

203<sup>rd</sup> Division Meeting **ASME International Dynamic Systems and Control Division** American Control Conference 2023, San Diego, CA Contacting the Division: <u>dscd.exec@gmail.com</u>

Date and Time:Wednesday May 31, 2023, at 7:00 pm – 9:30 pm (PT)<br/>Light refreshments will be served between 6:30-7:00 pmIn-person Location:Aqua Salon EF at the Hilton San Diego Bayfront HotelVirtual meeting option via Zoom:

Topic: ASME DSCD General Division meeting at	Join by SIP
ACC 2023	91833845255@zoomcrc.com
Time: May 31, 2023 7:00 PM Pacific Time (US	
and Canada)	Join by H.323
	162.255.37.11 (US West)
Join Zoom Meeting	162.255.36.11 (US East)
https://utah.zoom.us/j/91833845255	115.114.131.7 (India Mumbai)
	115.114.115.7 (India Hyderabad)
Meeting ID: 918 3384 5255	213.19.144.110 (Amsterdam Netherlands)
Passcode: ACC2023	213.244.140.110 (Germany)
One tap mobile	103.122.166.55 (Australia Sydney)
+12532158782,,91833845255# US (Tacoma)	103.122.167.55 (Australia Melbourne)
+13462487799,,91833845255# US (Houston)	64.211.144.160 (Brazil)
	69.174.57.160 (Canada Toronto)
Dial by your location	65.39.152.160 (Canada Vancouver)
+1 253 215 8782 US (Tacoma)	207.226.132.110 (Japan Tokyo)
+1 346 248 7799 US (Houston)	149.137.24.110 (Japan Osaka)
+1 669 444 9171 US	Meeting ID: 918 3384 5255
+1 669 900 6833 US (San Jose)	Passcode: 4449727
+1 312 626 6799 US (Chicago)	
+1 646 876 9923 US (New York)	Join by Skype for Business
+1 301 715 8592 US (Washington DC)	https://utah.zoom.us/skype/91833845255
Meeting ID: 918 3384 5255	
Find your local number:	
https://utah.zoom.us/u/adAe76TMmY	

### AGENDA

7:00 pm	1. Chair's welcoming remarks	air's welcoming remarks Xiaobo Tan		
7:02 pm	2. Approval of minutes	Kam Leang		
7:05 pm	<ul> <li>3. Announcements</li> <li>3.1 New DSCD ExComm and Committee Members</li> <li>3.2 NSF updates</li> <li>3.3 IFAC Mechatronics Journal</li> <li>3.4. Soichiro Honda Medal</li> </ul>	Jordan Berg Eduardo Misawa T.C. Tsao Masayoshi Tomizuka/ Xiaobo Tan		
7:40 pm	<ul> <li>4. DSCD Community</li> <li>4.1 80<sup>th</sup> DSCD Celebration at MECC 2023</li> <li>4.2 ASME-AACC Joint Submission MOU update</li> <li>4.3 Call for input from student community</li> </ul>	Atul Kelkar/Jingang Yi Xiaobo Tan/ Jingang Yi/ Jordan Berg Xiaobo Tan		
8:00-8:05	Break			
8:05 pm	5. Select Division updates/activities (rapid 5-mins/each updates, for more info see attached detailed reports)			
	5.1 Newsletter report	Changliu Liu/ Shu-Xia Tang/ Minghui Zhang		
	5.2 Treasurer's report	Rajesh Rajamani		
	5.3 Technical Committee report	Atul Kelkar		
	5.4 ASME updates	Barbara Zlatnik		
	5.5 2023 ACC report	Jun Zhang/ Wenlong Zhang		
	5.6 2023/2024 AIM updates	Santosh Devasia		
	5.7 Honors and Awards Committee report	Roberto Horowitz		
	5.8 DSCD PodCast Series updates	Bryan Maldonado/ Selina Pan		

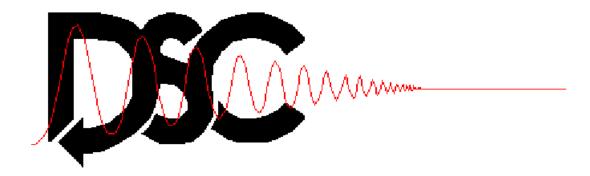
	5.9 MECC 2023/2024 updates	Atul Kelkar/Hosam Fathy
	5.10 ASME J. Dynamic Systems, Measurement and Control (JDSMC)	Ranjan Mukherjee
	5.11 ASME/IEEE Trans. on Mechatronics (TMECH)	Jingang Yi
	5.12 ASME Letters in Dynamic Systems and Control (LDSC)	Peter Meckl
	5.13 ASME J. of Autonomous Vehicles and Systems (JAVS)	Vladimir Vantsevich
9:15 pm	6. Open discussion	

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

### **Attached Written Detailed Reports**

1.	Treasurer's report	Raje	sh Rajamani
2.	Newsletter report	Changliu Liu/Shu-Xi	ia Tang/Minghui Zhang
3.	Technical Committee report	Atul	Kelkar
4.	ASME updates	Barb	para Zlatnik
5.	2023/2024 ACC report	Jun 2	Zhang/Wenlong Zhang
6.	2023/2024 AIM report	Sant	osh Devasia/Kok-Meng Lee
7.	Honors and Awards Committee report	Robe	erto Horowitz
8.	DSCD PodCast Series	Brya	n Maldonado/Selina Pan
9.	MECC 2023	Atul	Kelkar
10.	ASME J. of Dynamics Systems, Measurement,	and Control Ranj	an Mukherjee
11.	ASME Letters in Dynamic Systems and Control	(LDSC) Peter	r Meckl
12.	ASME J. Autonomous Vehicles and Systems (J	AVS) Vlad	limir Vantsevich
13.	Transactions on Mechatronics (TMECH)	Jinga	ang Yi
14.	Secretary's report: Membership numbers	Kam	Leang
15.	DSCD Website	Alireza Mohammadi/S	atadru Dey/Barbara Zlatnik

\*Pending submission



### 202<sup>th</sup> 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 Westin hotel at Jersey City Newport, Room Newport I & II **In-person Location:** Virtual option via Zoom

### AGENDA

1. Chair's welcoming remarks Xiaobo Tan 7:30 pm 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.

#### 3. Recognition of service to DSCD 7:40 pm

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

### 4.2 NSF updates

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

### Xiaobo Tan

Xiaobo Tan

Harry Dankowicz

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. Xiaobo Tan

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

Atul Kelkar

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

#### 6.2 Technical Committee updates

### 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 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

Santosh Devasia

Barbara Zlatnik

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

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/S	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 Cont	rol (LDSC)	Peter Meckl
10.	ASME J. Autonomous Vehicles and Systems	(JAVS)	Vladimir Vantsevich
11.	Secretary's report: Membership numbers		Kam Leang
12.	DSCD Website	Diane Peters/Alirez	a Mohammadi/Barbara Zlatnik
13.	Honors and Awards Committee		Roberto Horowitz

\* Pending submission

### **New DSCD Executive Committee Members**



**ExComm Junior Member** Junmin Wang Professor, Lee Norris & Linda Steen Norris Endowed Professorship in Mechanical Engineering The University of Texas at Austin



Secretary Mahdi Shahbakhti Associate Professor, Mechanical Engineering Dept University of Alberta



**Treasurer Diane Peters** Associate Professor, Mechanical Engineering Dept Kettering University

### **New DSCD Committee Members**

### **Honors and Awards Committee**

Andrew Alleyne, University of Minnesota
Yi Guo, Stevens Institute of Technology
Miroslav Krstic, UC San Diego
Robert Landers, University of Notre Dame
Jianbo Lu, Nikola Motor Company

### **AACC Director**

Xiaobo Tan, Director, Michigan State University Eduardo Misawa, Alternate, National Science Foundation

**Conference Editorial Board Chair** 

Marcello Canova, The Ohio State University

### **New DSCD Committee Members**

### **DSCD Conference Program Representative**

Wenlong Zhang, Arizona State University

### **DSCD Newsletter Editors**

Changliu Liu, Editor, Carnegie Mellon University Shu-Xia Tang, Senior Associate Editor, Texas Tech University Minghui Zheng, Associate Editor, University of Buffalo

**Student Activities and Travel Grant Coordinator** 

Matteo Aureli, Coordinator, University of Nevada, Reno

### **New DSCD Committee Members**

### **DSCD Webmaster**

Satadru Dey, The Pennsylvania State University

### **DSCD PodCast Series Producers**

Shreshta Rajakumar Deshpande, Ford Motor Company
William Nagel, Widener University
Ye Zhao, Georgia Tech
Cara Nunez, Harvard University



## **NSF Updates**

Eduardo Misawa, Ph.D.

emisawa@nsf.gov

Senior Advisor and Scientific Integrity Official

## DSCD-related program updates

- Dynamics, Control and Systems Diagnostics (DCSD)
- Cyber-Physical Systems (CPS)
- Smart and Connected Communities
- CIVIC Innovation Challenge
- Artificial Intelligence
- Manufacturing
- Translational research ("TIP")
- Etc.



## **Policy updates**

- Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 23-1)
  - Eligibility, RECR training, SciENVcv, Safe and Inclusive Working Environments for Off-Campus or Off-Site Research, BAA
- NSF implementation of National Security Presidential Memorandum 33 (NSPM-33)
  - Biographical Sketch
  - Current and Pending (Other) Support
  - Disclosures: w/proposal, pre-award, post-award
- Draft PAPPG (24-1) Federal Register Notice
- NSF system updates
  - Resources, automatic compliance check, LaTeX resources
- PAPPG: Scientific Integrity

# **QUESTIONS?**

### • Eduardo Misawa, Ph.D.

- Senior Advisor and Scientific Integrity Official
- <u>emisawa@nsf.gov</u>
- Phone: 703-292-5353
- Available through Slack channel during the ACC 2023
- Available in person on Wednesday \* Thursday during the conference



80th Anniversary Celebration for the Dynamic Systems and Control Division (1943-2023)

@MECC 2023 Opening Reception October 3, 2023 Lake Tahoe

## Planned activities

- 80<sup>th</sup> anniversary celebration reception at MECC 2023 (jointly with the conference's welcome reception) (Atul Kelkar/Jingang Yi)
- Historical perspective of the division - video montage of thoughts and memories from DSCD colleagues (Marcia O'Malley)

 Special session "DSCD – Past, Present, and Future" at MECC 2023 (Jingang Yi/May-Win Thein)



## Updates on the DSCD Newsletter

Changliu Liu Shuxia Tang Minghui Zheng



## What is New?

- Making the newsletter publication process more streamlined
  - A submission <u>form</u> (we can take submissions all year round)
  - A shared repository or website (still deciding, this can help information archival)

## Overview of the Summer 2023 Issue

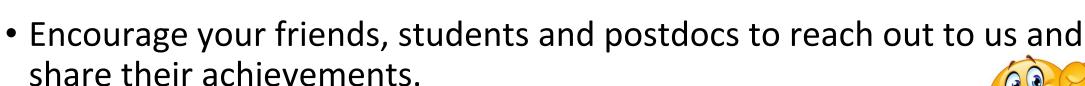
- Initial announcement in late March
- Received two email submissions and one form submission
- Will make more announcements

## Solicitation for the Summer 2023 Issue

- New faces spotlight to highlight new faculty in the community who began their appointment after January 2020 - you are welcome to send us a short biography along with research/lab introduction and hobbies/interests
- **Featured articles** (<1,000 words) to provide an overview or perspectives broadly relevant to our community (e.g., sustainability, climate change, manufacturing, automation, diversity/equality, DSCD history, etc.)
- **Recognitions and achievements**, including recently received awards/honors afforded to and books/edited volumes published by DSCD colleagues
- Short news, including announcements of upcoming conferences/workshops, CFPs for special issues/sessions in relevant journals/conferences, activities and/or announcements from technical committees, etc.
- **Summaries** of educational experiences and/or platforms, and research activities including new initiatives, experimental platforms, testbeds, and benchmarks that you would like to attract attention
- Job and position postings
- **Memorials** to commemorate the loss of DSCD members especial during the pandemic

## You Can Help Us to Make the Newsletter Better.

- Never hesitate to fill out this <u>form</u> or email us.
  - Your submission, our passion!
- "Hesitate" to say no if we solicit your contribution.



Send us your suggestions.







