



## 4<sup>th</sup> International Highly Siderophile Element Geochemistry Workshop

July 11-15<sup>th</sup> 2016  
Durham University, UK

### WORKSHOP ON HIGHLY SIDEROPHILE ELEMENT GEOCHEMISTRY

The 4<sup>th</sup> International Workshop on Highly Siderophile Element Geochemistry will take place in Durham (UK) during the week commencing 11 July 2016. This event is hosted by the Durham Geochemistry Group of the Department of Earth Sciences. This specialist workshop is expected to be of 3.5 to 5 days duration and is open to all interested parties at an international level. A number of travel bursaries will be offered to support attendance of this meeting – details are available from our website: [community.dur.ac.uk/hse.ws/](http://community.dur.ac.uk/hse.ws/).

The workshop will appeal to a cross-disciplinary audience and cover analytical advances, as well as low-temperature and high-temperature geo- and cosmochemistry topics pertaining to highly siderophile elements (HSE) and allied elements. The meeting and related activities will provide opportunities for exchange between scientists of all levels, thereby offering the potential for all to accelerate knowledge/technology sharing and explore new observations that advance understanding of key geo- and cosmochemistry questions. Additionally, we anticipate the workshop will facilitate opportunities for new international collaborations to continue HSE frontier science, support overall advances within the geochemistry community, help create pathways for present and future students, and potentially provide early stage discussions to commercialize scientific applications for industry.

### THE BARRINGER FAMILY FUND FOR METEORITE IMPACT RESEARCH

The Barringer Crater Company has established a special fund to support field work by eligible students interested in the study of impact cratering processes. The Barringer Family Fund for Meteorite Impact Research will provide a number of competitive grants ranging between \$2,500 and \$5,000 to support field research at known or suspected impact sites worldwide. Grant funds may be used to assist with travel and subsistence costs, as well as laboratory and computer analysis of research samples and findings. Masters, doctoral and post-doctoral students enrolled in formal university programs are eligible. Those interested should **apply by 3 April 2016**; notification of grant awards will be by 5 June 2016. Additional details about the fund and the application process can be found at: [www.lpi.usra.edu/science/kring/Awards/Barringer\\_Fund](http://www.lpi.usra.edu/science/kring/Awards/Barringer_Fund)

### RENEW YOUR MEMBERSHIP NOW!

Please renew by March 31, 2016; after that date, a \$15 late fee will be applied. You can renew online at: <http://metsoc.meteoriticalsociety.net>

### SEM SHORT COURSE REPORT

#### *Raman, Infrared and Laser-Induced Breakdown Spectroscopy Applied to Science and Technology of the Earth and the Environment*

The Sociedad Española Mineralogía (SEM) short course on three types of spectroscopy – Raman spectroscopy, infrared spectroscopy and laser-induced breakdown spectroscopy (LIBS) – was held 3–4 November 2015 at the University of Jaén (Spain). This short course was supported by the Science and Technology of the Earth PhD program and the Chemistry PhD program at the University of Jaén and included lectures and practical sessions.

Two lectures were given by Dr. Fernando Rull of the University of Valladolid (Spain). Dr Rull is a Senior Researcher at Centro de Astrobiología, a research center that is part of the Spanish National Research Council (CSIC) and that is associated to the NASA Astrobiology Institute. Dr Rull is the principle investigator behind the Raman instrument planned with the Exomars 2018 mission, and coprinciple investigator with the Supercam instrument of the Mars 2020 mission. The first of Rull's lectures introduced the fundamentals of both Raman and LIBS spectroscopies and the instruments used to make the analyses; his second lecture concentrated on the applications of these techniques to planetary exploration, industry, and heritage. Rull showed how Raman instruments provide powerful tools for identifying and characterising minerals and biomarkers because Raman spectra are sensitive to the composition and structure of any mineral or organic compound. This capability provides direct information of potential organic compounds that might be related to present or past signatures of life on Mars, as well as for general mineralogical information and geological processes, especially water-related processes.



Practical session at the Centro de Instrumentación Científica, University of Granada.

Practical sessions took place in two locations: first, at the Centro de Instrumentación Científico Técnica (CICT) at the University of Jaén, which were supervised by Dr M<sup>a</sup> José Ayora and Dr Ana Domínguez-Vidal; second, at the Centro de Instrumentación Científica (CIC) at the University of Granada, which was supervised by Dr Nicolás Velilla. At the end, the participants had the opportunity to ask questions about how these spectroscopic techniques could be applied to their own research: some of them even took spectra from their own samples.

The participants were mainly geoscientists and chemistry students and researchers from the Spanish universities of Zaragoza, León, Salamanca, Madrid, Málaga, Granada and Jaén. The short course was coordinated by Dr Juan Jiménez Millán (SEM President) and Dr Isabel Abad (SEM Secretary). The SEM awarded five grants to help students attend.

On behalf of the participants, the SEM would like to thank all the lecturers for sharing their knowledge with our young researchers. These two days were also a great opportunity for students and senior researchers to talk to one another and establish professional contacts. The SEM hopes that the students can now apply their new knowledge to their own individual research problems, and the SEM has every intention of organizing this type of course more regularly for young scientists.