Poster Presentation

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Fully-dedicated website for learning crystallography at institute of physical-cchemistry rocasolano

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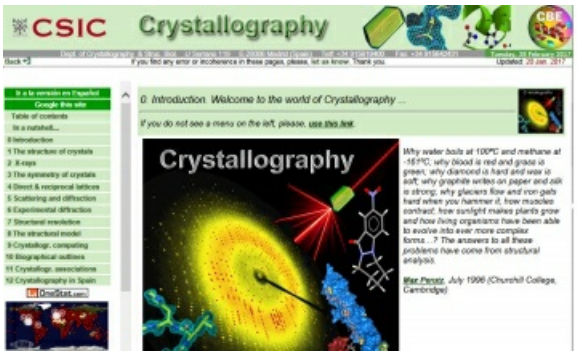
Crystallography, that underpins nearly all of the sciences today, remains relatively unknown to the general public. The International Year of Crystallography (IYCr2014) has greatly helped to raise awareness of the role that this science plays in our world, and many efforts have been made to spread the message of crystallography in various countries where scientific activity is not as well developed or as well organized as elsewhere. However, crystallography still seems to remain an unresolved matter in academic environments of even some developed countries. As an example, the American Crystallographic Association and the US National Committee for Crystallography suggested in 2006 that "perhaps due to rapid technological advances in the field of modern crystallography, there appears to be a declining number of professional crystallographers, as well as a lack of sufficient education and training in crystallography...". In this context, the Department of Crystallography and Structural Biology of the Institute of Physical-Chemistry "Rocasolano" (Spanish National Research Council, CSIC) offers a website entitled "Crystallography–Cristalografia" that occupies a space internationally recognized to learn Crystallography: http://www.xtal.iqfr.csic.es/Cristalografia/.

The different chapters of this website present the fundamental concepts of Crystallography illustrated with numerous figures and animations, as well as hundreds of external links to reliable resources of information. Among the key issues contained in this web the reader will find general chapters on the structure of crystals, X-rays, crystal lattices and symmetry, theoretical and experimental scattering and diffraction phenomena (comparing past and current developments), the methodology to solve the structure of crystals, the meaning of the structural knowledge, and many technological aspects, including computing, without forgetting the historical context of the development of this science.

This website, written in two languages (Spanish and English), was announced by the International Union of Crystallography (http://bit.ly/dHj0Q0) and selected by this institution as one of the most interesting sites for learning crystallography (http://bit.ly/1zCsBOX). It was offered as such in the commemorative web for the International Year of Crystallography (http://bit.ly/1BYMGyd), and suggested as the educational website to learn about crystals, diffraction and crystal structure determination in the brochure (http://bit.ly/1DXoqxP) prepared by UNESCO. It is also offered as one of the best learning online tools by several USA universities (see for example: http://bit.ly/guMQax, http://bit.ly/gCLbYk). Google Analytics, and other web counters directly accessible through the web page menu (ie, http://bit.ly/2bz1qfx), show that this web gets over 1,500 different page visits a day (over 500,000 page visits/year), distributed over 190 countries, but especially from USA, Mexico, India, EU and Latin American countries.

The Department is also involved in the organization of the "Macromolecular Crystallography School" (MCS2017 http://www.xtal.iqfr.csic.es/MCS2017/), an annual initiative directed to 25 graduate students and/or researchers which need a deeper insight into most advanced crystallographic techniques to carry out their research projects. Most relevant developers in the field participate as teachers in the course. The school program covers theoretical



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