

## Women's Networking Event

The Female Researchers Chapter of the International Association for Computational Mechanics (IACM-FRC) organized a virtual Women's Networking Event on August 3<sup>rd</sup>, 2022, as part of the **15<sup>th</sup> World Congress of Computational Mechanics (WCCM 2022)**.


The event kicked off with short welcoming message by **Dr. Rekha Rao**, chair of the IACM-FRC, **Prof. Antonio Huerta**, president of IACM, **Prof. Seiichi Koshizuka**, WCCM congress chair, followed by an introduction to the Female Research Chapter of IACM by **Prof. Pania Newell**, co-chair of the IACM-FRC. They all acknowledged the importance of achieving gender balance in the computational mechanics community and commended the outstanding work of the IACM-FRC to increase the visibility of female researchers in this field. IACM-FRC has been providing travel grants for young female researchers to attend international conferences and present their research. The grants are awarded to women who might otherwise not be able to attend these meetings. This year, IACM-FRC encouraged women's participation at WCCM-APCOM2022 by awarding grants that covered the registration fees for the virtual conference. We also awarded 6 prizes for the best female presentations.

## Prof Akiko Matsuo's Talk

The networking event featured an inspiring talk given by **Akiko Matsuo**, Professor of Computational Fluid Dynamics at Keio University and the youngest member ever of the Aircraft and Railway Accident Investigation Commission of the Japanese Ministry of Land, Infrastructure and Transportation. Prof. Matsuo gave an overview of her career, highlighting the choices she made as a young pupil, and later as a student, to create her own successful career path towards becoming a leading researcher in aeronautical science in Japan.

**Takeo Elementary School (6-12 years old)**

- I was a restless, active girl.
- I loved mathematics.
- I never felt that there was any difference in ability based on gender.
- Since elementary school, I had decided to study science in high school.  
(We have to decide it during high school in Japan.)
- I wanted to be an astronaut or build a spaceship in the future.



Prof. Matsuo started her talk recalling how, like many children passionate about science fiction, she was fascinated with space travel and aspired to become an astronaut. As she often suffered from motion sickness, she could not become an astronaut, but she kept her childhood dream in

mind when making career decisions. She believes that everyone can have a successful research career if they follow what they are passionate about, especially at times when the career path seems to be diverging from the initial expectations. She developed an affinity for mathematics in elementary school, which she later pursued in her undergraduate studies. After obtaining her B.S. in Mathematics, she became interested in computational fluid dynamics, her current area of research, during her M.E. postgraduate studies in Aeronautical Engineering at Nagoya University. She completed her Ph.D. early, in just 2.5 years, and then worked as a researcher at the Institute of Space and Aeronautical Science. She attributes her success to hard work, staying positive, being focused, and removing self-doubt from mind. This is how she overcame challenging times as a student and later as a young researcher.

### Virtual Speed Mentoring

**Prof. Azadeh Sheidaei**, IACM-FRC Mentoring Officer, introduced a virtual speed mentoring initiative, where IACM-FRC will facilitate matching junior and senior female researchers working in the field of computational mechanics. This is a great opportunity for junior researchers to get career insights and learn from the experience of more senior academics. Anyone interested in participating in this initiative as either mentor or mentee, is encouraged to send their resumes to [Sheidaei@iastate.edu](mailto:Sheidaei@iastate.edu) and mention whether they are looking for a mentor, or they would like to serve as one.



### IACM-FRC Best Presentation Awards

**Prof. Jiaoyan Li**, FRC-IACM Awards Officer, presented the Young Female Researcher Best Presentation Awards for talks given at the WCCM-APCOM2022. This year's winners were awarded \$1,250 and the runner-ups \$415. The prizes were sponsored by Elsevier and awarded for the best presentations from three categories:

- **Best PhD Presentation** awarded to **Lisa Hug** from Technical University of Munich for her talk on *"Predicting Fracture in Human Bones using Phase Field Models and the Finite Cell Method"*. The runner-up



was **Jana Wedel** from Friedrich-Alexander University Erlangen-Nurnberg, for her talk on “*Geometry Influence of Particles Depositing in Realistic Human Lung Replicas*”.

- **Best Postdoc Presentation** awarded to **Dr Elizabeth Qian** from California Institute of Technology, for her talk on “*Reduced Operator Inference for Nonlinear Partial Differential Equations*”. The runner-up was **Dr Malu Grave** from Federal University of Rio De Janeiro, who presented the “*Simulation of a droplet impact in a thin film using a phase-field model*”.
- **Best Junior Faculty Presentation** awarded to **Dr Fleurianne Bertrand** from University of Twente, for her talk on “*First order least-squares formulations for eigenvalue problems*”. The runner-up for the Best Junior Faculty Presentation was **Dr Bianca Giovanardi** from Delft University of Technology, for “*Computational Modeling of Fingering in Stretched Hydrogel Cylinders*”.

Many congratulations to all our winners for their outstanding talks!

### **End of Meeting and Future Meeting**

**Prof. Marie Oshima**, from this year’s WCCM organizing committee gave a few closing remarks. She noted that the number of female participants at WCCM editions has been increasing, and this year we have achieved the largest number of female speakers in both plenary and semi-plenary lectures. Half of the plenary keynote speakers this year were women, but we still need to continue to promote women in our community, especially young women who are just starting their research careers.

The meeting concluded with **Dr. Rekha Rao reminding us of the lack of the female awardees for the last round of USACM and IACM awards. The USACM awards are coming up, so please support women in computational mechanics by nominating them.**

**Dr. Rao is the Technical Program Chair for USNCCM-17. She invited everyone** to USNCCM-17 which will take place in Albuquerque NM on 23-27 July 2023. The call for abstract submission is now open.

The recording to the virtual Women’s Networking Event can be found by following: <https://youtu.be/savyY8iJ6U0>

### **Call for Social Media Officer**

IACM-FRC is currently looking for a Social Media Officer. If you are interested in becoming a part of our community and play an active role in promoting women in computational mechanics, contact us!



