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I'm an experimental condensed matter physicist and long-term user of Argonne National Lab. I'm currently an Associate Professor of Physics and head of the high-pressure physics research laboratory at University of Utah, USA.

Education and Employment History

- Associate Professor of Physics, University of Utah, 2015-p
- Assistant Professor of Physics, University of Utah, 2010-2015
- Postdoctoral fellow, Harvard University, 2004-2009
- PhD, Washington University of St. Louis, 2004
- BSc, Sharif University of Technology, 1998

Interests:

I'm interested in quantum effects in condensed matter and exploring exotic states of matter at extreme conditions of pressure and temperature. In my research I use high pressure techniques to study and synthesize new materials with exotic quantum properties.

Goals and ideas for the user community:

APS is a great user facility and my goal is to help improve it in many areas for participation of diverse group of users and enhance the efficiency and science outcome of research done in APS. Here are examples of my ideas about some areas that improvement can help user-community

- Helping user community to write more efficient, clear and creative proposals
 - Enhancing the format of the general user proposal (including some basic guiding questions to help writing the proposals)
 - Remote workshops for informing and training groups on new methods
- Improvement of pre-arrival preparation of the users
 - Creating basic check-lists for what preparation tools to bring to the beamtime for first time and novice users.
 - o Basic remote training videos for each beamline to be reviewed prior to arrival
- Improvement of the user sample preparation areas
- Improvement of facilities during the user stays
 - Improving the guest-house accommodation and affordability for participation during beamtime (availably of smaller dorm-type shared rooms with private sections, common kitchen area,)
 - Improvement of accessible on-site food (Healthy snacks, fruits and food vending machines, and affordable healthy food for purchase)
 - o Providing access to daily child-care facility to users
 - Better transportation between the user office and the guest-house/lab

Honors and Activities:

I'm an active member of high-pressure community and served in many positions. I'm the current treasurer of International Association of High-Pressure Research (AIRAPT), was chair of the high-pressure Gordon research conference in 2016 and co-director of the IUCr Ettore Majorana school of CRYSTALLOGRAPHY UNDER EXTREME CONDITIONS in 2022. I'm an advocate for advancement of women in science and co-founder of women under pressure group.