## **DSCD** Financial Update

### Rajesh Rajamani

University of Minnesota

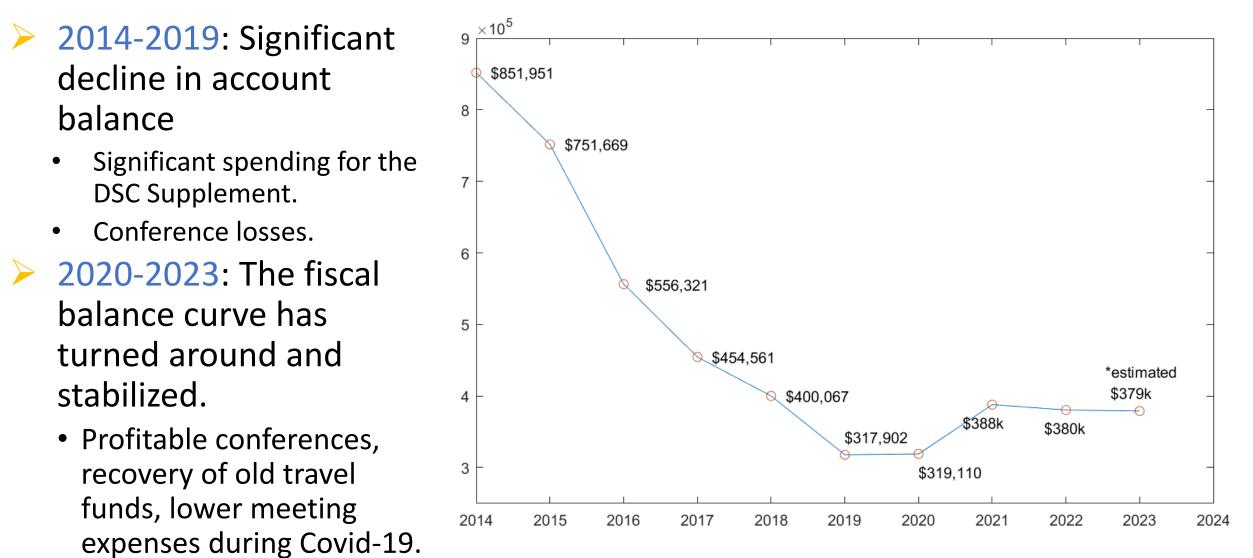
**DSCD** Treasurer

May 31, 2023

Division Meeting at the 2023 ACC

## DSCD Segregated Account Summary

History of account balance over recent years



## Current Fiscal Year Conference Revenue

- All conferences in FY23 were profitable and will contribute positive returns to DSCD.
- 2022 ACC
  - > ASME Portion of ACC Surplus (after DSCD Meetings expenses): \$23,794.66
  - ACC Surplus can vary significantly from year to year
    - 2021 ACC: ASME Portion of ACC Surplus: \$77,991.58
- 2022 MECC
  - Total surplus: \$7,541, Surplus after AACC overhead: TBD
  - ASME Portion: 80% based on registrations, IEEE: 20%
  - 2021 MECC Net conference surplus: \$24,869.39, After AACC overhead: \$11,386.89
- 2022 AIM
  - 2022 AIM Surplus: Approx \$41,766, ASME Portion of surplus: \$13,922
  - > 2021 AIM: ASME Portion of conference surplus: \$6,025.

## Spending Plan for Fiscal 2024

Categories	Definition	FY 23	FY 24 (w/o TCs)	FY 24 ( TCs)	Total
ASME Event Support	Registration, travel, lodging, food, etc	\$ 2,000	\$ 22,000		\$ 22,000
Face-to-Face Meetings	Leadership meetings, planning meetings, etc	\$ 7,700	\$ 6,000	\$ 2,950	\$ 8,950
Honors & Awards	Division and TCs	\$ 10,800	\$ 4,500	\$ 6,800	\$ 11,300
New Initiatives	New products, conferences, etc	\$ 1,500	\$ 5,000	\$ 2,500	\$ 7,500
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	\$ 19 <i>,</i> 400	\$ 24,000		\$ 24,000
Volunteer and Member Support	Non-ASME conference support	\$ 5,000	\$ 9,000		\$ 9,000
Total		\$ 46,900	\$ 71,000	\$ 12,250	\$ 83,250

Last year's budget was \$46,900, this year's budget significantly higher due to several <u>one-time</u> expenses:

AIM Student travel support (\$12k), DSCD 80<sup>th</sup> Anniversary Cruise at the 2023 MECC (\$20k), Additional DEI event at the 2023 MECC (\$5k)

## 203<sup>rd</sup> DSC Division Meeting

## **ASME DSCD Technical Committees Report**

American Control Conference 2023, San Diego, CA

Wednesday, May 31, 2023

DSC Division Meeting

2023

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Atul Kelkar, Clemson University

## **Technical Committee Leadership**

Technical Committee	Chair	Vice Chair
Automotive and Transportation Systems (ATS)	Yan Chen, Arizona State University	Carrie Hall, Illinois Institute of Technology
Bio-Systems and Health Care (BSHC)	Wenlong Zhang, Arizona State University	VACANT
Mechatronics	Kira Barton, University of Michigan	Hao Su, North Carolina State University
Robotics	Biswanath Samanta, Georgia Southern University	Yan Gu Purdue University
Vibrations	Matteo Aureli, University of Nevada, Reno	Sichen Yuan, Lawrence Technological University
Energy Systems (ES)	Chris Vermillion, North Carolina State University	Stephanie Stockar, The Ohio State University

## TC Meeting Schedule at ACC 2023

TC	Time	Location
Automotive & Transportation TC	05/31, 6:00-7:00 pm	Sapphire 400A Zoom: <u>https://asu.zoom.us/j/7795601213</u> (no passcode)
Bio-Systems and Health Care TC	06/01 6:00-7:00 pm	Sapphire 400B Zoom: https://asu.zoom.us/j/85692663834?pwd=eUpLTHIZNUQvY0NYSER6 RUNmSE01dz09 (passcode: 673488)
Energy Systems TC	06/01, 11:30-12:30pm	Location: Aqua Salon EF
Mechatronics TC	No Meeting at ACC	
Robotics TC	05/31, 5:30-6:30pm	Online only on Zoom: https://georgiasouthern.zoom.us/s/89088817032?pwd=K1pOVGwxQXF taENwMm1wTkJTVmV0QT09#success_(no passcode)
Vibrations TC	05/31, 5:30-6:30pm	Online only on Zoom: https://unr.zoom.us/j/83030567558?pwd=Y101d010Znk4a3ZUeEFCU3 I4dzhxZz09 (passcode: 477065)

## **■** Automotive and Transportation Systems

- Committee Leadership and Membership
  - Chair- Yan Chen (Arizona State Univ.)
  - Vice Chair- Carrie Hall (Illinois Institute of Technology)
  - 209 members
- Web, email alias, linked-in group
  - ats-tc-allmembers@googlegroups.com
  - https://www.linkedin.com/groups/4380983
- Invited Sessions
  - Automotive and Transportation Systems: 6 (ACC 2022), 4 (MECC 2022), 3 (ACC 2023), 3 (MECC 2023)

## **ATS Committee Activities**

- Special/Tutorial Sessions and Other Events
  - "Industry Stories in Controls" Special Session at MECC 2022,
  - "Status and Trends of Automotive and Transportation Systems: Electrification, Connection, and Automation" Special Session at ACC 2023
  - "An Overview of the US Department of Transportation's New Research Initiatives and Funding Programs" Special Session at ACC 2023
  - **Best Paper Awards** 
    - Automotive and Transportation: Best Paper at MECC 2022; Best Paper at ACC 2023

## • Meetings at ACC 2023

 Automotive and Transportation TC meeting: May 31, 6-7 PM, Sapphire 400A, and the zoom link (hybrid meeting option may be provided) will be https://asu.zoom.us/j/7795601213

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## **Robotics Technical Committee**

### **TC Leadership**

- Chair: Biswanath Samanta (Georgia Southern University)
- Vice Chair: Yan Gu (Purdue University)
- Secretary: Paolo Stegagno (University of Rhode Island)

### **Past and Present Activities**

• MECC2022 Invited Session: Bioinspired Techniques for the Control and Assessment of Robotic Motion

### **Future Planned Activities**

 MECC2023 Invited Session: Robotics and Control Applications in Healthcare and Medical Systems (To be jointly organized with Bio-Systems and Healthcare TC and IEEE CSS Healthcare and Medical Systems TC)

## **Robotics Technical Committee**

## **Awards and Recognitions**

• TC Best paper award: Assessment of Neuromuscular Fatigue from Muscle Synergies in Hand Poses - Avinash Baskaran and Chad G. Rose (Presented in MECC2022)

## **Mechatronics**

- Committee Chair and Membership
  - Chair- Kira Barton (University of Michigan), 195 members

### Opportunities

- Seeking applications for Mechatronics TC Secretary: email <u>bartonkl@umich.edu</u> for details
- Seeking nominations for 2023 Best Paper and Best Student Paper in Mechatronics: email <u>mishrs2@rpi.edu</u> for details

### Invited Sessions

- Invited session for MECC 2022, "Rising Star in Mechatronics"
- Invited session at ACC 2022, "Control for Additive Manufacturing Processes"
- Invited session for 2023 ACC, "Modeling, Control and Estimation of Soft Material Systems"
- **Special/Tutorial Sessions and Other Events** 
  - Special/workshop session at Advanced Intelligent Mechatronics 2023 on "Advances in Mechatronics Education"
  - Two special sessions planned for MECC 2023: "Special Sessions on Manufacturing Controls"

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## **Mechatronics Committee Activities**

- Best Paper Awards
  - Mechatronics: Best Paper and Best Student Paper at MECC 2022

# Bio-systems & Healthcare Technical Committee

### TC Leadership

Chair: Wenlong Zhang, Arizona State University

Co-Chair: Chad Rose, Auburn University

## **Past activities**

TC Leadership Meeting (February 22, 2023)

Meeting with past chairs of the TC to brainstorm initiatives to boost TC activities

### 2023 American Controls Conference

- 3rd Workshop on Human-Autonomy Interaction and Integration (W08)
- Invited session on Healthcare and Medical Systems at ACC (ThA08)
- Invited session on Recent Advancement of Human Autonomy Interaction and Integration (FrB03)

Online Workshop on Innovations in Extracorporeal Gas Exchange Therapies: Recent Advances and Outstanding Challenges (May 24, 2023)

2023 Modeling, Estimation and Control Conference (MECC)

 ASME-IEEE Joint Invited Sessions Robotics and Control Applications in Healthcare and Medical Systems (*under review*) **Bio-systems & Healthcare Technical Committee Future Planned Activities** TC Meeting at 2023 ACC 6-7 pm on June 1 (Thursday) at Sapphire 400B 2023 BSHC TC Best Paper and Best Student Paper Awards Call for nominations to be released in June Workshop and invited sessions for 2024 ACC Call for papers/abstracted to be released in mid August Searching for Secretary and Publicity Chair Send (self) nominations to Wenlong Zhang (wenlong.zhang@asu.edu) by 8/1

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# Energy Systems Technical Committee TC leadership

- Chair: Chris Vermillion
- Co-chair: Stephanie Stockar
- Other positions: Xinfan Lin (secretary), Herschel Pangborn (publicity chair), Matt Williams (industry liaison), Satadru Dey (awards chair)

#### Past and current activities

- 2 invited sessions at MECC 2022
- 8 invited sessions at ACC 2023
- Created working groups for (i) diversity, equity, and inclusion (DEI), (ii) young faculty/professional networking, and (iii) planning regular Zoombased brown bag lunch-and-learn/beer summits for TC members
- Student and young professional networking event at ACC 2023
- Increasing diversity in research event scheduled for ACC 2023

# Energy Systems Technical Committee

#### **Future planned activities**

- 1 invited session submitted and accepted for CCTA 2023
- Planning an energy-themed special issue for JDSMC (Satadru Dey leading the effort)
- Planning regular (i.e., monthly) virtual lunch-and-learn/beer summit events where TC members informally share emerging research
- Continuing to organize invited sessions at ACC, CCTA, and MECC

#### Awards and recognition

• Best paper awards at ACC and MECC; 3 finalists, 1 winner

# **Vibrations Technical Committee**

- TC Leadership The Vibrations TC has about 45 members.
  - Matteo Aureli Chair
  - Sichen Yuan Vice Chair
  - Zhenhua Tian- Secretary
- Past and Current Activities
  - Invited session at MECC 22 "Vibrations: Modeling, Analysis, and Control" (6 papers)
- Future Planned Activities
  - Invited session proposed at MECC 23; now under review
  - Invited sessions will be proposed at ACC 2024
  - Meeting at ACC 2023: May 31, 2023 at 5:30pm PDT (on ZOOM)
  - Link:

https://unr.zoom.us/j/83030567558?pwd=Y1o1d010Znk4a3ZUeEFCU3I4dzhx Zz09

# **Vibrations Technical Committee**

#### Activities from TC members

- Xu Chen: Local Arrangements Chair, IEEE/ASME Intl. Conf. on Advanced Intelligent Mechatronics, 2023
- Xu Chen: Program Co-Chair, ISCIE/ASME International Symposium on Flexible Automation (ISFA), 2022
- Xu Chen: Program Chair, MECC 2022
- Xu Chen: Scientific Committee Member, SME North American Manufacturing Research Conference (NAMRC) 50, 2022
- Xu Chen: Invited Session: "Control of Additive Manufacturing Processes and Soft Material Systems," American Control Conference, 2022 (with Bristow, Douglas A., Barton, Kira, Hoelzle, David, Landers, Robert G., Mishra, Sandipan)

# ACC 2023- 203rd DSC Division Meeting

# Thank you.

Contact:

Atul Kelkar

atul@clemson.edu

# **ASME Update**

Prepared for the Dynamic Systems and Control Division for their May 31, 2023 Executive Committee and General Division Meetings

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

The American Society of Mechanical Engineers ASME®



#### Manager, TEC Ops Role for DSCD

- » Serve as primary staff support for several divisions, including DSCD, as well as two technology groups
- » 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 advocate for divisions

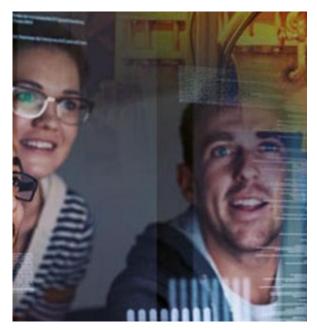




#### **Technical & Engineering Communities Sector**

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.

