

## Poster Presentation

MS68.P02

### *Crystallization Competition in the School: An innovative teaching/outreach tool*

A. García-Caballero<sup>1</sup>, F. Lahoz<sup>2</sup>, M. Cuevas-Diarte<sup>3</sup>, S. García-Granda<sup>4</sup>, P. Gómez-Sal<sup>5</sup>, V. Esteve-Cano<sup>6</sup>, J. Pasán<sup>7</sup>, S. López de Andrés<sup>8</sup>, J. García-Ruiz<sup>1</sup>

<sup>1</sup>Laboratorio de Estudios Cristalográficos, Instituto Andaluz de Ciencias de la Tierra (CSIC-UGR), Granada, Spain, <sup>2</sup>Universidad de Zaragoza, Dpto. Química Inorgánica, Instituto de Síntesis Química y Catálisis Homogénea - ISQCH, Facultad de Ciencias, Zaragoza, Spain, <sup>3</sup>Universitat de Barcelona, Dept. Cristal·lografia, Mineralogia i Dipòsits Minerals, Barcelona, Spain, <sup>4</sup>University of Oviedo, Dept. of Physical and Analytical Chemistry, Asturias, Spain, <sup>5</sup>Universidad de Alcalá, Departamento de Química Inorgánica, Madrid, Spain, <sup>6</sup>University Jaume I, Inorganic & Organic Chemistry Department, Castellón, Spain, <sup>7</sup>Universidad La Laguna, Laboratorio de Rayos X y Materiales Moleculares (MATMOL), Dept. Física, Tenerife, Spain, <sup>8</sup>Universidad Complutense Madrid, Dpto. de Cristalografía y Mineralogía, Madrid, Spain

The Crystallization Competition in the School is an innovative contest on Crystallography and Crystallization for young students aged 12-16, successfully tried in five yearly editions. During the 2013/2014 school year, the Competition is coordinated by the Specialized Spanish Group of Crystallography and Crystal Growth throughout Spain in seven hosting areas, culminating in a National Final with a selection of the best crystallization projects. Objectives: a) To stimulate scientific vocations amongst secondary school pupils through an enjoyable and enriching activity; b) To explain basic concepts of Crystallography and Crystallization taking advantage of the natural attraction of crystal growth; c) To communicate how researchers work and compete in a scientific environment; d) To bridge the gap between science and society by conveying the importance of Crystallography in everyday life. Development: 1. Training of secondary school teachers (October-November 2013). A number of workshops entitled 'Crystallography in the School' are organised to provide school teachers with specific training in Crystallography and Crystallization; 2. Laboratory work and experimental follow-up (December 2013-March 2014). The students grow spectacular large crystals using an innovative crystallization kit of ADP under the guidance of their teachers, while developing a solid understanding of the concepts involved: solubility, supersaturation, nucleation and crystal growth. Students may also develop other crystallization projects related to the formation of geodes, common salt crystallization in its different habits, and crystallization in gels; 3. Intermediate/Regional Finals (April 2014). The best crystallization projects nationwide are selected to present their crystallization projects at the National Final in Madrid; 4. National Final (10 May 2014, headquarters of CSIC). The format is similar to a 'Scientific Congress', where the students have to present a crystal model and a poster of their work. \* Organized by: GE3C, CSIC and The Crystallization Factory. \* Sponsored by: FECYT, MINECO and Triana Science & Technology.

[1] <http://www.lec.csic.es/concurso/>, [2] <http://www.facebook.com/CristalesEnElAula>, [3] [https://twitter.com/Cristales\\_Aula](https://twitter.com/Cristales_Aula)



**Keywords:** Crystallization, Education, Outreach