



Experimentally Speaking...

VOLUME 14 | ISSUE 2

JULY 2023 | SEM.ORG

Message from the President



Raman Singh, SEM President, 2023-2024

FRIENDS, I AM HUMBLLED and honored to stand here with you and start my term as the 2023–2024 president of the Society of Experimental Mechanics. I attended my first SEM as a graduate student in 1992, and if someone had told me then that someday I would be standing here laying out the goals and appointments for the society as the incoming president, I would have said that they were delusional.

I remember my experience at that first SEM meeting quite well. I joined SEM because my graduate advisor suggested that it was the thing to do, so I showed up at the conference with my paper to present along with other graduate students from his group. It was exciting to meet and talk to the academic leaders whose papers I was reading as I started on my graduate career. The technical presentations were interesting and I went from session to session to listening to as many talks as I could. It was a bit nerve racking to present my own research in a room full of what were then strangers, but I came back with great feedback and made some new friends. It was an external validation of my own research. This first experience led to me coming back year after year, and now, I bring my own graduate students to present, listen, interact, and network.

Through my years of being involved in various organizational activities for SEM, including the technical divisions, research and education committees, the executive board, and most recently the president-track, I have developed a deep appreciation for the tremendous amount of work that goes on behind the scenes to keep the society functioning and thriving. The

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staff, Nuno, Kristin, Jon, members of the executive board, and the TD leadership give a lot of their time to make all this possible. It is all this work that continues to deliver value to our members year after year.

In taking over the position of the president, I would like to thank Jim De Clerck for his service as president over the last year. His efforts in ensuring greater coherence between various constituencies of SEM, including the IMAC community, has led to a more collaborative environment. Jim and other past presidents continue to support the mission of SEM as we go forward.

As clichéd as it may sound—the world is a much more complex place than the 30 odd years ago when I first became a member of SEM as a young graduate student. We have the pressures of a post-pandemic society,

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climate change, push for decarbonization, political and economic instability, and the rise of AI, just to name a few things. This provides us with a great opportunity to respond, inform, and lead in addressing these challenges from a scientific and engineering perspective. As a society, we represent a great pool of expertise, experience, and vision. In keeping with this perspective, I would like to dedicate my efforts over the next year in addressing two key areas to support and enhance the society mission.

First, is the need to continue to grow our mentoring programs for students and new members. These programs will help provide a pathway to develop the next generation of leadership for our society. As SEM continues to evolve, thrive and respond to a changing world, we will always have a need for strong leadership. It is our student members, first-time attendees, and relatively junior members of the society that will drive our future. We continue to do a great job of supporting SEMEF activities, the student-paper competition, and other first-time attendee events. Instituting a structured mentoring program will engage these groups of SEM members and provide a pathway for developing emerging leaders that will ensure that our society will continue to be in good hands.

While my very first SEM meeting was exciting, it was also challenging. I knew very few people at the conference other than my PhD advisor and fellow graduate students from my lab. Thanks to my advisor, however, mentoring led to building a network, and now I have a conference calendar that is full. I am very grateful for this mentoring and support and feel very strongly that we should continue to provide and enhance this experience for all of our members that may be new to the society. After all, one of you will be standing up here as president in 30 years, when the world's complexities have continued to grow exponentially, and my hope is that we would have done a good job in training you for that challenge.

The other area I would like to dedicate my efforts to is based on the awareness

that our world's challenges are increasingly complex. These challenges are perhaps best served by solutions that are collaborative and involve diversity of thought and participation. Our society has responded well within the broad area of experimental mechanics to contribute to technical solutions. We can continue to lead along this role while strengthening partnerships with other professional societies across the globe, seeking greater involvement and presence from funding agencies at our conferences, increasing industry participation, and continuing to strengthen the involvement of national labs. We are a small and friendly society, but we should beware of falling into the trap of becoming an echo-chamber. Conflicting perspectives on solving technical programs often lead to more nuanced solutions. Engaging other organizations that are distinct from us but complimentary enriches our own thought processes and enables us to contribute on a bigger scale.