The American Society of Mechanical Engineers • ASME \*



**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 (TEC Council) 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
  - Provides opportunities to volunteer at the next level of ASME



#### TEC Sector – Division Strategic Planning

» At TEC Council direction, all divisions are underway with developing their own strategic plans

5



*The American Society of Mechanical Engineers • ASME* <sup>•</sup>

#### **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



#### ASME Robotics Roadmap Robotics Technology Group

#### Goal

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



*The American Society of Mechanical Engineers* • *ASME* <sup>®</sup>

# Robotics Technology Group conducted a successful workshop at IDETC

*Work continues on a Robotics Roadmap for ASME – Working Groups are writing sections focused on various technologies* 

- » Manish Kumar serves on the RTG, representing DSCD. He participated in the Workshop and is co-lead of the Working Group on Robot/Robot and Robot/Machine Collaboration
- » Atul Kelkar participated in the Workshop and is serving on the Working Group on Human-Centered Manufacturing

8



# 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**

Get Involved > Technical Divisions > Technical Division Pages > 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.

. . . . . . . . .



The American Society of Mechanical Engineers • ASME®

#### **TEC Talks Webinar Series**



Very successful August 2022 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 Online**

- » Join the TEC Sector Linked In Group
  - <u>https://www.linkedin.com/groups/914902/</u>
- » Visit the new TEC Sector web page
  - <u>https://www.asme.org/get-involved/technical-divisions/technical-and-engineering-communities-sector</u>
- » TEC Sector Quarterly Newsletter sent to all division members
  - <u>https://www.asme.org/getmedia/4e3f7b13-d0de-4542-b647-319eced28114/tec-sector-newsletter-jan2023.pdf</u>



#### Various ASME Updates

- » ASME has released its Climate Change Position statement and launched a web site dedicated to the topic. There is a letter from Tom Costabile, ASME's Executive Director/CEO, which acknowledges the roll that ASME's division played in the development of Position Statement, including participation in a survey late last year. <u>https://www.asme.org/about-asme/climate-change</u>
- » ASME Diversity, Equity and Inclusion
  - https://www.asme.org/about-asme/diversity-and-inclusion
  - Toolkit new resources coming soon: https://www.asme.org/about-asme/diversity-andinclusion/toolkit



#### Report on ACC 2023

Compiled by Jun Zhang DSCD Rep. for the American Control Conference 2023 May 18, 2023

#### Meetings at ACC

Zoom and/or in-person meetings have been arranged at ACC 2023 for the following DSCD meetings:

Meeting	Day and Time	Meeting Information
6	(MDT)	
DSCD Executive	05/31	Location: Aqua 300
Committee Meeting	1:30-5:00pm	Zoom: https://utah.zoom.us/j/99358889131
_		(passcode: ACC2023)
DSCD Division	05/31,	Location: Aqua Salon EF
General Meeting	7:00-9:30pm	Zoom: https://utah.zoom.us/j/91833845255
		(passcode: ACC2023)
DSCD Technical	No meeting at	
Committee Chairs	ACC	
Meeting		
Automotive &	05/31,	Location: Sapphire 400A
Transportation TC	6:00-7:00 pm	Zoom: https://asu.zoom.us/j/7795601213
		(no passcode)
Bio-Systems and	06/01	Location: Sapphire 400B
Health Care TC	6:00-7:00 pm	Zoom:
		https://asu.zoom.us/j/85692663834?pwd=eUpLTH1
		ZNUQvY0NYSER6RUNmSE01dz09
	0.6/01	(passcode: 673488)
Energy Systems TC	06/01,	Location: Aqua Salon EF
	11:30-12:30pm	
Mechatronics TC	No meeting at	
Data da TO	ACC	Outine and and the Zamma
Robotics TC	05/31,	Online only with Zoom:
	5:30-6:30pm	https://georgiasouthern.zoom.us/s/89088817032?pw d=K1pOVGwxQXFtaENwMm1wTkJTVmV0QT09
		#success
		(no passcode)
Vibrations TC	05/31,	Online only with Zoom:
	5:30-6:30pm	https://unr.zoom.us/j/83030567558?pwd=Y101d010
	5.50-0.50pm	Znk4a3ZUeEFCU3I4dzhxZz09
		(passcode: 477065)
		(pusseoue. +//005)

#### **Statistics for ACC 2023**

There was a 69% acceptance rate for ACC submissions. Papers submitted though ASME had an acceptance rate of 66%. ASME also organized/co-organized 13 of the 26 invited sessions, 2 of the 9 tutorial sessions, and 4 of the 9 special sessions. Additional statistics are below.

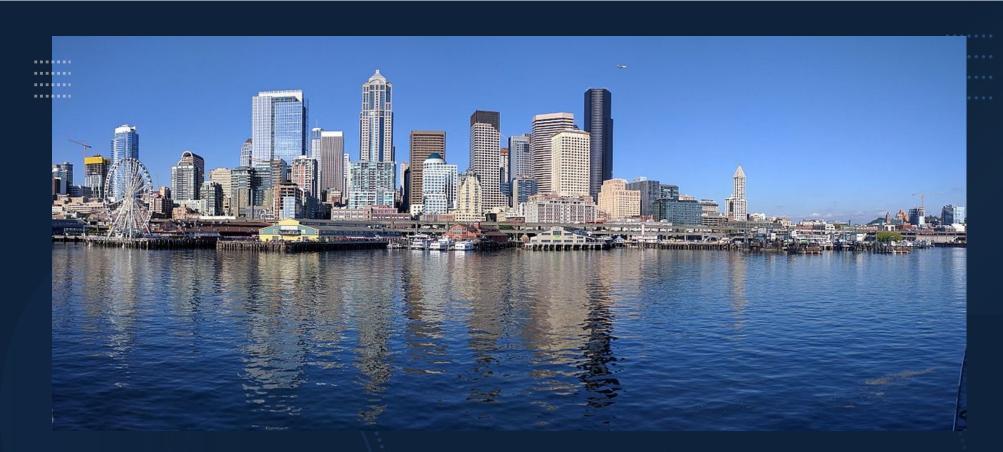
- Total number of paper submissions: 1110
- Total number of accepted papers: 763
  - Acceptance rate: 69%
- Total number submitted through ASME: 74
- Total number of accepted ASME papers: 49
  - Acceptance rate: 66%
- Total number of Invited sessions: 26<sup>1</sup>
- Total number of Invited sessions organized/co-organized by ASME: 13
- Total number of Tutorial sessions: 9<sup>1</sup>
- Total number of Tutorial sessions organized/co-organized by ASME: 2
- Total number of Special sessions: 9<sup>1</sup>
- Total number of Special sessions organized/co-organized by ASME: 4

<sup>&</sup>lt;sup>1</sup> The number of invited and tutorial sessions refer to the accepted session proposals, not the submitted ones.

# 2023 AIM

http://www.aim2023.org/





# Location and Date

- Seattle, June 27-July 1 (Tue-Sat), 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

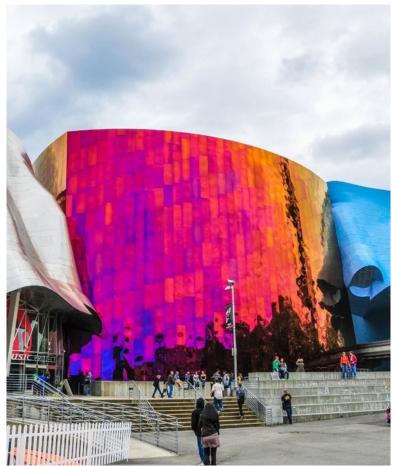






# Lots of things to do





- 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





# **Argosy Dinner Cruise**

ARGOSY

**From Downtown** 



## Technical Museums

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





The Westin Seattle, June 27- Jly 1 (Tue-Sat), 2023
\$212 per night (Single/Double) – typical Seattle do

# Hotel

- \$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/

#### Program

		Wednesday 6/28/2020	Thursday 6/29/2020	Friday 6/30/2020	
	8:30 AM	Plenary I	Plenary II	Plenary III	
	9:00 AM	Пенагут	пенагуп		
AM	9:30 AM	Break Break		Break	
A	10:00 AM	Technical	Technical	Technical	
	10:30 AM	Technical Sessions/	Technical Sessions/	Technical Sessions/ Workshops	
	11:00 AM	Workshops	Workshops		
	11:30 AM	1101K3110P3	vvorksnops	vorksnops	
	12:00 PM				
	12:30 PM	Lunch	Lunch	Lunch	
	1:00 PM				
	1:30 PM	Industry	Industry	Industry Plenary III	
PM	2:00 PM	Plenary I	Plenary II		
	2:30 PM	Break	Break	Break	
	3:00 PM	Technical	Technical	Technical Sessions/ Workshops	
	3:30 PM	Technical	Technical Sessions/		
	4:00 PM	Sessions/ Workshops	Workshops		
	4:30 PM	workshops	workshops	vorsnops	

# **Details of Program**

- 2 Workshop
- 3 Academic Plenary
  - Robert Gao
  - Xiaobo Tan
  - Michael Yip
- 3 Industrial Plenary
  - Philip Freeman (Boeing)
  - Teddy Seyed (Microsoft)
  - Celia Oakley (Opener)
- 36 regular sessions
- 4 Invited Sessions



#### **Report- AIM 2024**

Xiang Chen and Hiroshi Fujimoto

Presented to DSCD on May 31, 2023



#### **Conference Date**

#### July 15–18, 2024 Workshops: July 15, Technical Sessions: July 16-18

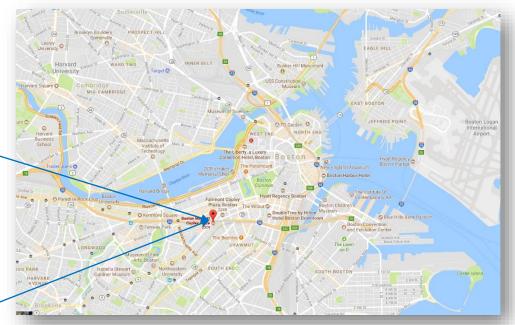
	JULY, 2024						
SUN	MON	TUE	WED	THU	FRI	SAT	
30	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31				

#### AIM 2024 BOSTON

### **Location and Venue**

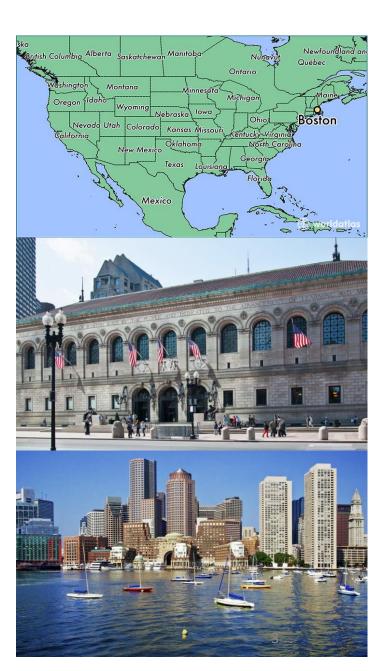






*Conference Venue:* Sheraton Boston Hotel 39 Dalton Street Boston MA 02199, U.S.A.

