

THE 26th V.M. GOLDSCHMIDT CONFERENCE®

The 26th V.M. Goldschmidt Conference of the Geochemical Society (GS) and the European Association of Geochemistry (EAG) was held June 26–July 1 2016 in Yokohama (Japan). This year, GS and EAG were joined by the Geochemical Society of Japan (GSJ) in planning a meeting with broad international appeal. In all, more than 3,650 delegates participated in the conference, making it one of the largest Goldschmidt Conferences to date.

The organizers received 3,553 abstracts. The Science Committee, theme chairs, and session leads did an outstanding job reviewing and organizing the abstracts into a coherent and well-organized program with 1,950 oral presentations and 1,710 posters. Delegates came from all over the world; the 20 countries with the largest number of participants were:

■ Japan	987
■ USA	588
■ China	494
■ Great Britain	248
■ Australia	189
■ France	188
■ Germany	166
■ South Korea	135
■ Canada	119
■ Switzerland	96
■ Taiwan	67
■ Russia	36
■ India	33
■ Italy	32
■ Denmark	31
■ Netherlands	30
■ Poland	27
■ Norway	26
■ Belgium	24
■ Israel	24



Goldschmidt2016 was held in the modern Pacific Yokohama Center.

As always, Goldschmidt was not just the product of the host societies: it truly reflects the cooperation of the entire geochemical community. Hundreds of scientists contributed to the success of the meeting by volunteering as theme and session chairs, grant application reviewers, mentors, and student helpers.



Hisayoshi Yurimoto,
Chair of the
Goldschmidt2016
Science Committee

Hisayoshi Yurimoto (Hokkaido University, Japan) chaired the Science Committee, which also included Daniela Rubatto (University of Bern, Switzerland), Roberta Rudnick (UC Santa Barbara, USA), Katsuhiko Suzuki (JAMSTEC, Japan), Derek Vance (ETH Zürich, Switzerland), and Meixun Zhao (Ocean University of China). Together they developed the 19 themes for the conference and identified more than 50 theme chairs who helped organize the scientific program.

The Local Organizing Committee, chaired by Harue Masuda (Osaka City University, Japan), combined originality with efficiency, adding a fresh Japanese flavor and numerous innovations to the existing Goldschmidt traditions. Hiroyuki Kagi (University of Tokyo, Japan), Naohiro Yoshida (Tokyo Institute of Technology, Japan), Yuji Sano (University of Tokyo, Japan), Yoshio Takahashi (Hiroshima University, Japan), Hodaka Kawahata (University of Tokyo, Japan), Takefumi Hirata

(Kyoto University, Japan), Naomi Harada (JAMSTEC, Japan), Gen Shimoda (Geological Survey of Japan, AIST), Yukihiro Nojiri (National Institute of Environment, Japan), Koshi Yamamoto (Nagoya University, Japan) and Yoko Furukawa (Office of Naval Research, Japan). were also members of this committee. Coordination with the GS was assured by Laurie Reisberg (CRPG-CNRS, France), Shuhei Ono (MIT, USA), Derek Vance, and Barbara Sherwood Lollar (University of Toronto, Canada) of the liaison committee. We'd also like to thank Cambridge Publications and Convention Linkage for the seamless organization.

The daily plenary talks highlighted some of the most interesting developments in their respective fields. On Monday (June 27th), Satoshi Utsunomiya (Kyushu University, Japan) presented "Challenging Radionuclides in Environment at the Atomic Scale: Issues in Waste Disposal and Fukushima." On Tuesday (June 28th), Terry Plank (Lamont Doherty Earth Observatory of Columbia University, USA) discussed "The Volatile Input to Volcanoes and Eruption". For Wednesday's Plenary Lecture (June 29th), EAG President Liane G. Benning (German Research Center for Geosciences GFZ, Germany and University of Leeds, UK) spoke on "Why Greenland Melts: A Geo-Bio-Interface Perspective". On Thursday (June 30th), Shogo Tachibana (Hokkaido University, Japan) delivered the 2016 Paul W. Gast Lecture on "Chemical Evolution of the Solar System: Laboratory Experiments and Small-Body Explorations". Finally, on Friday (July 1st), Vickie Bennett (Australian National University) presented "Deep Time, Deep Earth: Revealing Earth's Early History". Most of the talks are available online at youtube.com/user/goldschmidtconf.

We'd also like to congratulate again the recipients of the GS, EAG, GSJ and Shen-Su Sun Foundation awards and medals. A full list of these winners can be found at <http://goldschmidt.info/2016/medalsView>.

STUDENT PROGRAMS AND SUPPORT

Preparing the next generation of scientists for successful careers is a key component of every Goldschmidt conference. This year's meeting built on successful initiatives from previous years and added new programs specifically meant for students and early career delegates. The mentor program continues to be one of the most popular parts of the conference. Hundreds of students and post-docs were matched with experienced scientists who helped them navigate the complexities of a large, international conference. Thanks to everyone who served as a mentor this year!

