

Preface

During the 2000 Western Pacific Geophysics Meeting (WPGM), held in Tokyo (27–30 June 2000), two sessions focused on asteroid-meteorite connections. A total of 26 oral papers and 15 posters were presented in these sessions.

The first session, “Dynamical and collisional evolution of asteroids and their delivery of meteorites,” was organized by Akira Fujiwara, Makoto Yoshikawa, and Patrick Michel, and was devoted to general aspects of asteroid evolution. The processes that might have acted on asteroids since their formation, and the missing links between asteroids and meteorites, were discussed through simulations of the orbital and collisional evolution of asteroids; observational works on asteroids, which searched for signs of past processes and remnants; comparisons between remote sensing data and laboratory simulations; and profiling of parent bodies from analysis of extraterrestrial samples.

The second session, “Understanding asteroidal surfaces for sample return missions: Through meteorite analysis, ground observation and in-situ measurements” by Tomoki Nakamura, Hajime Yano, Hideyasu Kojima, and Michael E. Zolensky, summarized current views on the formation and evolution of asteroidal surface materials. The session consisted of a timely report of the NEAR-Shoemaker observations, the scientific goals of the MUSES-C mission, the implications for asteroidal surfaces derived from studies of meteorites and cosmic dust and laboratory experiments, and information from ground observations.

Following a previous Earth, Planets and Space (EPS) special issue on “Asteroids, Dust, and Ring Particles,” which was devoted to papers presented in 1998 WPGM sessions that focused on small bodies and dust in the solar system (Sasaki, 1999), this special issue consists of eight papers that were submitted for publication and followed the regular reviewing procedure of the journal: we asked for comments from two referees chosen by the guest editors. We would like to thank the reviewers and all the authors of the published papers.

Special issue guest editors: Akiko M. Nakamura
Patrick Michel
Hajime Yano
Michael E. Zolensky

Reference

Sasaki, S., Preface of the special issue of “Asteroids, Dust, and Ring Particles”, *Earth Planets Space*, **51**, 1153, 1999.