Contract has been signed with hotel





#### Website and CFP

Conference Website and Call for Paper:

Call for Paper is ready to be circulated;

TMECH/AIM Focused Section Call for Paper is ready for circulation;

Conference website is registered: <u>www.aim2024.org</u>, under construction.



## **Tentative Conference Program**

Plenary/Keynotes	3P, 2-3K
Workshops	4 half/full-day
<b>Tutorial Sessions</b>	??
Invited Sessions	Need to be pormoted
Contributed Sessions	Need to be promoted
TMECH/AIM FS	Need to be promoted
TMECH Presentation	Publicity co-Chairs will contact authors
Student Competition	??
Any other suggestions	??

#### **Promotion of AIM 2024**

ACC (May-June), ICRA (May-June in London), AIM (June-July), IFAC WC (July), CCC (July), CCTA (August), IROS (October), IECON (October), CDC (December), any other conferences ?

Society E-Mail Lists: ASME, IEEE, others ?

In-Person OpCom Meeting: AIM or IROS or IECON?

Thank You Very Much !



#### Advisory Committee:

Hideki Hashimoto (Chuo Univ., Japan) Kok-Meng Lee (Georgia Inst. of Tech., USA) Shigeki Sugano (Waseda Univ., Japan) Huijun Gao (Harbin Inst. of Tech., China)

#### Steering Committee:

Gursel Alici (Univ. of Wollongong, Australia) Jordan Berg (Nat. Science Foundation, USA) Martin Buss (TU Munich, Germany) I-Ming Chen (Nanyang Tech Univ., Singapore) Hiroshi Fujimoto (Univ. of Tokyo, Japan) Huijun Gao (Harbin Inst. of Tech., China) Hideki Hashimoto (Chuo Univ., Japan) Kok-Meng Lee (Georgia Inst. of Tech., USA) Mihoko Niitsuma (Chuo Univ., Japan) Shigeki Sugano (Waseda Univ., Japan) Dong Sun (City Univ. of Hong Kong, China) Jun Ueda (Georgia Inst. Of Tech., USA) Heike Vallery (TU Delft, Netherlands) Shane Xie (Univ. of Leeds, UK) Bin Yao (Purdue Univ, USA) Jingang Yi (Rutgers Univ., USA)

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Santosh Devasia (Univ. of Washington, USA) Huayong Yang (Zhejiang Univ., China) Program Chair:

Hiroshi Fujimoto (Univ. of Tokyo, Japan)

Program Co-Chair: Raffaella Carloni (Univ. of Groningen, Netherlands) Jian Chen (Zhejiang Univ., China) Tomoyuki Shimono (Yokohama Nat. Univ., Japan)

Yan Wan (Univ. of Texas-Arlington, USA) Finance Chair: Se Young (Pablo) Yoon, (Univ. of NH, USA)

Publicity Chair:

Shaohui Foong (Singapore Univ. of Tech. & Design Publicity Co-Chairs

Soo Jean (Univ, of Waterloo, Canada) Emre Sariyildiz (Univ. of Wollongong, Australia) Xuebo Zhang (Nakai Univ., China) Publication Chair

Xu Chen (Univ. of Washington, USA) Local Arrangements Chair:

Bala Balasingam (Univ. of Windsor, Canada) Workshops/Tutorials Chair:

Mihoko Niitsuma (Chuo University, Japan) Workshops/Tutorials Co-Chair: Hao Su (North Carolina State Univ., USA)

Registration Chair: Yan Gu (Purdue University, USA)

Invited Session Co-Chairs:

Silu Chen, (NIMTE, China) Jongeun Choi (Yonsei Univ., Republic of Korea)

Markus Grebenstein (DLR German Aerospace Ctr.) Barys Shyrokau (TU Delft, Netherlands) Toshiaki Tsuji (Saitama Univ., Japan)

Dirk Wollherr (TU Munich, Germany)

Yan Wang (Ford Motor Company, USA) Awards Chair:

Santosh Devasia (Univ. of Washington, USA



The 2024 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM2024) will be held on **July 15-18**, **2024 in Boston**, **MA**, **USA** (<u>https://aim2024.org/</u>). As the flagship conference on intelligent mechatronic systems, AIM 2024 will bring together the international mechatronics community to discuss cutting-edge research results, expert perspectives on future developments, and innovative applications in mechatronics, robotics, automation, industrial electronics, and related areas.

The sponsors and organizers of AIM 2024 invite submissions describing original work, including but not limited to the following topics: Actuators, Automotive Systems, Bioengineering, Data Storage Systems, Electronic Packaging, Fault Diagnosis, Human-Machine interfaces, Human-Robot Interaction/Collaboration, Human Factors in Mechatronics Systems, Industry Applications, Information Technology, Intelligent Systems, Machine Vision, Manufacturing, Micro Electro-Mechanical Systems, Micro/Nano Technology, Modeling and Design, System Identification and Adaptive Control, Motion Control, Vibration and Noise Control, Neural and Fuzzy Control, Opto-Electronic Systems, Optomechatronics, Prototyping, Real-Time and Hardware-in-the-Loop Simulation, Robotics, Sensors, System Integration, Transportation Systems, Smart Materials and Structures, Energy Harvesting, and other frontier fields.

We invite high-quality submissions in the categories below. All submissions must be uploaded to the submission website: <u>http://ras.papercept.net/conferences/scripts/start.pl</u> following the schedule below.

**Contributed:** All papers go through a rigorous peer-review review process. All accepted manuscripts must be presented by the authors at the conference, will be published in the conference proceedings, and will be submitted for inclusion in IEEEXplore, subject to formatting and copyright requirements.

**Invited:** Invited sessions consist of 4 to 6 thematically related invited papers that will be presented together at the conference. Invited session proposals must include a brief statement of purpose and extended abstracts of the included invited papers. Invited papers are submitted and reviewed following the same process as contributed papers, and are included in the proceedings.1

**Workshops**: Half-day or full-day workshops will be in one of two categories: (1) *Tutorial Workshops* focused on educating attendees about an emerging topic and (2) *Research Workshops* focused on bringing together experts to discuss an emerging field. Tutorial and workshop proposals must include a statement of objectives, a description of the intended audience, and a list of speakers with an outline of their planned presentations. Unless specifically requested, individual tutorial and workshop presentations are not peer previewed, and do not appear in the proceedings.

**Special Sessions:** Special sessions will be organized to give exhibitors, organizations, and attendees a venue to discuss specialized, new, and not strictly technical topics (such as products) that do not fit in the other submission categories. Special Session proposals must include an abstract of the special session.

Late Breaking Results: Poster presentations on late-breaking mechatronics research results will be presented during the conference. Note that the deadline for posters is much later than the deadline for papers, allowing presenters to share their most recent results. Posters will be peer-reviewed.

**TMECH/AIM Focused Section and TMECH Presentation-Only:** TMECH authors have two opportunities to share your work at AIM2024. (1) *Presentation Only:* All authors of TMECH papers accepted between Feb. 16, 2023 and Feb. 15, 2024 have the option to present their work during the conference. (2) *Focused Section:* Submissions to the 5<sup>th</sup> Edition of the Focused Section on TMECH/AIM Emerging Topics will go through the TMECH review process and, if accepted, are presented at AIM2024 and published as part of the focused section in the August 2024 issue of TMECH. Inclusion in the focused section requires paid registration and presentation. Papers rejected for publication in TMECH will automatically be considered by the Program Committee of AIM 2024 for inclusion in AIM2024 as a contributed paper. Details are available on the conference website: <u>https://aim2024.org/</u> and the TMECH website <u>http://www.ieee-asme-mechatronics.info/</u>.

	IMPORTANT DATES:					
	TMECH/AIM Focused Section:	January 1, 2024				
	Invited/Workshop/Special Session Proposals:	January 27, 2024				
USA)	Contributed and Invited Papers and TMECH Presentation Only:	February 8, 2024				
1E	TMECH/AIM First Decision:	March 1, 2024				
	TMECH/AIM Revisions:	March 25, 2024				
NDARD	Notification of AIM and TMECH/AIM Paper Status:	May 1, 2024				
<b>C</b> S	Final Paper Submission:	May 10, 2024				
	Late-Breaking Submission:	May 16, 2024				

#### **Call for Papers**

#### The Fifth Edition of Focused Section on TMECH/AIM Emerging Topics

Submissions are called for the Fourth Edition of Focused Section (FS) on TMECH/AIM Emerging Topics. This Focused Section is intended to expedite publication of novel and significant research results, technology and/or conceptual breakthroughs of emerging topics within the scopes of TMECH (<u>www.ieee-asme-mechatronics.org</u>), providing rapid access to the state-of-the-art of TMECH publications to the mechatronics community.

The submitted paper must not exceed 8 TMECH published manuscript pages, excluding photos and bios of authors, and will be subject to the peer review process by TMECH standard. All final accepted papers will be published in August Issue of TMECH in 2024, and will be presented in the 2024 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2024, <u>www.aim2024.org</u>). The rejected papers from the submissions will be transferred to the Program Committee of AIM 2024 for further review and consideration as conference contributed papers.

The review process for submissions to this Focused Section will be conducted in up to two rounds with one Major/Minor Revision allowed, and the final decision falls into one of the following two categories:

- 1. Accept for publication in Focused Section. In this case, the paper will be accepted by AIM 2024 concurrently for presentation only, with full information of the paper included in the preprinted proceeding of AIM 2024. The final publication in TMECH, however, will be subject to the completion of presentation in AIM 2024 with full registration fee paid.
- 2. Reject for publication in Focused Section (after the first or second round). In this case, the paper, as well as all the review comments, will be forwarded to the Program Committee of AIM 2024 for further consideration. A final Accept/Reject decision will then be made by the Committee as a conference contributed paper for AIM 2024.

#### **Manuscript preparation**

Papers must contain original contributions and be prepared in accordance with the journal standards. Instructions for authors are available online on the TMECH website.

#### **Manuscript submission**

Manuscripts should be submitted to TMECH online at: <u>mc.manuscriptcentral.com/tmech-ieee</u>, selecting the track 'TMECH/AIM Emerging Topics'. The cover letter should include the following statement: This paper is submitted to the Fourth Edition of Focused Section on TMECH/AIM Emerging Topics. The full information of the paper should be uploaded concurrently to AIM 2024 online at: <u>ras.papercept.net/conferences/scripts/start.pl</u>, noted with the given TMECH manuscript number in the designated area.

#### Submission/Review/Decision Timeline:

Opening Date of TMECH/AIM FS Submission Site (first submission):	November 1, 2023
Closing Date of TMECH/AIM FS Submission Site (first submission):	January 1, 2024
Full Information of TMECH/AIM FS Paper Submitted to AIM Site:	January 1, 2024
First Decision for TMECH/AIM FS Submission:	March 1, 2024
Revised TMECH/AIM FS Submission Due by:	March 25, 2024
Final Decision for TMECH/AIM FS Submission:	May 1, 2024
Final Version of TMECH/AIM FS Submission Due by:	May 20, 2024
Publication of Focused Section in TMECH:	August 2024

Contacts: For any questions related to this Call for Paper, please contact: Qingze Zou, <u>qzzou@soe.rutgers,edu</u>, Senior Editor of TMECH, Yan Wan, <u>yan.wan@uta.edu</u>, Program Co-Chair of AIM 2024.

#### UNIVERSITY OF CALIFORNIA, BERKELEY

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SANTA BARBARA • SANTA CRUZ

Professor Roberto Horowitz Department of Mechanical Engineering University of California Berkeley, CA 94720-1742 Phone: (510) 643-7013 Fax: (510) 643-5599 Email: horowitz@berkeley.edu www.me.berkeley.edu/people/faculty/roberto-horowitz

May 28, 2023

To: Professor Kam K. Leang, Secretary ASME DSCDFrom: Professor Roberto Horowitz, Chair ASME DSCD Honors & Awards CommitteeRe: Committee Report

The Honors & Awards (H&A) Committee is currently integrated by:

Roberto Horowitz, Chair, University of California, Berkeley Miroslav Kristc, Vice Chair, University of California, San Diego Andrew Alleyne, University of Minnesota Neville J. Hogan, MIT Robert Landers, University of Notre Dame Yi Guo, Stevens Institute of Technology Jiambo Lu

#### 1) 2022 Rufus Oldenburger Medal

The H&A Committee reviewed 5 nominations for the 2021 Rufus Oldenburger Medal. The committee recommended **Dr. Davor Hrovat**, formerly the Henry Ford Technical Fellow at the Ford Motor Company and currently Adjunct Distinguished Professor, MAE Dept., UCSD, for the award. ASME approved the committee's recommendation and notified Dr. Hrovat, who gladly accepted the award.