Students could also participate in "Meet the Plenary" luncheons. These small, informal sessions immediately following the plenary lectures allowed students to interact with several of our most accomplished scientists.

New for 2016, the Geochemical Society and the Local Organizing Committee planned a series of student-oriented workshops on Sunday (June 26th). Leading geochemists presented short courses on cosmochemistry, isotope geochemistry, palaeoclimatology, and high-pressure geochemistry. Publishing experts offered a workshop on the nuts and bolts of preparing research for journal publication. Another session gave non-anglophone students an opportunity to practice their oral presentations with young scientists who had excellent English skills. All of these programs were offered to students for a nominal fee thanks to the support of sponsors Nu Instruments Japan, the Japan Agency for Marine-Earth Science and Technology (JAMSTEC), and publishers Elsevier and John Wiley and Sons.

To encourage the participation of as many students and early career scientists as possible, the conference awarded more than 150 grants and waived registration fees. Special thanks go to the sponsors of these grants: the Science Council of Japan, JAMSTEC, National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), Elsevier, the Tokyo Geographical Society, and donors to the GS student travel fund.

NEW LECTURE IN BIOGEOCHEMISTRY

The GS launched a major new lecture this year following a gift from an anonymous donor. The Endowed Biogeochemistry Lecture will bring added attention to the important field of biogeochemistry through an annual keynote talk at the Goldschmidt conference. Prof. Antje Boetius of the Alfred-Wegener-Institut, Helmholtz Centre for Polar and Marine Research in Bremerhaven (Germany) and the University of Bremen presented the inaugural lecture entitled, "Effects of the Declining Sea-Ice on the Arctic Ocean Ecosystem: Life Matters." The well-received talk was recorded and is now available on the GS website. The society will seek nominations this winter for the 2017 lecture.



Prof. Antje Boetius delivers the Endowed Biogeochemistry Lecture on 28 June 2016

INGERSON LECTURE

This year, the F. Earl Ingerson Lecture (named after GS founder F. Earl Ingerson), which in the past has usually been given at the Geological Society of America's annual meeting, was held for the first time at the Goldschmidt conference. This year's lecturer was Tim Lyons (University of California – Riverside, USA), who spoke on "A Decade of Progress in Studies of Trace Metals in the Early Oceans".

MEDIA COVERAGE



An episode of the BBC World Service program *The Forum* is recorded during Goldschmidt2016.

Goldschmidt features some incredible science, and to share some of it with the wider world, the conference undertook a media effort. Press officer Tom Parkhill developed press releases on topics including:

- Controlled Colorado River (USA) flooding released stored greenhouse gases
- Crystal movement under Mount St Helens (Washington, USA) may have indicated that the 1980 eruption was likely
- Fukushima (Japan) and the oceans: What do we know, 5 years on?
- Gas causing ground to rise near Bay of Naples (Italy) volcano
- Huge helium discovery 'safeguards future supply for magnetic resonance imaging (MRI) scanners'
- Radioactive cesium fallout on Tokyo (Japan) from Fukushima concentrated in glass microparticles
- Researchers find surface of Mercury arose from deep inside the planet

The releases led to articles in a number of major publications around the world, such as the *New York Times* (in the USA), the *Guardian* (in the UK), *Der Spiegel* (in Germany), and *Le Monde* (in France). Additionally, the BBC World Service brought *The Forum*, a weekly radio program, to Goldschmidt. The episode recorded during the conference, "The Unpredictable Planet: Understanding Volcanoes and Earthquakes" featured Goldschmidt delegates who are experts in their field discussing the topic for the program's worldwide audience. A recording is available at www.bbc.co.uk/programmes/p041svq3.



Some of the student helpers who kept Goldschmidt2016 running smoothly.

WORKSHOPS AND FIELD TRIPS

The Goldschmidt Conference offered a number of opportunities for additional learning before and after the meeting itself. Field trip destinations in Japan included Mt. Fuji, the Izu-Oshima Island volcano, the Izu collision zone, and the Hishikari and Akeshi epithermal gold deposits. More than a dozen workshops covered a variety of scientific and professional topics. Workshops were also held during the week on important subjects such as gender equality in the Earth sciences and research funding programs.



The conference offered cultural programs every evening, such as this performance by an ensemble of geochemists.

SPONSORS AND EXHIBITION

A successful Goldschmidt would not be possible without the support of generous sponsors. The GS and Local Organizing Committee are grateful to Nu Instruments Ltd, Thermo Fisher Scientific (Bremen) GmbH, JAMSTEC, The Geochemist's Workbench, and Isotopx for their dedication to the meeting. The City of Yokohama and the Earth-Life Science Institute (Tokyo Institute of Technology) also helped make it a success. Finally, thanks go to the many exhibitors who shared their expertise with delegates throughout the week.

If you attended the Goldschmidt Conference this summer, thank you for helping to make it the world's largest gathering devoted to geochemistry!