Acceptance of the Mineralogical Society of America Award for 2013

WENDY MAO

Department of Geological and Environmental Sciences, Stanford University, 450 Serra Mall, Stanford, California 94305-2115, U.S.A.

Thank you so much, Gordon, for those kind words. Mr. President, members of the society, and guests: It is a great honor to be receiving the MSA award and also to share the stage with the Roebeling Medalist Frank Hawthorne and Distinguished Public Service Awardee Pierrette Tremblay.

Reading over the citations and acceptance speeches of the previous MSA award recipients was really fascinating. I know I sound like a broken record saying that I feel humbled looking at the list of previous awardees, but I would be remiss not to. It is a really impressive group, and frankly I feel a lot of pressure recognizing how much the previous recipients have accomplished.

On paper it probably looks like I was born into mineralogy since as a child some of my most vivid memories are of playing on the weekends in the old Geophysical Laboratory building, but I actually came to mineral physics in a bit of a roundabout manner. My older sisters and I were all convinced that we had no interest in doing what our father did. My oldest sister Cyndy is a lawyer, my middle sister Linda is an architect, but I always loved science, so I went to MIT where I majored in materials science and engineering.

With graduation looming, I felt at a crossroads in terms of what I wanted to do next. I finally decided that I wanted to apply my materials science background to geologic problems and went to the University of Chicago where I studied with Dion Heinz. Here I would like to thank my fellow graduate student cohort Guilherme Gualda and Rahul Chopra for helping to keep me sane. After getting my Ph.D., I was fortunate to receive an Oppenheimer post-doctoral fellowship from Los Alamos National Laboratory where I worked with Yusheng Zhao and Don Hickmott who allowed me near complete freedom to pursue my research interests in studying the behavior of materials at extreme conditions, which meant I was away most of the time at synchrotron sources running experiments.

For the past six years, the San Francisco bay area has been my home, and now I almost cannot imagine living anywhere else. I am acutely aware of this during February beamtimes in Chicago. Stanford has been a wonderful place to build my career, and I was lucky enough to get a joint position in two departments, Geological and Environmental Sciences at Stanford and Photon Science at SLAC National Accelerator Laboratory. There are also two synchrotrons and a free electron laser nearby. I have had the good fortune of learning from departmental colleagues and mentors many of whom are MSA Award and Roebling Medal winners. Jonathan Stebbins is three offices down from me. Louie and Gary Ernst are in the building next door. I have also been fortunate to co-teach mineralogy with Gordon Brown. The first time I lectured was pretty nerve-racking since Gordon has more mineralogy knowledge in his pinky finger than I will probably ever have, but he has only ever been extremely generous and supportive.

I would like to thank collaborators and friends in mineral physics and many other fields who have been inspiring to work with: Yingwei Fei, Jimi Badro, Chichang Kao, and Rus Hemley, as well as all the speakers and presenters who participated in the oral session (Liz Cottrell, Wendy Panero, Abby Kavner, Kanani Lee, Li Zhang, Rebecca Fischer, Wenge Yang, Yu Lin, Juhn Liou, Gary Ernst, and Paul Robertson) and the poster session. I also need to thank the many scientists working at the synchrotron beamlines without whom I would not have been able to conduct successful experiments and develop new techniques.

I would like to thank my current and former group members: former post-docs George Amulele, Maria Baldini, and Wen-Pin Hsieh; current post-docs Arianna Gleason, Eglantine Boulard, Shigeto Hirai, Yu Lin, Shihing Wang, Qiaoshi Zeng, and Zhidan Zeng. Also current graduate students Mary Reagan, Crystal Shi, Fan Yang, and Zhao Zhao and former undergraduate researcher Gabriela Farfan.

Finally I would like to thank my husband and life partner, Ben, for his love and also preemptively thank him for his patience and support when I will be away at experiments and meetings. I would also like to acknowledge a little project that I started after I turned 35, but one who has already profoundly changed my life – my son Jackson. For one thing he has made me realize that the sleep schedule at the synchrotron is not that bad. Jackson has also given me a new appreciation for my own parents to whom I would like to dedicate this award. My father is a model of someone who truly loves his work and is never complacent and satisfied resting on his laurels. It has become a bit of a joke whether he will ever retire. He always says he cannot imagine retiring since research is what he would want to do anyways if he ever had any free time. My mother is the opposite of a tiger mom and has played no less an influential role in my life. Although it must have been difficult at times as a working mother of three with a husband who always worked late hours and weekends, she never let it show. I love you both very much.

Let me wrap up by saying this is truly an honor and thank you all again.