### 2) Nominations request for the 2022 ASME DSCD Outstanding Young Investigator and Takahashi Education Awards.

The H&A Committee is requesting nominations for the Division's Yasundo Takahashi Education and Outstanding Young Investigator awards. <u>The submission deadline is Friday June 30th</u>.

- Outstanding Young Investigator Award: This award is given biennially (odd years) by the Dynamic Systems and Control Division of ASME to a DSCD member who will not have reached <u>his/her 40th birthday</u> when the nomination is due (June 30, of the awarding year), and who as a mechanical engineering professional, has demonstrated outstanding research contributions, either basic or applied, in fields of interest to the DSCD.
- <u>Yasundo Takahashi Education Award:</u> This award is given biennially (odd years) by the Dynamic Systems and Control Division of ASME to a DSCD member or a team for either <u>excellent sustained</u> <u>contributions or for an outstanding major, singular contribution to education in areas</u> of interest

to the DSCD. These contributions can include classroom teaching, short courses and workshop development, course development, lab development, textbook publishing, and software publishing.

The submission deadline is <u>Thursday June 30th</u>. Submission should be sent by e-mail to <u>Roberto</u> <u>Horowitz</u>, H&A Committee Chair. An announcement is included in the attachment.

#### 3) Revisions to the Kalman Best Paper Award (PBA) Review Process

The committee is waiting for ASME JDSMC Editor, Ranjan Mukherjee, to provide the H&A committee with the list of 2023 Kalman PBA candidates, to begin the selection process.

Sincerely,

Klowit

Roberto Horowitz Distinguished Professor James Fife Endowed Chair Department of Mechanical Engineering

#### Attachments:

Call for nominations for the 2023 ASME DSCD Yasundo Takahashi Education and Outstanding Young Investigator awards

#### **ATTACHMENT 1**

### Call for nominations for the 2023 ASME DSCD Yasundo Takahashi Education and Young Investigator Awards

The Dynamic Systems and Controls Division (DSCD) of ASME is seeking nominations for the following two division awards:

#### Yasundo Takahashi Education Award:

This award is given biennially (odd years) by the Dynamic Systems and Control Division of ASME to a DSCD member (or a team) for either <u>excellent sustained contributions or for an</u> <u>outstanding major, singular contribution to education in areas</u> of interest to the DSCD. These contributions can include classroom teaching, short courses and workshop development, course development, lab development, textbook publishing, and software publishing.

#### **Outstanding Young Investigator Award:**

This award is given biennially (odd years) by the Dynamic Systems and Control Division of ASME to a **DSCD member who will not have reached his/her 40th birthday** when the nomination is due (June 30, of the awarding year), and who as a mechanical engineering professional, has demonstrated outstanding research contributions, either basic or applied, in fields of interest to the DSCD.

The deadline for receiving nominations is **June 30th 2023.** Complete nomination packages should be sent by e-mail to <u>Professor Roberto Horowitz</u>, chair of the DSCD Honors and Awards (H&A) Committee.

A nomination package should include:

A letter of nomination clearly indicating the qualifications of the nominee for receiving the award. The nominee's curriculum vitae (CV)

Additional letters in support of the nomination are welcomed but not necessary.

Nominees selected for these awards must have been primary members of the DSCD for at least 5 consecutive years prior to receiving the Award and have been an active contributor of the DSCD.

Please do not hesitate to contact Professor Horowitz if you need further information.

## ASME Dynamic Systems and Control Division Podcast Series

## Update at DSCD General Meeting May 31, ACC 2023

Bryan Maldonado, Hao Su, Yao Ma, and Selina Pan

# **ASME 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
- <u>https://www.youtube.com/channel/UCKZDGbU2OsXtBvX4d7iwYTA</u> /videos
- Release via ASME DSCD YouTube channel, disseminated via DSCD website
- Reduced duration from 30-40 min  $\rightarrow$  20~30min
- Total views: 2198  $\rightarrow$  3681, subscriber counts: 104  $\rightarrow$  138



# 2021 Guests



ASME Dynamic Systems and Control Division PodCast Series: Guest Prof. Anna... 400 views · 2 years ago

ASME Dynamic Systems and Control Division Podcast Series rcia K. O'Malle 28:47

ASME Dynamic Systems and Control Division PodCast Series: Guest Prof. Marci...



ASME Dynamic Systems and Control **Division PodCast Series: Guest Prof....** 





28:03

ASME Dynamic Systems and Control Division PodCast Series: Guest Prof. Venka... 166 views • 1 year ago ASME Dynamic Systems and Control Division Podcast Series ASME Dynamic Systems and Control Division PodCast Series: Guest Prof. Chris...

146 views · 1 year ago



ASME Dynamic Systems and Control **Division Podcast Series: Guest Prof. Scott...** 

273 views · 1 year ago



ASME Dynamic Systems and Control Division Podcast Series: Guest Prof. Neera...

167 views · 1 year ago

- 02/2021: Prof. Anna Stefanopoulou, UMich
- 03/2021: Prof. Marcia O'Malley, Rice
- 04/2021: Prof. Masayoshi Tomizuka, UC Berkeley
- 05/2021: Prof. Venkat Krovi, Clemson
- 06/2021: Prof. Chris Vermillion, NCSU
- 07/2021: Prof. Stephanie Stockar, OSU
- 08/2021: Prof. Scott Moura, UC Berkeley
- 09/2021: Prof. Carrie Hall, IIT
- 10/2021: Prof. Aaron Johnson, CMU
- 11/2021: Prof. Neera Jain, Purdue



ASME Dynamic Systems and Control Division Podcast Series: Guest Prof. Carrie... 253 views • 1 year ago

ASME Dynamic Systems and Control Division Podcast Series: Guest Prof. Aaron...

ASME Dynamic Systems and Control

Division PodCast Series: Guest Prof....

206 views • 1 year ago

265 views · 1 year ago

ASME Dynamic Systems and Control Division Podcast Series

30:03



## 2022 Guests

- 01/2022: Dr. Katherine Strausser, Ekso Bionics
- 03/2022: Dr. Jamie Lian, ORNL
- 05/2022: Prof. Jing Sun, Umich
- 06/2022: Prof. Santosh Devasia, U. of Washington
- 07/2022: Prof. Azim Eskandarian Virginia Tech
- 08/2022: Prof. Lars Eriksson Linköping University
- 09/2022: Dr. Carrie Bobier-Tiu, Toyota
- 10/2022: Prof. Zhaojian Li, Michigan State Univ.



ASME DSCD Podcast, Dr. Carrie Bobier-Tiu, Senior Manager, Controls, Woven Planet,...

159 views · 6 months ago

ASME Dynamic Systems and Control Division Podcast Series: Prof. Zhaojian Li,...

238 views • 5 months ago

# **6 New Guests since last Meeting**

- 06/2022: Prof. Santosh Devasia, U. of Washington
- 07/2022: Prof. Azim Eskandarian Virginia Tech
- 08/2022: Prof. Lars Eriksson Linköping University
- 09/2022: Dr. Carrie Bobier-Tiu, Toyota
- 10/2022: Prof. Zhaojian Li, Michigan State Univ.
- 03/2023: Prof. Kamal Youcef Toumi, MIT



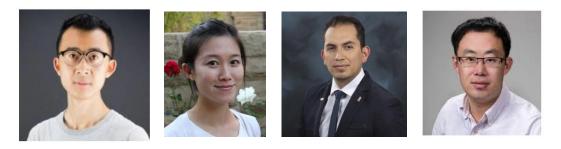
# **Other items**



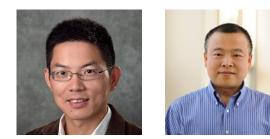
- Positions open for new co-producers (2-year term)
  - Please consider applying
  - For more information please reach out to any member of the team
- Please subscribe to our channel and enjoy the videos!
  - ASME DSCD
  - <u>https://www.youtube.com/channel/UCKZDGbU2OsXtBvX4d7iwYTA</u>

# **Podcast Team**

- Looking for new hosts and guests!
- Hosts
  - Dr. Yao Ma, TTU
  - Dr. Selina Pan, Waymo
  - Dr. Bryan Maldonado Puente, ORNL
  - Dr. Hao Su, NCSU
- YouTube Dissemination
  - Prof. Kam Leang, U of Utah
- Advisors
  - Prof. Xiaobo Tan, MSU
  - Prof. Jingang Yi, Rutgers







# 203<sup>rd</sup> DSC Division Meeting

## **MECC 2023**

Lake Tahoe, NV

October 2-5, 2023

http://mecc2023.a2c2.org

**Atul Kelkar**, General Chair, Clemson University Manish Kumar, Program Chair, University of Cincinnati





# MECC 2023 featuring

### **Technical Events**

- Great Plenary Talks
- First-time introducing joint paper submissions at MECC
- Presentation opportunity for IFAC and AACC Published Journal Papers Abstract only submission
- Regular contributed paper sessions with multiple tracks
- Workshops and Tutorials
- Several Special and Invited sessions
- Several Student Activities Rising Star, Best Paper Competition
- Posters only session
- Several Technical Committee meetings and planned sessions

### **Social Events**

- Opening reception combined with 80th DSCD Anniversary Gala!
- Award Banquet
- Closing Reception
- Several fun activities available for families around the venue



≣

## Special Sessions at MECC 2023

### **Special Sessions at MECC 2023:**

- **DSCD Rising Stars**: In this session, young members (senior PhD students and postdocs) will present their research work/portfolio to a large audience. This will help the young members gain visibility within the larger modeling, dynamics, and control community. At the same time, this session will help potential employers (both academia and industry) to get to know potential candidates.
- **Careers After PhD:** Possibilities and DEI Perspective: This session will have two parts. In the first part, three panelists from industry, academia, and National Lab will discuss potential career possibilities. In the second part, the same three panelists will focus on specific challenges faced by URM communities in engineering careers. They will first share their experiences, followed by answering specific questions from the audience.

### Organizers

• Satadru Dey & Hossein Rastgoftar, Student and Young Members Co-Chairs

## **Student Travel Awards and Student Best Paper Competition**

### **DSCD and AACC Student Travel Awards:**

 Students who contribute to in-person events and who show financial need are eligible for travel awards for MECC 2023. This award will be used to waive the registration fee.

### **Student Best Paper Competition:**

• MECC 2023 will host a student paper competition. Finalists will present their papers twice at MECC 2023: (i) at a dedicated Best Student Paper competition session, and (ii) at a regular session.

