## Acceptance of the Mineralogical Society of America Award for 2011

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Mr. President, Members of the Society, and Guests:

Thank you, Jay, for this wonderful citation, and let me just say that it is a tremendous honor for me to receive the MSA Award. Looking at the list of previous awardees, I am not at all confident about the extent to which I deserve this recognition. However, I thank MSA and accept this as a vote of confidence in my future work.

My very first introduction to Earth science came from Shigenori Maruyama at Tokyo Institute of Technology. His undergraduate lectures were so impressive for me to decide to study Earth's deep interior. And I really enjoyed the geological research on mantle rocks including some fantastic field trips to Hawaii islands, South Africa, and Tahiti islands. Then, I finally found my way when I met Kei Hirose who was to become my Ph.D. adviser. It is difficult to express my gratitude by a simple phrase, but I would certainly not be here today if I had not met him. Kei introduced me to the world of high-pressure experiments, and I learned a lot from Kei concerning his attitude toward science. I also thank my young and brilliant colleagues at Tokyo Institute of Technology for their energy and passion for pushing the Earth science forward.

After my Ph.D. thesis, I had a chance to visit Jay Bass and Stas Sinogeikin at University of Illinois. Although that visit was only for three months, Jay and Stas intensively taught me a lot about the Brillouin scattering spectroscopy, and we had very fruitful collaborations especially on the development of high-pressure Brillouin scattering spectroscopic technique combined with diamond-anvil cell, which allowed us to explore the elasticity of deep Earth's materials to Mbar pressure range. There were outstanding students and post-docs while I was there who produced a motivating and fun atmosphere. I am grateful them all, in particular Carmen Sanchez-Valle, Dmitry Lakshtanov, Jennifer Jackson, Jingyun Wang, Jean-Philippe Perrillat, and Bin Chen.

I moved then in 2006 to the Institute for Study of the Earth's Interior, Okayama University at Misasa. At Misasa, I was very fortunate to join the group of many talented scientists in highpressure mineral physics led by Eiji Ito. I have particularly enjoyed working with Ito-sensei, Tomoo Katsura, Masami Kanzaki, Akira Yoneda, and Xianyu Xue and have also learnt a great deal from young brilliant scientists such as Daisuke Yamazaki and Takashi Yoshino. Thank you for your energy and enthusiasm. During this time, I also had a great opportunity to install the



newly developed in situ sound velocity measurement system at high pressure and high temperature at the Japanese synchrotron radiation facility of SPring-8 in collaboration with Yasuo Ohishi and Nagayoshi Sata. This system enables us to measure the sound velocities and lattice parameters of Earth's deep materials under simultaneously high-pressure and high-temperature condition of the lower mantle.

After two years in Misasa, I have been employed at Tohoku University. There, I am very lucky to work especially with Ohtani-sensei who has always given valuable support and guidance. I would like to take this opportunity to express my gratitude for his continuous encouragement throughout my academic carrier, and thank you for being here today.

Finally, I thank my wife Michiyo for her patience. She has always supported me in good and bad and has always given me the best advice. Indeed, today is a really great day for me not only because of this wonderful award ceremony. If you please allow me, I would like to just say "Happy Birthday!" to my 2-year-old daughter Setoka.

Let me finish Mr. President, members of the society, and guests, by thanking once again for this award. It is a great honor.