

We are pleased to provide you the latest information about the Misasa International Symposium MISASA VII “Sample return and Astrobiology” (December 19–21, 2018).

The overall session plan for the symposium has now been formulated. The scientific scope of the symposium will include researches on terrestrial and extra-terrestrial materials collected on Earth or other bodies in the Solar system with a common goal of understanding the origin, evolution, and dynamics of the Earth and planets. We plan to discuss the latest topics on going and future solar explorations, including sample return missions, and future perspectives of the astrobiology with our approach of comprehensive geochemistry and geochronology. These themes encompass the core researches at Institute for Planetary Materials.

The deadlines for both registration and abstract submission are December 3, 2018. If you have not already done so, please register and then submit your abstract at the site shown below. The symposium program will be distributed during the symposium. For latest information, please also visit the following site: [https://sympo.misasa.okayama-u.ac.jp/misasa\\_vii/](https://sympo.misasa.okayama-u.ac.jp/misasa_vii/)

We anticipate that the symposium will bring together scientists of diverse backgrounds to deepen discussions on the latest topics and future perspectives in Earth and planetary materials science and related fields. We hope that the symposium will also serve as a forum to strengthen the capacity and roles of our “Institute for Planetary Materials” for collaborative research, and foster collaborative relationships with the participants.

We look forward to meeting you in Tottori, Japan.

## Dec 20 (Thu) Yonago BiG SHiP

9:00 -- 12:00: Active Comets: Ice and Silicates  
-- Rosetta to CAESAR, data collection and analyses  
keynote speakers: Steve Squyres

Rosetta visited comet 67P/Churyumov-Gerasimenko in 2014 and revealed the nature of a previously scarcely known solar system landscape. A new mission CAESAR plans to visit the comet again to collect icy material to be analysed by terrestrial laboratories. New details relating to the upcoming mission are discussed in context of results obtained from the Rosetta mission.

14:00 -- 18:00: Planets and Satellites: Planetary Materials  
-- ExoMars, MARS2020, and MMX  
keynote speakers: Catharine Conley, Maria-Paz Zorzano

The success of Curiosity has shown that missions to the Mars are as important for understanding our solar system as those to small bodies. The origin of Life, evolution of planets, and the relationship between moons and asteroid will be discussed in this session.

## Dec 21 (Fri) Yonago BiG SHiP

9:00 -- 12:00: Active Asteroids: Extraterrestrial Materials  
-- Hayabusa 1 and 2, implications and sample collection  
keynote speaker: Yu-ichi Tsuda, Sei-ichiro Watanabe

Hayabusa 2 has reached the asteroid Ryugu and demonstrated its unique shape. The current scientific insights and concerns on the sample collection will be discussed.

14:00 -- 18:00: Life & Astrobiology  
-- Life initiated in comets, asteroids, Earth, and Mars  
keynote speaker: Bruce Damer, Armen Y. Mulkidjanian, Stephen Mojzsis

The field of astrobiology is developing through the study of organic chemistry, geochemistry, and cosmochemistry. Expected findings relating to samples yet to be returned from comets, asteroids, and Mars will be discussed in the context of astrobiology.

### List of speakers (confirmed)

- Gray Bebout (Lehigh University)
- Kathleen Campbell (The University of Auckland)
- Queenie H. S. Chan (The Open University)
- Catharine Conley (NASA Headquarters)
- Bruce Damer (US Santa Cruz)
- Yoshifumi Inatani (ISAS/JAXA)
- Yasuhiro Kawakatsu (ISAS/JAXA)
- Mutsumi Komatsu (Waseda University)
- Martin Van Kranendonk (University of New South Walse)
- Hitoshi Miura (Nagoya City University)
- Stephen Mojzsis (University of Colorado Boulder)
- Armen Y. Mulkidjanian (Osnabruck University)
- Noriyuki Namiki (NAOJ)
- Sousuke Ohno (PERC/Chitech)
- Mark Sephton (Imperial College of London)
- Steve Squyres (Cornell University)
- Seiji Sugita (University of Tokyo)
- Satoshi Tanaka (ISAS/JAXA)
- Fuyuto Terui (ISAS/JAXA)
- Javier-Martin Torres (Lulea University of Technology)
- Yu-ichi Tsuda (ISAS/JAXA)
- Sei-ichiro Watanabe (Nagoya University)
- Maria-Paz Zorzano (Centro de Astrobiología (INTA-CSIC) /Lulea University of Technology)