## Contacts:

 Satadru Dey and Hossein Rastgoftar, Student and Young Members Co-Chairs

## MECC 2023 paper submission details

### **Contributed Papers**

- 91 (regular)
- 38 (Joint MECC-DSC)

### **Invited Papers**

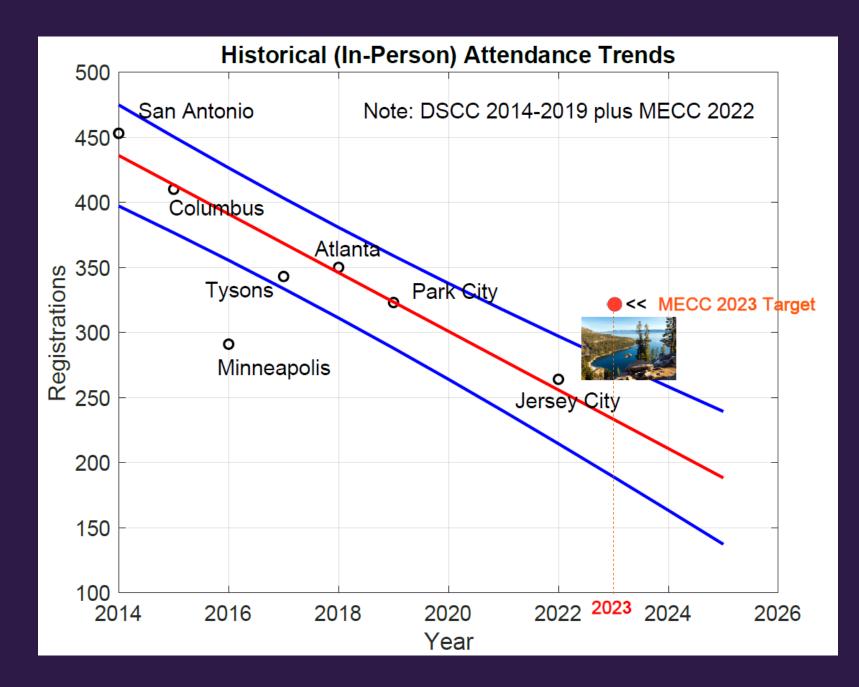
- 24 (regular)
- 13 (Joint MECC-DSC)

### Others

- 166 total contributed/invited papers
- 3 special session proposals
- 2 tutorial session proposals
- 4 workshop session proposals
- 8 invited session proposals





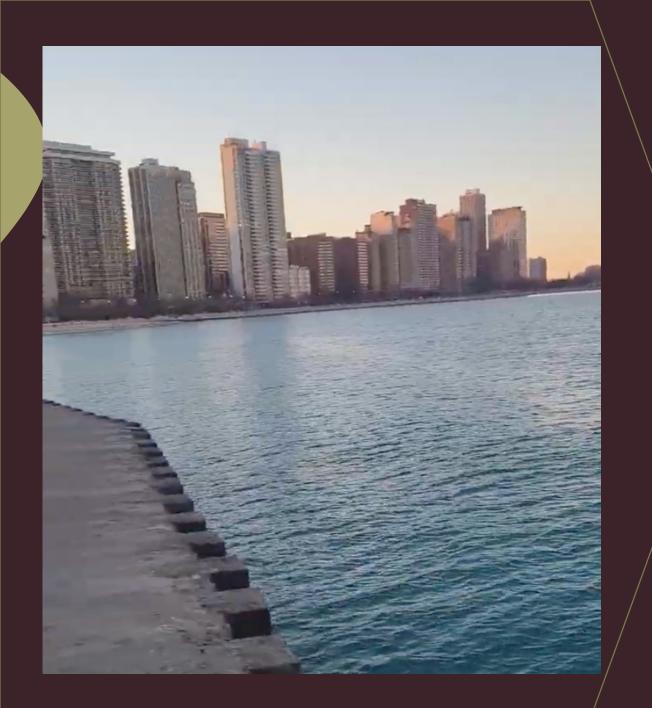


## Where would you rather be?



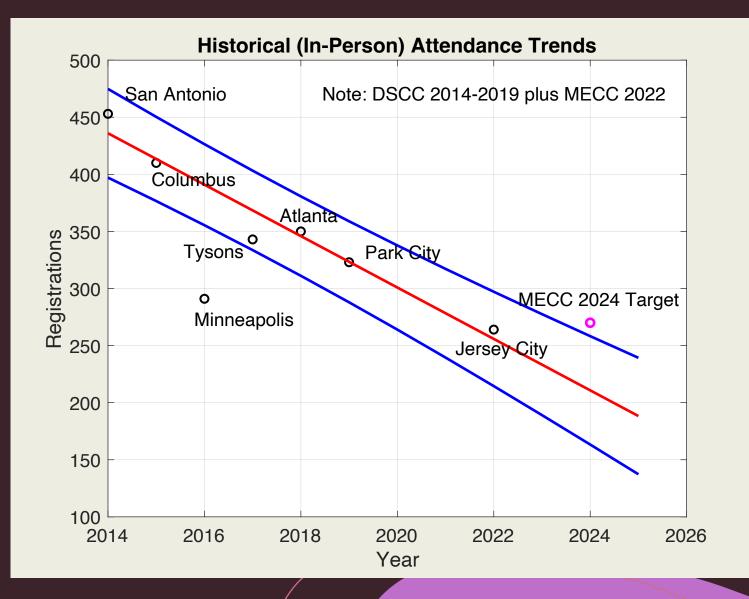
## IROS 2023 - Detroit

MECC 2023 – Lake Tahoe



## Join us for MECC 2024, October 27-31, 2024, Chicago, IL

Join us as we strive to expand and grow MECC our conference, for our community



Join us at the Intercontinental, Magnifict Mile, in Chicago





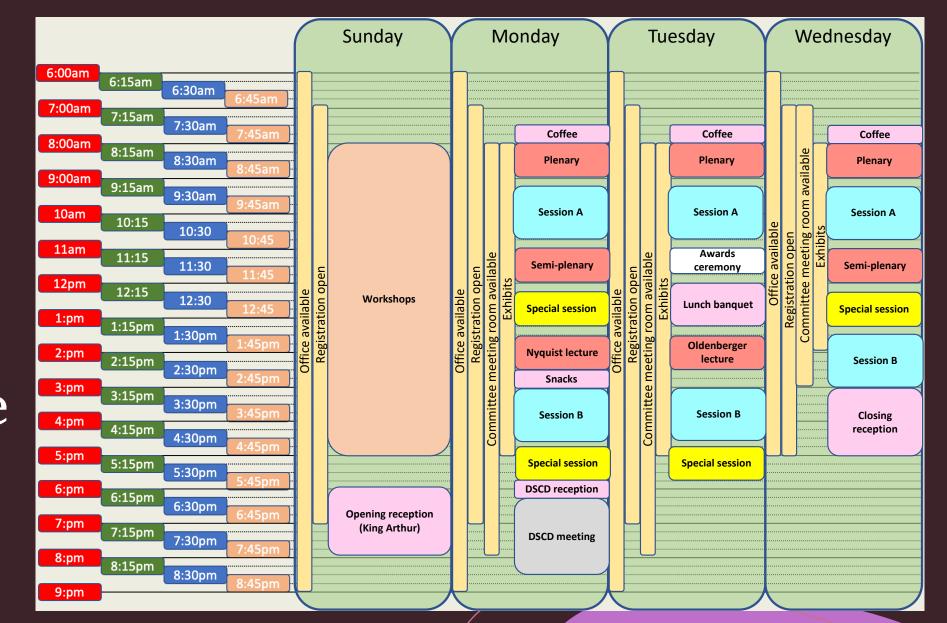
#### Centrally located, directly on the Magnificent Mile

 Historic hotel, originally the (Shriner) Medinah Club





Join us as we strive to build a strong conference program





## Presentation outline

- Background
- Dates, venue/hotel
- Budget, AV/F&B costs
- Schedule/program
- Program/International program committee
- Joint submission process
- Next steps

## Join us as we all work to make MECC a success



Hosam Fathy General Chair



Simona Onori Program Chair



Marcello Canova CEB Chair



Jin-Oh Hahn Finance Chair



Chris Vermillion Registration Chair



Juan Ren Publications Chair



Donald Docimo Students & Young Members Chair



Daniel Opila Invited Sessions Chair



Minghui Zheng Tutorial Sessions Chair





Ayse Tekes Outreach and Education Chair





Sankar Rangarajan Huazhen Fang Industry co-liaison Publicity Chair



Nicole Abaid Special Sessions Chair







### ASME JDSMC Status Report May 31, 2023

Technical Editor – Ranjan Mukherjee Journal Secretary – Marlan Buddingh

#### **Statistics**:

### 1. Number of papers published: 2015-2022

Year	No. of Full Papers	No. of Techical Briefs	Total number of papers	Number of pages	
2015	168	37	210	2035	
2016	125	21	146	1407	
2017	157	34	191	1807	
2018	187	23	210	2112	
2019	184	25	209	2109	
2020	92	16	108	1076	
2021	104	18	122	1309	
2022	88	14	102	1097	
2023 (till June)	36	5	41	-	

#### **Statistics**:

### 2. Acceptance/Rejection Rate: 2015-2022

Year	of pap Ibmitte	No. of papers rejected	Rejection %	Papers withdrawn or removed	of pape ccepted	Ac	cepted %
2015	662	311	47%	164	187		28%
2016	619	331	53%	99	189		31%
2017	637	338	53%	87	212		33%
2018	554	326	59%	58	170		31%
2019	550	361	66%	87	102		19%
2020	505	314	62%	90	101		20%
2021	397	243	61%	48	105		27%
2022	329	206*	63%*	46*	47*		14%*
2023 (5 mo)	154				4		

For papers submitted in 2022, 30 (9%) papers are still under review

#### **Statistics**:

3. Time in Process: 2015-2022

Year	No of papers submitted	Assigned to AE (days)	Time in review (days)	Submission to Editor approval (months)	Submission to publication (months)		
2015	662	14	166	10.13	14.42		
2016	619	29	142	9.61	15.35		
2017	637	61	141	9.57	14.8		
2018	554	72	146	10.24	14.19		
2019	550	33	144	9.07	13.49		
2020	505	11	134	7.03	12.41		
2021	397	14	129	7.81	11.38		
2022	329	9	121	7.28	9.12		

For papers submitted in 2022, 30 (9%) papers are still under review

#### **Key Points**

1. Faster Review Cycle/Faster Publication Timeline

Time taken for papers to get accepted for publication continues to improve

2. Drop in number of submissions

JDSMC will transition back to bi-monthly publication beginning in 2024; Note that JDSMC was a bi-monthly publication prior to 2015.

3. Special Issue: Energy in Smart Infrastructures: Storage and Utilizations – September 23, Guest Editors: Satadru Dey, Donald Docimo, Yuanyuan Shi, Herschel Pangborn

4. Impact Factor – has increased slightly, still low 1.30 (2019); 1.37 (2020); 1.64 (2021)

5. Kalman Best Paper Award – 20 Papers nominated by AEs from papers published in 2022

6. From 2024, JDSMC will accept joint submissions with MECC

7. Editor Term Expires – July 2024



# **Mechatronics**

# Editor-in-Chief Status Report (05/23)

## Huijun Gao

hjgao@hit.edu.cn

### **Executive Summary:**

- YTD original submissions: 751
- YTD original submissions to TMECH/AIM 2023: 104 (179 in 2022)
- 2021 IF: Web of Science: 5.867 (2020: 5.303); Scopus: 10.5 (2020: 11.3)
- H-Index: 149 Impact Factor D.01782 Ligenfactor Article Influence Score Score Diversed by Scopus Scop

## 2023 Management Committee

	2021	2022	2023
Chair	Hiroshi Fujimoto (IES)	Kyujin Cho (RAS)	Jingang Yi (DSCD)
Treasurer	Aaron Dollar (RAS)	Jun Ueda (DSCD)	Tomoyuki Shimono (IES)
Secretary	Jun Ueda (DSCD)	Michael Ruderman (IES)	Heiki Vallery (RAS)
Members	Xiaobo Tan (DSCD)	Heike Vallery (RAS)	I-Ming Chen (RAS)
	Kyujin Cho (RAS)	Jingang Yi (DSCD)	Xiang Chen (DSCD)
	Michael Ruderman (IES)	Tomoyuki Shimono (IES)	Michael Ruderman (IES)

Officers of the Management Committee rotate among the sponsoring societies.

## 2023 Editorial Staff



Editor-in-Chief Huijun Gao, Harbin Institute of Technology, China.



Managing Editor
 Kara McArthur,
 JWM Consulting,
 the U.S.A.

