

Award Ceremony and After Event

Shortly before the end of school term, on May 21, the public award ceremony was organised at the Faculty of Science, UNIGE, and all winning classes were invited to attend. After a short introduction by the president of the jury, three short incentive lectures were offered.

Prof. Radovan Černý presented the discovery of X-rays by Wilhelm C. Röntgen, the observations of Max von Laue that crystals diffract X-rays, and the opportunity for youngsters to pursue a career in science, if not in crystallography. He was followed by a fascinating talk by Dr. Jacques Deferne about the wonders of natural crystalline structures. He explained how such structures emerge from the subtle conjunction of Nature and ions, before concluding with the use of man-made crystals in industry. Finally, Prof. Alan Williams humorously demonstrated the organisation of atoms in the heart of crystals, insisting on the importance of a scientist's critical mind when using 3D visualisation programmes to better understand the microscopic dimensions of matter.

Then, all member elected classes were invited to receive their Prize from the members of the jury. For each class category, the first and second prizes were glass cubes with a laser engraving showing the 3D structure of potassium dihydrogen phosphate,^[7] while the third prize was a large ball & stick model of this crystal^[8] (see Fig. 3). The fourth prize, attributed for the originality of the crystals submitted, was a set of two scientific books on chemical elements,^[9] one of which was authored and donated by Dr. Jacques Deferne. All winning students also received a nice centimetre-sized quartz crystal. The 54 submitted crystal sets were then displayed during the friendly tea party that followed, where schoolchildren and researchers of the Faculty of Science shared their experience.

To complete this nice story, the crystal sets were also exhibited in a large showcase of the Geneva Museum of Science History during the traditional Science Fair^[10] organised every other year by the museum in the Parc de la Perle-du-Lac that attracts up to 35'000 visitors during a week-end in July.

By-products of the Contest and Rendez-vous in 2015!

At the conclusion of the event, a luxurious catalogue^[11] presenting all crystal sets that were submitted to the contest was published and sent to all participating children and schools, as an acknowledgement for the effort involved in a fancy, yet instructive and pedagogic scientific activity. An adapted version of Fig. 2 has also been selected for display in the beautiful Crystallographic e-Calendar produced by the Swiss Society for Crystallography in all four official Swiss languages and in English, and the minutes of the event have been requested by the Swiss Society

for Crystallography for publication in their official Newsletter. Finally, the contest has also been published on the website of the International Union of Crystallography (<http://www.iucr2014.org/events/competitions/crystal-growth-competition-in-geneva>).

In view of the success of this competition among Geneva classes, the Chimiscope and the PhysiScope have agreed that the International Year of Light 2015 could be another good opportunity to organise a new exhilarating contest for schoolchildren. Let's meet again in 2015!

Acknowledgements

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- [1] Special issue 'Crystallography: Past, Present, Future', *Chimia* **2014**, 68, issue 1-2.
- [2] Swiss Society for Crystallography, Calendar of events related to IYCr-2014. <http://www.sgk-society.ch/scr2014/2/>
- [3] D. Perret, 'Chimiscope: A multifaceted laboratory platform for a unique journey into (bio)molecular science' *Chimia* **2011**, 65, 872; D. Perret, 'Assembly instructions: build your own attractive chemistry platform: Experiences from the Chimiscope', *Chimia* **2012**, 66, 837; <http://chimiscope.ch>
- [4] C. Renner, 'Hands-on inspiration for science', *Nat. Mater.* **2009**, 8, 245; <http://www.physiscopes.ch>
- [5] R. Černý, 'La cristallographie sur le devant de la scène', *Le Journal UNIGE* **2014**, 87; <http://www.unige.ch/sciences/crystal>
- [6] K. Weber, 'The National Ignition Facility comes to life', *Sci. Technol. Rev.* **2003**, Sept. Issue, 4.
- [7] 3D laser engraving in glass cubes was produced by Crysalis (France); <http://www.crysalis3d.fr>
- [8] Ball-and-stick models were produced by Miramodus Limited (School of Chemistry, University of Edinburgh, UK); this company actively involves disabled people in its business; <http://www.miramodus.com>
- [9] T. Gray, 'Atomes – Une exploration visuelle de tous les éléments connus dans l'univers', Ed. P. Victoires. **2013**; J. Deferne, 'Le monde étrange des atomes', Ed. J. Deferne, **2014**, <http://www.kasuku.ch>
- [10] Nuit de la Science 2014, 'Tout ce qui brille n'est pas or', Genève, <http://www.ville-ge.ch/culture/nuit/>
- [11] The catalogue was produced by Trajets Imprimerie (Geneva); this printer shop is operated by the Fondation Trajets, which works for the integration of psychologically impaired people; <http://www.trajets.org>



Fig. 3. Members of the jury, from left to right: Prof. Černý, Dr. Deferne, Prof. Renner, Prof. Williams, with the collection of prizes (left). Detail of the 3D structure of KH_2PO_4 engraved in glass cube and as ball-and-stick model offered as prizes to the award-winning classes (right).