Personally, SEM has served as an oasis for me. I have always felt welcomed here and the advice, mentoring, and fellowship I have received over the years has shaped my professional and personal life, even at my most challenging phases. Through these professional and personal experiences, I have developed immense appreciation for the incredible society that I belong to, and it is with a sense of deep gratitude that I am moved to serve as the incoming president. With this, I look forward to a great year ahead serving the society.

To continue the management of the various activities of SEM and the service to our members it is my honor and privilege as the president to appoint the following for the 2023-2024 year.

My appointments for the 2023-24 year are:

- **Nuno Lopes**, as Secretary
- **Kristin Zimmerman**, as Treasurer
- **Jim De Clerck**, Immediate Past



SEM incoming President Raman Singh (far left) at the 2023 SEM Annual Conference with Martha Grady and student attendees.

- President, as Chair of Editorial Council
- **Jason Blough**, President Elect, as Chair of the National Meetings Council
- **Junlan Wang**, as Vice President, as Chair of Technical Advisory Council
- **Eric Brown**, Past President, Chair of Administrative Council
- **Julie Harvie** (IMAC), At-Large Board Member, as Executive Board Representative to IMAC Advisory Board
- **Dario Di Maio** (IMAC), At-Large Board Member as Vice-Chair of the Research Committee
- **Jamie Kimberley**, At-Large Board Member as Vice-Chair of Administrative Council
- **Gordon Shaw**, At-Large Board Member as Vice Chair of Editorial Council
- **Martha Grady**, At-Large Board Member as Vice Chair of the Education Committee
- **Charlotte Kramer**, At-Large Board Member as Vice Chair of National Meetings Council
- **Hae Young Noh**, At-Large Board Member as Vice Chair of Technical Activities Council
- **Maarten van der Seijs**, At-Large Board Member as Vice Chair of the Applications Committee

I look forward to working with all of you.

Raman Singh
SEM President 2023-2024 ■

Message from the Director

BEING NAMED the Executive Director of SEM is a great honor and a humbling experience. It is a role that comes with great responsibility and the opportunity to make an impact. As the Executive Director, I have been entrusted with representing the Society's values and mission and look forward to serving SEM and its members. It is a privilege to be entrusted with such a position and to recognize that success is a collective effort.

It is you, the SEM members, professionals and practitioners in the field who come together to share your knowledge, research, and innovations. These annual conferences play a crucial role in advancing the field of mechanical engineering and fostering collaboration among you and your peers. I would like to thank all those who volunteer their time and effort to put together a program that allows attendees to share their insights and experiences, inspiring and providing valuable knowledge.

In addition, our success can be attributed to the strong support and involvement of sponsors and exhibitors. These organizations contribute to the conference by showcasing their latest products, technologies, and services. This creates a vibrant and dynamic atmosphere, providing attendees with valuable insights into the industry's latest advancements.

And it is with pleasure that I can say that it was truly a collective effort that led to a successful 2023 Annual Conference which was held in Orlando, Florida during the week of June 5th. Approximately 380 attendees participated in tracks including: the 24th International Symposium on Micro and Nanomechanics

(ISMAN), the 13th International Symposium on the Mechanics of Biological Systems and Materials, the 9th International Symposium on the Mechanics of Composite and Multifunctional Materials, Additive and Advanced Manufacturing, Advancement of Optical Methods in Experimental Mechanics, Dynamic Behavior of Materials, Fracture and Fatigue, Inverse Problem Methodologies, Residual Stress, Thermomechanics and Infrared Imaging, Time-Dependent Materials, Machine Learning and Data Science, Applications, Education and Research. Our Technical Division meetings were well attended and provided a starting point for next year's program as were the meetings that handle a substantial portion of the Society's annual business.