# Senior Editors (12)



**Gursel Alici** 



Seiichiro Katsura



Ya-Jun Pan



Hiroshi Fujimoto



Konstatinos Kyriakopoulos



Nikolaos Tsagarakis



Robert Gao



Yunhua Li



Jun Ueda



Marina Indri



Kenn Oldham



Qingze Zou

# Technical Editors (62)

- Silu Chen
- Xu Chen
- Hao Su
- Charlie C.L. Wang
- Chenguang Yang
- Se Young (Pablo) Yoon
- Simone Baldi
- Jonathan Hey
- Gianluca Rizzello
- Wilson Wang
- Chunhua Yang
- Jun Yang

- Houxiang Zhang
- Jianguo Zhao
- Zhiwei Zhu
- Michael Defoort
- Soo Jeon
- Wonhee Kim
- Jens Kober
- Pei-Chun Lin
- Santhakumar Mohan
- Dawei Shi
- Zeyang Xia
- Peng Yan

- Jun-hui Zhang
- Sunil Kukreja
- Alessandro Vargas
- Hae-Won Park
- Joshua Schultz
- Yue Wang
- Zhuming Bi
- Giuseppe Carbone
- Yu Gu
  - Chao Liu
  - Hungsun Son
  - Jaspreet Dhupia

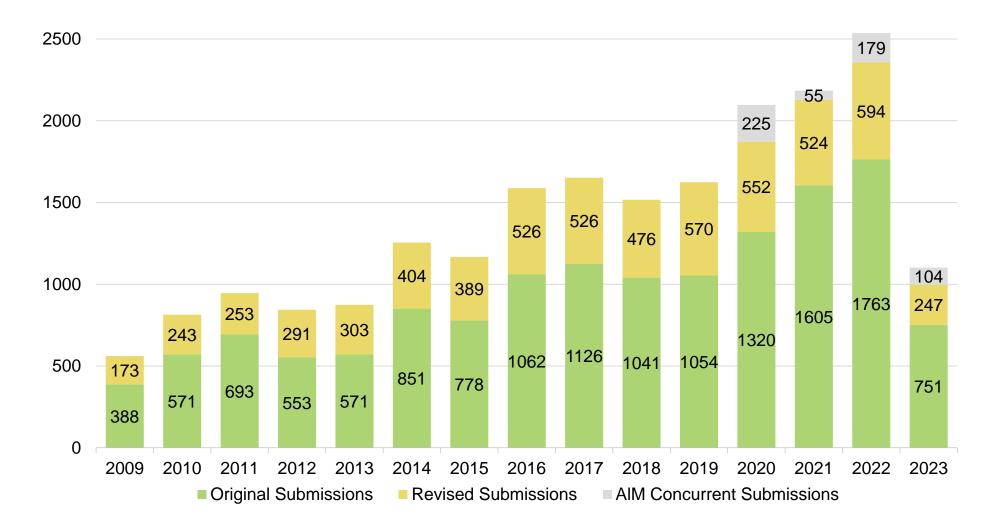
## Technical Editors (Continued)

- Erdal Kayacan
- Giovanni Berselli
- Dongmei Chen
- Shaohui Foong
- Chuxiong Hu
- Zhijun Li
- Denny Oetomo
- Adolfo Senatore
- Jinhua She

- Haoyong Yu
- Fernando Auat Cheein
- Laura Celentano
- Bing Chu
- Puren Ouyang
- Qiao Sun
- Qadeer Ahmed
- Mohammad Al Janaideh
- Jae-Ho Han

- Jinguo Liu
- Yong Liu
- Ming Xin
- Hesheng Wang
- Caihua Xiong
- Her-Terng Yau
- Xuebo Zhang
- Li Zhang

## **Submission Status**



 104 original submissions to the 2023 AIM/TMECH FS came in during 2023. There were 54 AIM revisions in 2023.

# At-a-Glance Update

#### As of May 9, 2023

Submission Statistics	YTD	MTD		Prior 12 Months	Monthly Avg. Prior 12 Months
TMECH/AIM Focused Section Papers	104	0		123	10.2
Focused Section	45	0		99	8.2
Letter	2	0		6	0.5
Focused Section Short Paper	0	0		2	0.2
Regular paper	575	42		1598	133.2
Short paper	17	0		35	2.9
Journal Statistics		МТ	ſD	Prior 12 Months	
Avg. days from submission to		3.0	0	60.6	
Avg. Reviewer turnaround tim	ne (days) - Orig	jinal	1.3	3	25.3
Avg. Reviewer turnaround tim	ne (days) - <b>Res</b>	ubmission	1.2	2	26.9
Avg. Reviewer turnaround tim	ne (days) - <b>Rev</b> i	ision	0.2	2	21.8
Avg. Time to Assign Reviewer	(days) - Origin	nal	1.7	7	11.6
Avg. Time to Assign Reviewer	(days) - Resul	bmission	0.0	D	0.7
Avg. Time to Assign Reviewer	(days) - Revis	ion	0.0	0	0.1
Avg. days from submission to		3.0	D	71.6	
Other Statistics					
Accept Ratio (prior 12 months			354 : 1561	(22.7%)	
Total Pending Manuscripts				397	

### Summary of Changes in At-a-Glance From Last EiC Report

- Regular paper submissions are up: from 1475 to 1598 over the past 12 months (current avg. 133/month)
- Avg. days from submission to first decision are up: from 59.3 to 60.6
- Avg. days from submission to final decision are down: from 71.8\* to 71.6
- Accept ratio is down: from 24.9% to 22.7%

\*Days to first decision and days to final decision are close as final decision includes immediate rejects.

#### Technical Editor Turnaround in the Last 12 Months (Days to Recommendation) (including guest editors)

250.00			
200.00			
150.00			
100.00	90 days	- atti	a a li
	Average Turnaround: 61.47 days		
50.00			
0.00			

- 16 editors had an average turnaround of longer than 90 days, BUT only 8 of them are regular TEs. The rest were guest editors and 2 AIM TE.
- The longest turnaround time was 270 days

# **YTD Publication Status**

### 2023 (Vol 28)

#### **February issue** – 606 pages, 53 articles **April issue** – 598 pages, 52 articles

 Focused Section – Focused Section on Real-Time Monitoring, Diagnosis, and Prognosis and Health Management for Electric Vehicles, 8 papers + editorial

#### June issue – 598pages, 53 articles

#### 2023 Page Budget: 3,600; Used thru Jun. issue: 1,802

# Page Budget and Backlog

#### Page budget

Yr	<b>'10</b>	'11	'12	'13	'14	'15	<b>'16</b>	'17	<b>'1</b> 8	ʻ19	<b>'20</b>	'21	'22	'23
Рр	1028	1224	1232	1832	2000	3292	3000	3000	3000	3000	3000	3300	6000	3600
lss	6	6	6	6	6	6	6	6	6	6	6	6	6	6

- In 2022 we increased the page budge to 3600 but in August we did one-time increase of 2400 pages for 2022. So total page budget is 6000 to clear long backlog for printing
- In 2023 we kept the page budget of 3600
- In 2024 we will increase the page budget to 4000
- Backlog (As of May 9, 2023)
  - 175 articles, 1679 pages

Solution to Backlog:

- From early Access to Rapid Posting (in Xplorer) wef: 12 August 2021
- Clarivate citation counts RP from 2020 in this format
- Authors can properly cite the works with DOI

# From Early Access to Rapid Posting

#### **Early Access example:**

*This article has been accepted for publication in a future issue of this journal, but has not been fully edited. Content may change prior to final publication. Citation information: DOI 10.1109/TMECH.2020.3036765, IEEE/ASME Transactions on Mechatronics* 

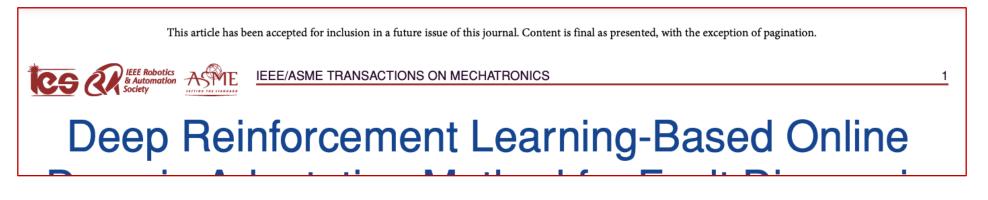
This article has been accepted for publication in a future issue of this journal, but has not been fully edited. Content may change prior to final publication. Citation information: DOI 10.1109/TMECH.2021.3059441, IEEE/ASME Transactions on Mechatronics

IEEE/ASME TRANSACTIONS ON MECHATRONICS

#### Distributed Cooperative Kinematic Control of

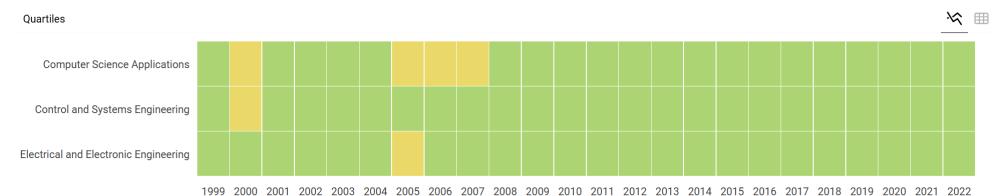
#### **Rapid Posting example:**

This article has been accepted for inclusion in a future issue of this journal. Content is final as presented, with the exception of pagination



# Impact Factor and Ranking

#### Data from 2021: Consistently in Q1



	2017	2018	2019	2020	2021
Impact Factor	3.936	4.943	5.673	5.303	5.867
Rank in Engineering, Manufacturing	3	5	7	11	12
Rank in Automation & Control Systems	10	11	7	14	15
Rank in Engineering, Mechanical	9	7	7	13	12
Rank in Engineering, Electrical & Electronics	38	36	28	37	47

Sources: Web of Science, Scopus.

### The 4<sup>th</sup> Edition of Focused Section on TMECH/AIM Emerging Topics

#### Submission: 123, Accepted 36

#### **Lead Guest Editors**

Qingze Zou, USA (TMECH Senior Editor in Charge) Garrett Clayton, USA, AIM 2023 Program Committee

#### Guest Editors (2-year term from 2022 to 2023)

Giovanni Berselli, Italy Doug Bristow, USA Dongmei Chen, USA Zheng Chen, China Bing Chu, UK Cédric Clévy, France Kayacan Erdal, Denmark Hosam Fathy, USA Markus Grebenstein, Germany Kazuaki Ito, Japan Soo Jeon, Canada Chao-Chieh Lan, Taiwan Kam Leang, USA

Weihua Li, Australia Yaoyu Li, USA Chris Manzie, Australia David Naso, Italy Jinghua She, Japan **Barys Shyrokau**, NL Tomoyuki Shimono, Japan Tarunraj Singh, USA Mahdi Tavakoli, Canada Ming Xin, USA Jianyong Yao, China Jingang Yi, USA Li Zhang, China Lei Zuo, USA

# **Focused Sections**

#### **Session closed**

- Design, Modeling, Learning and Control for Bimanual Manipulation Mechatronics
  - Lead guest editor: Aude Billard (EFPL, Switzerland)
  - Submission: 1 Sep. 2022
  - Termination: 19 Jan. 2023 (This FS had been terminated due to long delay and some problems in review process)

#### To be published

- Compliant Mechanisms for Mechatronics
  - Lead Guest Editor: Giovanni Berselli (University of Genova, Italy)
  - Submission: 1 March 2023
  - Publication: Dec 2023 issue

# Recruitment of Senior Editors for 2024-2025 Term

Last Name	First Name	Starting data	Ending data	Affiliation	Country	Main Society
Alici	Gursel	Jan-20	Dec-23	University of Wollongong	Australia	RAS
Kyriakopoulos	Konstantinos J.	Jan-20	Dec-23	National Technical Univ of Athen	Greece	RAS
Zou	Qingze	Jan-20	Dec-23	Rutgers University	USA	ASME
Gao	Robert	Jan-20	Dec-23	Case Western Reserve Univ	USA	ASME
Li	Yunhua	Jan-20	Dec-23	Beihang University	China	IES

The second batch senior editors on board in 2020, Gursel Alici (RAS), Konstantinos J. Kyriakipoulos (RAS), Qingze Zou (ASME), Robert Gao (ASME), Yunhua Li (IES) have reached the end of their 2nd term by 31 Dec 2023.

RAS needs to put up 2 Senior editors for 2024-2025 term. ASME DSCD needs to put up 2 Senior editors for 2024-2025 term. IES needs to put up 1 Senior editor for 2024-2025 term.

According the rules, the nominations from the societies need to have at least 1.5 times the available positions for MC to select. Thus, RAS and DSCD need to provide 3 - 4 names for SE candidates, and IES needs to provide 1 - 2 names for SE candidates.

