 2022 Organizing Committee



General Chair Qingze Zou Rutgers Univ.



Program Chair Xu Chen Univ. of Washington



Local Arrangement Chair Cong Wang New Jersey Institute of Technology



Registration Chair Douglas Bristow Missouri Univ. of Sci. Tech.



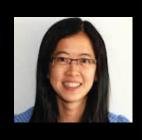
Finance Chair Tuhin Das Univ. of Central Florida



Publications Chair Chinedum Okwudire Univ. of Michigan



International Chair-Europe Tom Oomen Einhoven Univ. of Tech.



International Chair-Australia & Pacific Yuen Guan Yong Univ. of Newcastle



Editorial Board Chair Qian Wang Pennsylvania State Univ.



Students & Young Members Chair Ellen Yi Chen Mazumdar Georgia Tech



Publicity Chair Mannish Kuma Univ. of Toledo



Invited Sessions Chair Yaoyu Li Univ. of Texas-Dallas



Industrial/Exhibit Chair Kenn Oldham Univ. of Michigan



Workshops & Tutorials Chair Zongxuan Sun Univ. of Minnesota



International Chair-Asia Qingsong Xu Univ. of Marcau



International Chair-America Soo Jeon Univ. of Waterloo

MECC 2022 Submission Status

- Total number of full paper submissions/accepted: 129 vs. 138
- Abstract only submissions: 49.
- Poster submissions: 17.
- Tutorials: 2.
- Program overview: 8 invited sessions, 16 contributed sessions, 12 special sessions,
 2 tutorial sessions, one rapid-fire poster presentation session, and poster presentations on each day of the conference

MECC 2022 Registration Status

Total number of registrations: 236

Registration categories

o **Regular: 133**

Student: 103

Registrations from:

BelgiumSouth Korea

CanadaSweden

ChinaTurkey

ColumbiaUnited Kingdom

JapanUnited States

Netherlands
 Vietnam

MECC 2022 Students Activities (Ellen Mazumdar)

- Best Student Papers Competition: 18 applicants, top 6 chosen as finalists/
- ASME DSCD Rising Stars Invited Talks: 29 accepted
 - Split into 5 invited sessions: Robotics, Automotive, Vibrations & Energy, Mechatronics, and Bio
- Careers in Academia Panel: Confirmed 4 speakers
 - Invited: Juan Ren (Iowa State), Kaiyan Yu (Binghamton), Ram Vasudevan (U. Michigan)
 Yuncheng Du (Clarkson)
- Student Travel Grants: **73** applicants

MECC 2022 Special Sessions

- Two Agency sessions
 - Session 1: In-Person (Monday October 3, 14:00-15:30, Liberty I)
 - NSF CMMI Program Directors: Dr. Yueyue Fan, Dr. Harry Dankowicz and Dr. Jordan Berg
 - Session 2: Remote (Tuesday October 4, 14:0015:30, link provided in program book)
 - Dynamical Systems and Control Theory program at Air Force Office of Scientific Research (AFOSR): Dr.
 Frederick Leve
 - NSF Robust Intelligence Program, Division of Information and Intelligent Systems: Dr. Juan Wachs
- Two Tutorial sessions
 - Tutorial: Control and Testing of Connected and Automated Vehicles
 - Tutorial: Modeling, Estimation, and Control for Single Molecule Investigation

MECC 2022 Sponsorship

Sponsors:

• **Gold**: Siemens

• Silver: Rutgers University Mechanical and Aerospace Engineering

• **Silver**: University of Washington Engineering

• **Bronze**: Processes (journal)

 Future Planning: Sponsorship rates maintained at Covid levels (half of previous DSCC rates) to help attract sponsors, as no sponsors for conference in 2021. Still little interest by industry in on-site exhibitions, butt organizers should consider increasing rates.

Journal of Autonomous Vehicles and Systems

ASME Transactions Journal

Vladimir Vantsevich, Editor-in-Chief and Lauren Murrah, Assistant to Editor-in-Chief

ASME Dynamic Systems and Control Division Executive Committee Meeting ASME Dynamic Systems and Control Division General Committee Meeting October 3, 2022



(28) Associate Editors by Area

	Ground	Ground	Air & Space	Water
1	Canova, Marcello	Richter, Lutz	Azimov, Dilmurat	Jiang, Zhong-Ping (also Ground/Air & Space)
2	Carbone, Giuseppe	Sandu, Corina	Chen, Wen-Hua (also Ground)	McCue-Weil, Leigh
3	Ceccarelli, Marco	Wang, Junmin	Cowlagi, Raghvendra (also Ground)	Tallapragada, Phanindra
4	Duprey, Benjamin	Wang, Hai	Demkiv, Lyubomyr (also Ground)	
5	Gorsich, David J.		Hermann, Jeffrey	
6	Gray, Jeremy P.		Kumar, Manish	
7	Hu, Xiaosong		Nersesov, Sergey	
8	Jayakumar, Paramsothy		Van der Auweraer, Herman (also Ground)	
9	Khoshnoud, Farbod		Wang, Yue (also Ground)	
10	Larochelle, Pierre			
11	Lu, Jianbo			
12	Pandey, Gaurav			