More than 125 students were among the attendees and were guided, for a second year, by our student ambassadors in a variety of social events and meet-ups. Kudos, also, to those students who took part in the Michael Sutton International Student Paper Competition.

I'd also like take the time to appreciate an individual who has been involved not only with the judging and organization of the Michael Sutton International Student Paper Competition (MSISPC) for many years, but also with service to the Society for several decades. Jon Rogers has been instrumental in the success of MSISPC and in the financial health of the Society during his 20 plus years of service as treasurer. Jon took on the task of treasurer when SEM was not on solid ground, and it is through his guidance and leadership as treasurer over those more than 20 years that we can now say we are on solid



financial ground. He was acknowledged for his service at our awards luncheon, but I would like to extend an invitation to all of you to thank Jon for all his time and the many years of service he unselfishly gave to SEM in his role.

In conclusion, I'd like to acknowledge the work that the staff puts into ensuring SEM continues to provide you with the best possible experience. Thank you to Shari, Jen, Dan and Nicole for all your hard work and dedication.

I look forward to working with all of you and welcome any comments, questions, suggestions or advice you may share by email to director@sem.org or by telephone at (203) 790-6373 or any other means.

Nuno Lopes, Executive Director

2023 SEM Annual: Awards and Accolades

June 5-8, 2023 at the Rosen Plaza Hotel, Orlando, FL

WE WOULD LIKE TO EXPRESS our gratitude to all of the attendees, organizers, chairs and exhibitors who helped make this another successful annual. SEM is able to maintain its commitment to offering a stimulating environment for the exchange of research and ideas because of their diligence and hard work.

We hope to see you in Vancouver, Washington (just outside of Portland, OR) in June 2024. ■

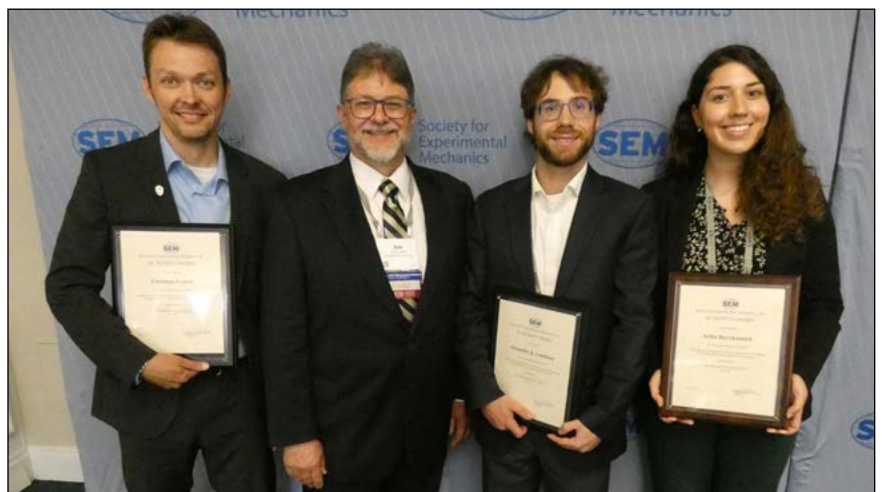


Above (clockwise): William M. Murray Medal Lecturer—Zdeněk Bažant with SEM President—Jim De Clerck; Springer/Nature Young Investigator Lecturer—Ryan Berke with Jim De Clerck; Michael Sutton International Student Paper Competition participants; M. Hetényi awardees—Christian Franck, Alexander K. Landauer and Selda Buyukozturk with Jim De Clerck;

Opposite page (top row/left to right): SEM Past Presidents—Peter Ifju, Eric N. Brown, Wendy Crone, Jose L.F. Freire, Randy Allemang, Nancy Sottos, Michael A. Sutton, Jonathan D. Rogers, Wei-Chung Wang, and Arun Shukla; M. M. Frocht Award Winner—Krishnamurthi Ramesh;

