



## Sociedad Española de Mineralogía

[www.ehu.es/sem](http://www.ehu.es/sem)

### CRYSTALLISATION IN THE SCHOOL

'Crystallisation in the School' is an initiative of La Factoría (a Consolider Ingenio 2010 project) working in collaboration with the Parque de las Ciencias (Granada, Andalusia), the Laboratorio de Estudios Cristalográficos (LEC-CSIC-UGR) and Science on Wheels (Puerto Rico). Its aim is to promote the appreciation of crystallisation and related sciences among high school students. This educational programme was held for the first time throughout the 2008–2009 school year and involved eight high schools in the Andalusia region (Spain) and five high schools in Puerto Rico. The main goals were (1) to popularise the subjects of crystallisation and crystallography among high school students; (2) to bring together students, teachers and researchers around a highly attractive topic for students; and last but not least (3) to evaluate the degree to which fundamental concepts about crystals and crystallisation were assimilated by students while growing crystals in the laboratory and at home. The latter is a research project performed by PhD student Rosa Santisteban and led by Prof. Juan Manuel García-Ruiz, in the framework of "La Factoría de Cristalización". The same research study is also being performed in the high schools of Puerto Rico in cooperation with Prof. Juan López-Garriga.



FROM LEFT TO RIGHT, Juan Manuel García-Ruiz (director of LEC), Fernando Nieto-García (vice-president of SEM) and Drs Juan López-Garriga (University of Puerto Rico at Mayagüez) listen carefully to the explanations of high school students about their crystal-growth project.

The work carried out by the high school students and teachers during this first year came to an end with the First Competition of Crystallisation in the School (<http://megacristales.com>), which was hosted at Parque de las Ciencias in Granada on 23 June 2009 and by Science on Wheels in Puerto Rico on 6 May 2009. At these events, the finalists from each participating school presented their best-grown crystals and their results in posters, in a similar way to that of a professional scientist. Three top prizes were awarded in each of four categories: best crystal composition, best single crystal, best poster presentation and best science behind the working plan.

This initiative was carried out under the auspices of the Mineralogical Society of Spain and other relevant Spanish scientific societies. Due to the success of this first edition, Crystallisation in the School will be repeated during the next academic year, when it will be extended nationally throughout the whole of Spain and Puerto Rico.

Further information can be found at the La Factoría website (<http://lafactoria.lec.csic.es/lafactoria>).



## International Mineralogical Association

[www.ima-mineralogy.org](http://www.ima-mineralogy.org)

### IMA OUTREACH COMMITTEE

The IMA council recently created an outreach committee, with the responsibility of looking after an interactive website that manages a list of mineral properties, such as IMA-CNMNC-approved names, chemical compositions, crystal structures, Raman spectra, etc. Constructed by a professional programmer funded by the RRUFF project, the website can be found at <http://rruff.info/ima/>. It consists of a database controlled by JAVA software that can be downloaded onto your computer. The RRUFF project consists of a study by the mineralogy groups at the University of Arizona and Caltech to characterize all the known minerals by X-ray diffraction, chemical analysis, and Raman and infrared spectroscopy, and its data can be accessed on the web for free. It has been funded largely through the generosity of Michael Scott, founding president of Apple Computers, with some additional funding from NSF and NASA. The IMA website provides a seamless interface to the American Mineralogist Crystal Structure Database, the pages of the *Handbook of Mineralogy* (kindly provided by the Mineralogical Society of America), the experimental data of the RRUFF project, selected references from various journals, and links to MinDat and WebMin.

The committee members include Bob Downs (chair, [rdowns@u.arizona.edu](mailto:rdowns@u.arizona.edu)), Frédéric Hatert (vice-chair, CNMNC), Marco Ciriotti, and the late Ernie Nickel. Their main task is to manage the contents of the definitive list of mineral names and their chemical compositions as defined by the CNMNC and as modified from the literature. At the request of a number of mineralogical journals, the website provides a downloadable Word dictionary file that contains the proper spelling of each mineral name. A complete list of the approved minerals and their chemical formula can also be downloaded in Excel format for user-defined applications.

One of the current goals of the committee is to gather the original descriptive articles for each mineral as PDF files. This project has received the cooperation of a number of journals, both societal and private, which allow these PDFs to be available to the public. These currently include publications of the American, British, Canadian, French, Italian, Japanese, and Russian societies, as well as *Zeitschrift für Kristallographie*, *New Data on Minerals, Gems & Gemology*, and *The Mineralogical Record*. Another goal is to create various classification schemes that permit one to easily assemble the minerals into various groups. For example, groups can include biological minerals, those found in meteorites, gemstones, isostructural minerals, those commonly mentioned in textbooks, etc.

In the near future the committee would like to get others involved in the database, especially members of the IMA commissions and working groups and those who may be interested in helping, especially regarding improvement to content and access to the website by other databases and websites. Our goal is to ensure that correct mineralogical information is provided to the public.

**Bob Downs**

Chair, Outreach Committee  
[rdowns@u.arizona.edu](mailto:rdowns@u.arizona.edu)