



and third examples of silica clathrate minerals found in nature. In the light of similarities in their occurrences and the sources of hydrocarbon gases included in them, as well as from the crystallochemical point of view, it is interesting to note that these three types of silica clathrate minerals known to date (melanophlogite, chibaite, and bosoiite) are isotopological to the three types of natural gas hydrates (sI, sII, and sH, respectively).

Dr. Momma also contributed to the discoveries of shimazkiite (IMA2010-085a), magnesorowlandite (IMA2012-010), minohlite (IMA2012-035), imayoshiite (IMA2013-069), iyoite (IMA2013-130), misakiite (IMA2013-131), and mieite (IMA2014-020).

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### Original Articles

**The  $K_2CO_3$  fusion curve revisited: New experiments at pressures up to 12 GPa** – Meili WANG, Qiong LIU, Toru INOUE, Baosheng LI, Samuel POTTISH, Justin WOOD, Cuiping YANG and Renbiao TAO

**In situ observation, X-ray diffraction and Raman analyses of carbon minerals in ureilites: Origin and formation mechanisms of diamond in ureilites** – Yoshihiro NAKAMUTA, Fumio KITAJIMA and Kazuhiko SHIMADA

**Ti-rich biotite in spinel and quartz-bearing paragneiss and related rocks from the Mogok metamorphic belt, central Myanmar** – Ye Kyaw THU, Maw Maw WIN, Masaki ENAMI and Motohiro TSUBOI

**Hadean detrital zircon in the North China Craton** – Zhuang LI, Bin CHEN and Chunjing WEI

### Letters

**Cation distribution in Mg-Zn olivine solid solution: a  $^{29}Si$  MAS NMR and first-principles calculation study** – Masami KANZAKI and Xianyu XUE

**Self-diffusion of water molecules confined between quartz surfaces at elevated temperatures by molecular dynamics simulations** – Satoru ISHIKAWA, Hiroshi SAKUMA and Noriyoshi TSUCHIYA

## ENCIENDE-SEM AWARD

The ENCIENDE-SEM Award recognizes the best educational initiative or innovative action that promotes scientific careers in the field of the Earth sciences among children and young students at the primary and high school levels, especially in mineralogy, petrology and geochemistry. In 2016, this award has gone to the project “**Con los pies en el suelo. Geoquímica del suelo**” [With your feet on the ground. **Soil geochemistry**], which was carried out by students at the IES Carpetania school in Yepes, Toledo. The project was coordinated by **Paloma Sepúlveda**, a teacher at the school, who has been very successful in familiarizing the students (15–16 years old) with the true wonder and nature of soil, something the general public know almost nothing about. The project coincided with the celebration of the International Year of Soils 2015. Soils support land life on our planet; they are very rich, full of life, and are a constantly changing ecosystem. And we humans need it for obtaining food, building materials and medications. It has very important functions in climate regulation and as a maintainer of equilibrium with water.



Student participants in the soil project prepare their samples.

Working in the lab.

The students analysed different soil samples in the laboratory and interpreted the results. According to Paloma Sepúlveda, the most important thing was not the results obtained from laboratory work but the experience that students acquired in handling materials and becoming aware of the vital role that soils play in ecosystems, conservation issues, and the needs of man. For more information, go to <http://proyectosayc.wix.com/conlospiesensuelo>.



The ENCIENDE-SEM Award, sponsored by the Spanish Mineralogical Society (SEM), is valued at €2,500 and will be given at the next SEM meeting in 2017.

## SEM STUDENT GRANTS IN 2016

SEM awarded 7 student grants in 2016, totaling €3,000. Congratulations to **Sergio Carrero Romero** (Universidad de Huelva), **Pablo Cruz Hernández** (Universidad de Huelva), **Pablo del Buey Fernández** (Universidad Complutense), **Javier García Rivas** (Universidad de Salamanca), **Alba Lozano Letellier** (Instituto de Diagnóstico Ambiental y Estudios del Agua, CSIC), **Cristina Ruiz Agudo** (Universidad de Münster) and **Catalina Sánchez Roa** (Universidad de Jaén) for winning an SEM grant!