(28) Associate Editors by Region/Country

	•	,	
	US	US	International
1	Azimov, Dilmurat	Lu, Jianbo	Carbone, Giuseppe (Italy)
2	Canova, Marcello	McCue-Weil, Leigh	Ceccarelli, Marco (Italy)
3	Cowlagi, Raghvendra V	Nersesov, Sergey	Chen, Wen-Hua (UK)
4	Duprey, Benjamin	Pandey, Gaurav	Demkiv, Lyubomyr (Ukraine)
5	Gorsich, David J.	Sandu, Corina	Hu, Xiaosong (China)
6	Gray, Jeremy P.	Tallapragada, Phanindra	Richter, Lutz (Germany)
7	Hermann, Jeffrey	Wang, Junmin	Van der Auweraer, Herman (Belgium)
8	Jayakumar, Paramsothy	Wang, Yue	Wang, Hai (Australia)
9	Jiang, Zhong-Ping	Associate Editors by Region	
10	Khoshnoud, Farbod		
11	Kumar, Manish		

26%

74%

International

USA



Larochelle, Pierre

(28) Associate Editors by Field

	Academia	Academia	Government/Military	Industry
1	Azimov, Dilmurat	McCue-Weil, Leigh	Gorsich, David J.	Demkiv, Lyubomyr
2	Canova, Marcello	Nersesov, Sergey	Jayakumar, Paramsothy	Duprey, Benjamin
3	Carbone, Giuseppe	Sandu, Corina		Gray, Jeremy P.
4	Ceccarelli, Marco	Tallapragada, Phanindra		Lu, Jianbo
5	Chen, Wen-Hua	Wang, Hai		Pandey, Gaurav
6	Cowlagi, Raghvendra V	Wang, Junmin		Richter, Lutz
7	Hermann, Jeffrey	Wang, Yue		Van der Auweraer, Herman
8	Hu, Xiaosong	Associate Edi	itors by Field	
9	Jiang, Zhong-Ping	Associate Eu	itors by Field	
10	Khoshnoud, Farbod			
11	Kumar, Manish	25%	■ Academia ■ Govt/Military	
12	Larochelle, Pierre	7%		



Advisory Committee

- Azim Eskandarian, D.Sc., ASME Fellow: Department Head and the Nicholas and Rebecca Des Champs Professor of Mechanical Engineering; Mechanical Engineering Department, Virginia Tech, VA
- David J. Gorsich, Ph.D.: Chief Scientist, U.S. Army Ground Vehicle Systems Center (GVSC), Warren, MI
- Madhu Raghavan, Ph.D.: Group Manager, Propulsion System Architecture; General Motors Research and Development, Warren, MI



Journal Metrics

Papers Submitted: 136

• Under Review: 6 (4.41%)

• Accepted: 40 (29.41%) – increased from 27%

Rejected: 64 (47.06%) – no change from 47%

• Removed: 12 (8.82%)

• Withdrawn: 14 (10.29%)

Countries Represented: 21 – 4 new countries

• Algeria, Brazil, China, Croatia, Egypt, France, India, Iran, Israel, Italy, Japan, Lebanon, Mexico, Morocco, Saudi Arabia, Spain, Taiwan, Tunisia, Uganda, United Kingdom, United States

• Time in Process:

Average Time from Submission to Technical Editor Decision:

• 2020: 3.590 months

2021: 3.293 months

• 2022: 2.771 months (as of 9/26/2022)

Average Time from Submission to Publication:

2020: 11.892 months*

• 2021: 9.460 months

• 2022: 5.375 months (as of 9/26/2022)



Presentations to the ASME Divisions

- JAVS Technical Editor Presentation to the Executive Committee of the Dynamic Systems and Control Division and to the Division: 2020, 2021, 2022
- JAVS Technical Editor Report for (July 2021 July 2022) submitted to the Executive Committee of the Division of Engineering Design



Advisory Committee Meeting Associate Editor Meeting

Plan of Action

- Update Journal Keywords Done
- Update the JAVS flyer Done
- Research conference sponsorship opportunities Working with ASME Publishing
- Invite published authors to become reviewers Developed an invite system
- Continue to focus on growing the underwater autonomous vehicles section of authors, reviewers, and associate editors – Continuously working on this item
- Promote JAVS at conferences, meetings, and other events as well as among colleagues in academia, government, and industry Continuously working on this item
- Scout and add qualified reviewers to the reviewer database Continuously working on this item