Opposite page (middle row/left to right): SEM President—Jim De Clerck presents SEM Treasurer—Jonathan D. Rogers with an award recognizing his extraordinary service and dedication to the Society; P. S. Theocaris Awardee—Arun Shukla with Jim De Clerck; G. A. Brewer Awardee—Frank DelRio; Fellow Inductee—Bo Song;

Opposite page (bottom row/left to right): 2023 SEM Annual Student Ambassadors Kazi Zahir Uddin and Bianca Davila-Montero with SEM President—Jim De Clerck; Incoming SEM President—Raman Singh presents Jim De Clerck with the Presidential Service Award; Michael Sutton International Student Paper Competition winners with Jonathan D. Rogers (left/right): 1st Place—Abhishek Gupta, 3rd Place—Piyush Wanchoo, 2nd Place—Chi Yang;



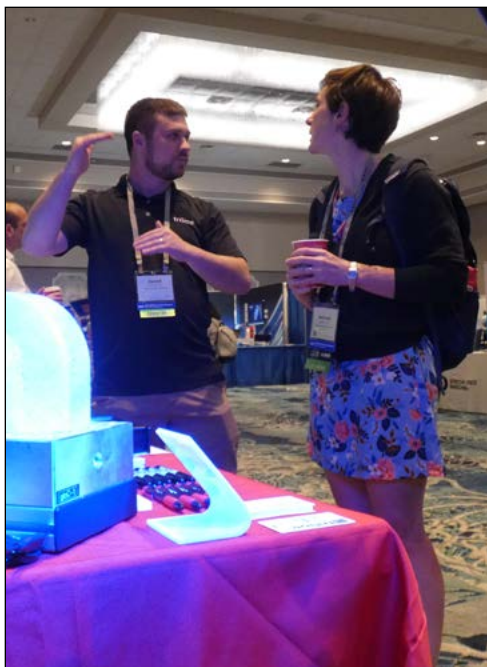


2023 SEM ANNUAL CONFERENCE

MOMENTS

ORLANDO, FL | JUNE 2023





See You Next Year at
2024 SEM Annual
in Vancouver, WA!

SEM's *Journal of Dynamic Behavior of Materials* Now Has an Impact Factor

THE LATEST JOURNAL impact factors and rankings are out from Clarivate and *JDBM* has been assigned a strong inaugural impact factor of 1.7. This assignment reflects the hard work and dedication of both current and former Editors-in-Chief, Jennifer Jordan and Eric Brown, as well as the entire slate of technical editors since the journal's beginnings.

While everyone shares in this success, we want to take time to thank the devotion and hard work of our editorial board, authors, and reviewers in furthering the study

and practice of experimental mechanics through the dissemination of high-quality manuscripts published in the journal.

JDBM is a peer reviewed archival journal on the science and engineering of material and structural response to dynamic loading focused on high strain-rate, impact, blast, penetration, and shock response. The journal publishes experimental, theoretical, modeling and simulation, and interdisciplinary work focused both on advancement of new techniques and application of techniques to new materials and structures.



We welcome you to congratulate all those involved in the journal's current and future successes.

For the latest articles, a listing of the editorial board, the journal's aims and scope or to submit an article, please go to www.springer.com/journal/40870.

We encourage you submit you high quality work in the field to *JDBM*. ■



MARK YOUR CALENDARS!

IMAC-XLIII



JANUARY 29 - FEBRUARY 1, 2024 | ROSEN PLAZA HOTEL | ORLANDO, FL

Upcoming Events

2024

IMAC-XLII | Jan. 29–Feb. 1, 2024

Rosen Plaza Hotel

Orlando, FL USA

2024 SEM Annual Conference | June 3–6, 2024

Hilton Vancouver Washington

Vancouver, WA USA

2025

IMAC-XLIII | Feb. 10–13, 2025

Rosen Plaza Hotel

Orlando, FL USA

2025 SEM Annual Conference | June 2–5, 2025

Hyatt Regency Milwaukee

Milwaukee, WI USA