# Recruitment of Senior Editors for 2024-2025 Term

#### **Key Considerations for Senior Editors**

- AE of RAS, IES, ASME DSCC related journals before. (The best would be former TMECH TE or Focused Section Lead Guest Editor)
- Publication in TMECH before is a must.
- AIM conference Editors would be a plus.
- AIM conference paper should be a must as well.
- Associate and Full Professor (or US equivalent)
- The number of TMECH areas covered should be no less than five (in order to help identifying new TE)
- balance geographical locations and gender, etc

# Recruitment of Senior Editors for 2024-2025 Term

#### Timeline:

#### Society nomination reaches TMECH EiC - 30 September 2023

- EiC screening and interviewing all candidates 31 October 2023
- TMECH MC to make final decision mid of Nov 2023
- New SE briefing by EiC late Nov 2023
- New SE starts assigning new papers and retiring SE do not receive new paper assignment on 1 Dec 2023 (soft ending)
- Retiring SE will be given 2 months to clear papers at hand till 31 Jan 2024 (hard ending)



# THANK YOU !

# ASME LETTERS IN DYNAMIC SYSTEMS AND CONTROL

Peter Meckl Technical Editor, Letters-DSC

Presentation at 2023 ACC, May 31, 2023

# **Current Published Issues**

Issue	# of Papers	# of 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	7	61
2022 Totals	37	262
Jan 2023	6	45

\*Stats as of 5/26/2023

# **Review Statistics**

Year Submitted	Total Number of Papers Submitted	Total Number Papers Rejected	Rejected Paper %	Total Number of Papers Withdrawn	Total Number of Papers Accepted	Accepted Paper %
2019 (DSCC)	28	4	14%	0	24	86%
2019 (other)	12	9	75%	1	2	17%
2019 (Total)	40	13	33%	1	26	65%
2020 (DSCC)	28	6	21%	0	22	79%
2020 (other)	50	28	56%	4	18	36%
2020 (Total)	78	34	44%	4	40	51%
2021	50	21	42%	7	22	44%
2022	44	22	50%	5	17	39%
2023*	15	4	40%	3	3	30%

\* 5 2023 papers still in progress as of 5/26/2023

# **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	39	7	48	11	4	2	2.027	3.398	5.535
2023*	12	11	35	7	10	1	0.796	1.544	0.633

\*Stats as of 5/26/2023

# **Editorial Board**

**Garrett M. Clayton** Levi D. DeVries Murat Inalpolat Kam K. Leang Alexander Leonessa Wen-Chiao Lin Yen-Chen Liu Loucas Louca Javad Mohammadpour Velni Santhakumar Mohan Peiman Naseradinmousavi **Diane Peters Biswanath Samanta** Reza Tafreshi Qian Wang Zhen Zhang Guoming (George) Zhu

Villanova University, USA United States Naval Academy, USA UMass Lowell, USA The University of Utah, USA Virginia Tech., USA GM Global R&D, USA (Kettering Univ. as of June 2) 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



- The number of unsolicited papers to the Letters is still quite low. I've advertised the Letters in the DSCD newsletters but need to do more to encourage authors to submit to the Letters. Conference papers from AIM and MECC should help.
- 2. It's still taking longer to process papers than I'd like. I will keep working on this.
- 3. I could still use more diverse AEs, i.e., more women, more geographic diversity, and better coverage of technical areas.

# **Future Plans**

- 1. Work with AIM and MECC organizers to invite papers from those conferences (now in place).
- 2. Solicit papers for the Letters, esp. review papers.
- Identify authors in emerging areas to submit papers. See next slide to submit special issue proposals.
- 4. Although the current number of AEs is adequate for the number of papers coming in, with papers from AIM and MECC, I could use more AEs. I will try to identify AE candidates to better cover emerging technical areas, as well as more women, international candidates, and industry members.

# 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

# 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 May 31, 2023



research, review, and publication experiences
 We need to start looking for AEs for next
 3-year period since 14 out of 28 AEs cannot be appointed for the 3<sup>rd</sup> term

# The number of Associate Editors reached a peak in early 2023 with 28. Currently, there are:

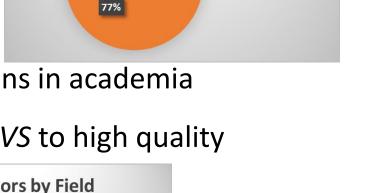
Associate Editors

- 12 AEs serving their 1<sup>st</sup> term
- 12 AEs serving their 2<sup>nd</sup> term
- 2 AEs in the nomination process for their 2<sup>nd</sup> term
- Only 2 AEs have declined a 2<sup>nd</sup> term due to other obligations in academia

○ JAVS began with 20 Associate Editors in 2020 spread across all three areas (ground, air

& space, water) and fields (academia, government & military, industry).

This high retention rate shows the continuing dedication of JAVS to high quality research, review, and publication experiences.
 Associate Editors by Field



Internationa

USA

**Associate Editors by Region** 

23%



# 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
- We need more members for the Advisory Committee contact Vladimir if you have suggestions



# Journal Metrics

#### • Papers Submitted:

- Under Review: 12 (7.27%)
- Accepted: 44 (26.67%) decreased from 29%
- Rejected: 79 (47.88%) no change from 47%
- Removed: 14 (8.48%)
- Withdrawn: 16 (9.70%)

#### • Countries Represented : 25 – 4 new countries

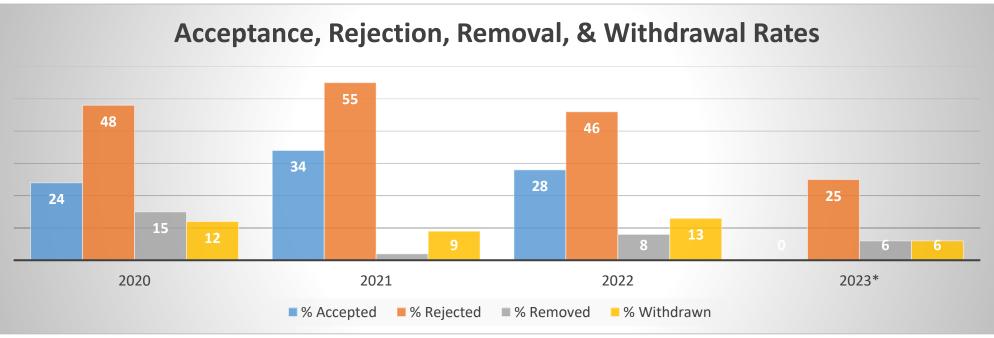
 Algeria, Brazil, Chile, China, Croatia, Egypt, France, India, Iran, Israel, Italy, Japan, Lebanon, Mexico, Morocco, Pakistan, Saudi Arabia, Spain, Sri Lanka, Taiwan, Tunisia, Turkey, Uganda, United Kingdom, United States

#### • Time in Process:

- Average Time from Submission to Technical Editor Decision:
  - 2020: 3.590 months
  - 2021: 3.293 months
  - 2022: 3.131 months
  - 2023: 0.350 months (as of 5/12/2023)
- Average Time from Submission to Publication:
  - 2020: 12.333 months\*
  - 2021: 9.987 months
  - 2022: 7.367 months
  - 2023: not yet available (as of 5/12/2023)



# Journal Metrics



\*As of 5/12/2023

- Acceptance and rejection rates began strong in 2020 (24% and 48%, respectively), increasing in 2021 (34% and 55%) with the rise in the previous year's submissions completing the review and publication process.
- While these rates have dipped slightly in 2022 (28% and 46%), returning to a similar level in 2020, these rates demonstrate JAVS' continuing commitment to publishing high quality, cutting edge research.

SETTING THE STA

# Advisory Committee Meeting Associate Editor Meeting

Targets for 3rd 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 – 2023

The time in process has steadily decreased from 2020 to 2023 and we are within range of our 73-day goal for the remainder of 2023.

Task	Target Duration	2020	2021	2022	2023
Submission to AE assignment.	Within 5 days	15 days	7 days	18 days	6 days
Time in review.	Within 35 days	94 days	81 days	73 days	34 days
AE submits recommendation.	Within 3 days	26 days	16 days	13 days	5 days
Final decision made by Editor.	Within 5 days	11 days	5 days	5 days	4 days
Total Time in Process	Within 73 days	146 days	114 days	109 days	49 days
					AST

SETTING THE STANDARI

# 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, 2023
- 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

Activities

- 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

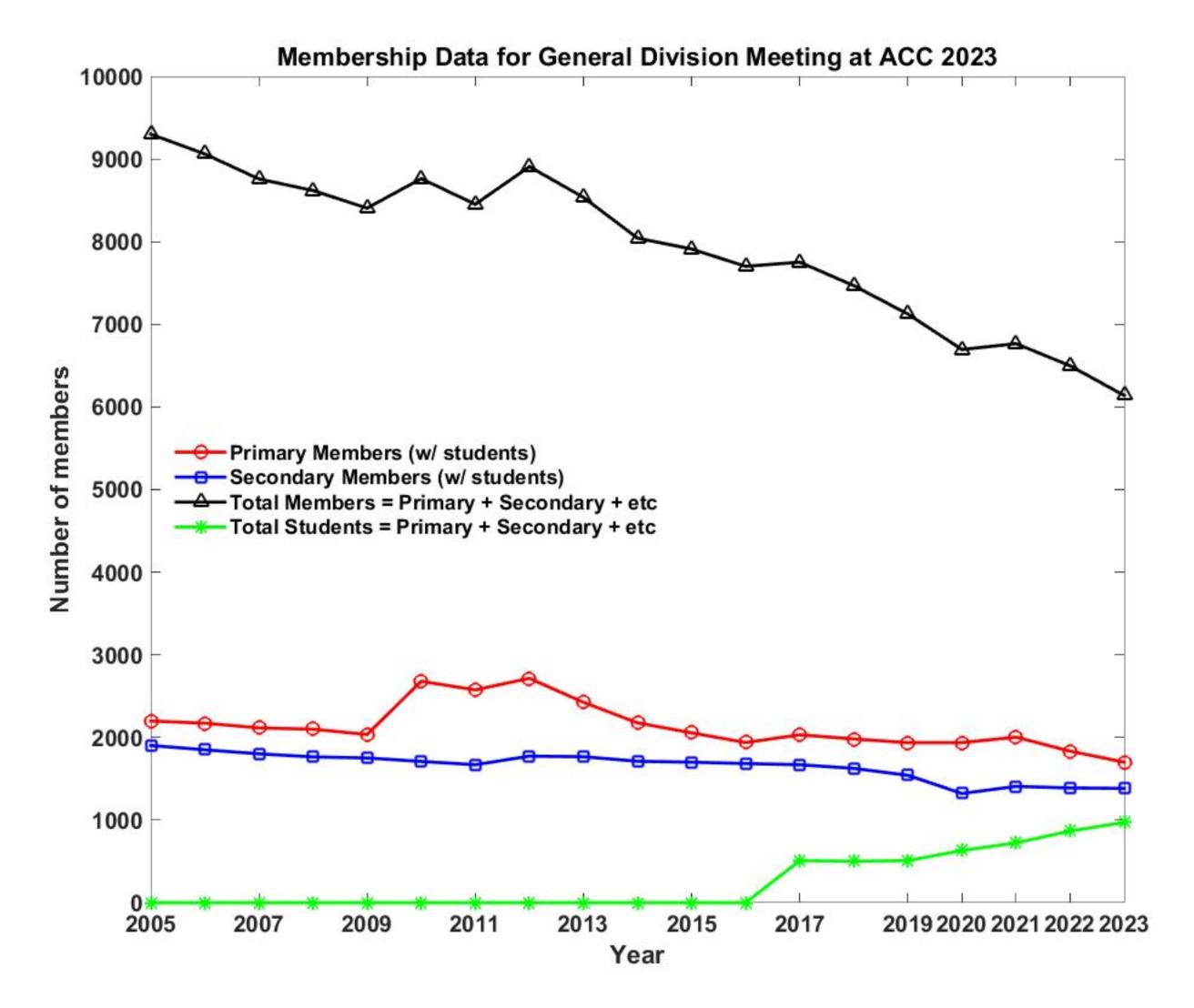
- ✓ Special Issue on Modeling and Simulation of Autonomous Ground Vehicles 2022 (published)
- ✓ Special Issue on Quantum Engineering for Autonomous Vehicles 2024 (in progress)
- ✓ Special Issue on Advanced Vehicle Technologies 2023 (in discussion)
- ✓ Deep Learning Assisted Computer Vision in Autonomous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





Vladimir Vantsevich vvantsevich@wpi.edu





# DSCD General and ExComm Meetings (Webmaser Updates, ACC 2023)

Alireza Mohammadi

Assistant Webmaster to Diane Peters (Jul. 2021-Oct. 2022)

Webmaster (Nov. 2022-Jul. 2023)



- The phase-out of the ASME Communities webpages is now complete and the new division webpage is completely operational.
- We provided the ASME HQ with a collection of keywords (using MECC and ACC keywords) for search engine optimization (SEO).
- The webmaster in collaboration with the ASME HQ points of contact
- We have created a spreadsheet through which the webmaster can communicate the list of desired changes with the ASME HQ points of contact (Barbara Zlatnik). Example: You could create a template for the TC's that has areas for them to fill out:

#### TC Name Description Leadership Awards Anything else you can think of.

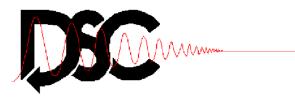
<u>Get Involved</u> > <u>Technical Divisions</u> > <u>Technical Division Pages</u> > Dynamic Systems & Control Division

https://www.asme.org/getinvolved/technical-divisions/technicaldivisions-community-pages/dynamicsystems-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.





• New webmaster: Satadru Dey, taking over in July 2023

 Alireza and Satadru will be working together for a smooth webmaster transition.