Special Issues

Propose, contribute to, and serve as guest editor for special issues

- ✓ Special Issue on Modeling and Simulation of Autonomous Ground Vehicles 2022 (published)
- ✓ Special Issue on Quantum Engineering for Autonomous Vehicles 2023 (in progress)
- ✓ Special Issue on Advanced Vehicle Technologies 2023 (in discussion)
- ✓ Deep Learning Assisted Computer Vision in Autonomous Unmanned Aerial Vehicles 2023 (in discussion)
- ✓ ACC 2023: Papers from Automotive and Transportation Systems Invited Sessions 2024 (in discussion)



Advisory Committee Meeting Associate Editor Meeting

Plan of Action

Targets for 2nd Year of Operation: 73 days from submission to final decision

Duration	Task		
Within 5 days	Editor assigns the manuscript to an AE or		
	rejects the manuscript.		
Within 5 days	AE assigns the manuscript to reviewers.		
Within 35 days	Reviews completed.		
Within 3 days	AE submits recommendation.		
Within 15 days	Authors are requested to submit revisions		
	with a reasonable turnaround. Fifteen days		
	is recommended.		
Within 5 days	The AE handles the second revision.		
Within 5 days	Final decision made by Editor.		



Time in Process: 2020 – 2022

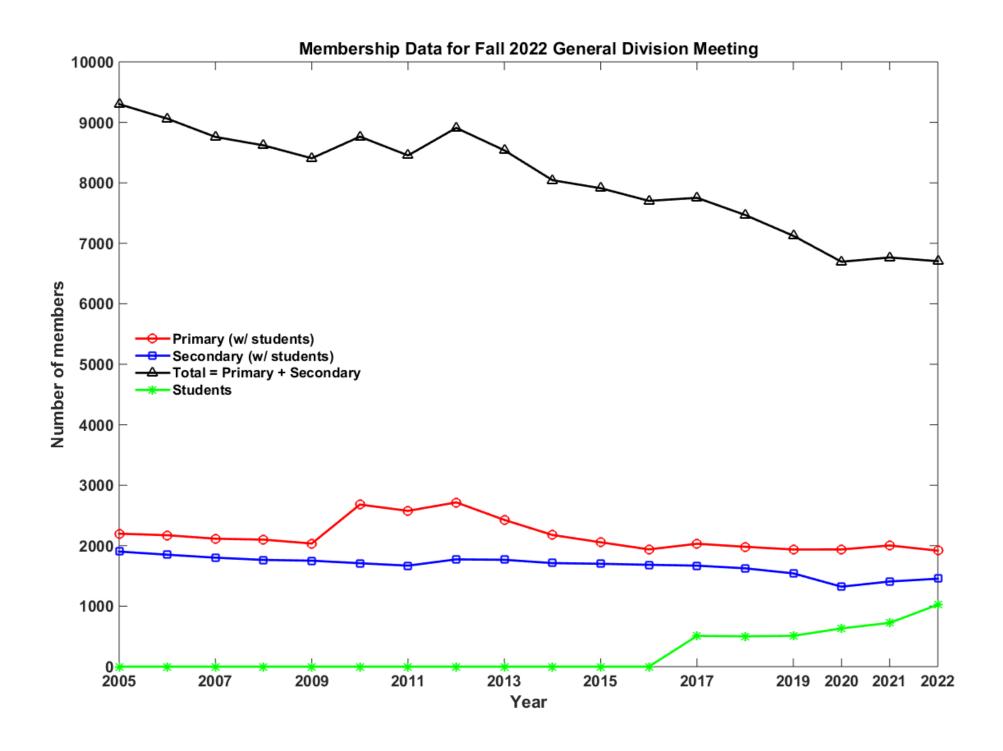
The time in process has steadily decreased from 2020 to 2022 and we are within range of our 73-day goal for the remainder of 2022.

Task	Target Duration	2020	2021	2022
Submission to AE assignment.	Within 5 days	15 days	7 days	7 days
Time in review.	Within 35 days	94 days	81 days	66 days
AE submits recommendation.	Within 3 days	26 days	16 days	10 days
Final decision made by Editor.	Within 5 days	11 days	5 days	3 day
Total Time in Process	Within 73 days	146 days	114 days	86 days

THANK YOU

Vladimir Vantsevich vvantsevich@wpi.edu





ASME DSCD Webmaster - Job Description

With the phase-out of the current ASME Communities webpages, the webmaster is no longer responsible for making the actual changes to the website for the division; those changes will be made by HQ. Therefore, the webmaster's job description will not include actual website updates, and detailed knowledge of websites and their editing is not required. The most important characteristic of the webmaster will be communication skills.

Specifically, the webmaster should:

- Check with the appropriate people in the division regularly to determine what revisions need to be made. A calendar has been put together, and can be maintained and updated each year. (Note that some changes will be regular, such as updating the awards yearly, but others will be infrequent or as-needed, such as updating information on the division's journals.)
- Provide HQ with clear information on what needs to be added, removed, or altered on the website, in sufficient detail that they can find the relevant page and make the changes.
- Verify that the changes have been made as intended, and check any links to ensure that they function properly.
- Update division leadership on any relevant information that they may need to have on the website and/or on the ASME HQ procedures for making changes.

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SANTA BARBARA • SANTA CRUZ

Professor Roberto Horowitz James Fife Endowed Chair Department of Mechanical Engineering University of California Berkeley, CA 94720-1742 Office Phone: (510) 642-4675 Mobile: (510) 734-3027 Email: horowitz@berkeley.edu https://me.berkeley.edu/people/roberto-horowitz/

September 25, 2022

To: Kam K. Leang, DSCD Secretary

(kam.k.leang@utah.edu, dscd.exec@gmail.com)

From: Roberto Horowitz, horowitz@berkeley.edu

Chair, ASME DSCD Honor and Awards Committee

Re: DSCD Honors and Awards Committee Report

The DSCD Honors and Awards Committee is integrated by:

Roberto Horowitz, Chair Kim Stelson, Vice-chair George Chiu Neville Hogan Huei Peng Tsu-Chin Tsao Rama Yedayalli

- 1) The committee solicited nominees, and selected the recipients for the following awards:
 - ASME Rufus Oldenburger Medal
 - Henry M. Paynter Outstanding Investigator Award
 - Charles Stark Draper Innovative Practice Award
 - Michael J. Rabins Leadership Award
- 2) The committee requested a list of nominees for the Kalman Best Paper Award from Ranjan Mukherjee, Editor of the ASME Journal of Dynamic Systems, Measurement and Control, who sent us 20 nominees. The committee, with the help of additional reviewers, selected a recipient for the award using the 2-phase review process that was approved last year.
- 3) The committee worked with
 - Fran McKivor, Administrator, Honors & Fellows
 - Barbara Zlatnik, Sr. Manager, DM&M Segment Operations

- Xiaobo Tan, Kam Leung and the other members of the DSCD ExCom
- Quingze Zou, Xu Chen, respectively the chair and program chair of the 2022 MECC

in preparing the Award Certificates, Checks, etc. and in setting up the Awards Ceremony, which will take place October 4th, 2022, 11:35 am - 1:50 pm at the 2022 Modeling, Estimation and Control Conference at the Westin Hotel at Jersey City Newport.

The Honors and Awards Committee wishes to gratefully acknowledge **Atul Kelkar**, **Miroslav Krstic**, **Robert G. Landers**, **Ken Oldham**, **Asok Ray**, **and Qian Wang** for their valuable help during the review process of some of the awards.

Below is the list of this year's awards recipients:

1) ASME Rufus Oldenburger Medal:

Wayne Book
HUSCO/Ramirez Professor (emeritus)
George W. Woodruff School of Mechanical Engineering
Georgia Institute of Technology
wayne.book@me.gatech.edu

2) Division Awardees

2.1 Henry M. Paynter Outstanding Investigator Award

Dawn M. Tilbury
Professor and Ronald D. and Regina C. McNeil Department Chair of Robotics
University of Michigan at Ann-Arbor
tilbury@umich.edu

2.2 Charles Stark Draper Innovative Practice Award

Rajesh Rajamani Benjamin Y.H. Liu / TSI Applied Technology Chair, Mechanical Engineering University of Minnesota rajamani@umn.edu

2.3 Michael J. Rabins Leadership Award

Nader Jalili
Professor and Head,
Department of Mechanical Engineering
The University of Alabama
njalili@eng.ua.edu

3 Rudolf Kalman Best Paper Award

The Winners of the 2022 Rudolf Kalman Best Paper Award are:

Randall T. Fawcett, Abhishek Pandala, Jeeseop Kim and Kaveh Akbari Hamed, Department of Mechanical Engineering Virginia Tech, Blacksburg, VA 24061 kavehakbarihamed@vt.edu

for their paper:

"Real-Time Planning and Nonlinear Control for Quadrupedal Locomotion with Articulated Tails," by Randall T. Fawcett, Abhishek Pandala, Jeeseop Kim and Kaveh Akbari Hamed, Mechanical Engineering Virginia Tech, Blacksburg, VA 24061. Paper DS-20-1377 of the ASME Journal of Dynamic Systems, Measurements and Control. Published in July 2021, 143(7).

4 Nyquist Lecturer

The 2022 Nyquist Lecturer is

Reza Moheimani
Professor and James Von Ehr Distinguished Chair
Department of Systems Engineering
The University of Texas at Dallas
Richardson, TX 75080
Reza.Moheimani@utdallas.edu

All awardees have been notified and will attend the awards ceremony.