

Crystallography courses and industry: hand in hand across the land

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If one would use a crystallographic term to describe the current status of crystallography, one could say that crystallographers live in a dual space. One space relies on the basic principles, and this is where we exist as almost endangered species. We face decrease of regular crystallography classes at universities, and outsourcing the crystallographic theory to computer and databases. The other space is the technologically driven one, and there we are mightier than ever. Technology pushes the borders of the field, and regular crystallography classes are replaced by contemporary courses, focused on interdisciplinary science. This all makes the task of modern crystallography courses that much more complex: (i) keeping the good communication between the spaces (i) gathering and transmitting the knowledge about basic theory and modern experimental setups and (ii) supporting the young scientists from less-privileged regions of the world.

When dealing with these challenges, reaching to crystallographers in industry is an obvious path. And among these, DECTRIS holds a special position, as it unites both crystallographic worlds: classical basics are complemented with cutting-edge detection technology. Grounded on protein crystallography of Paul Scherrer Institute, and continuously being built by crystallographers with expertise in various fields, DECTRIS' contribution to the community is manifold: research collaborations, measurement services, and promotion of crystallography.

The last aspect, promotion of crystallography, proved to be particularly proved fruitful - in the last four years DECTRIS has supported overwhelming amount of crystallographic courses. Ranges of financial supports and travel grants were offered, and DECTRIS scientific staff flew around the world to give talks about data collection, data processing, basic and applied crystallography. Various local organizers went an extra mile to make it work - bringing in balance lecturers, sponsors and participants.

We, crystallographers, know about symmetry operators, triplets and mineral classification. What we didn't learn in school is how to make a worldwide crystallography course work. This presentation summarizes strategies, challenges and outputs of coming from three sides, DECTRIS, organizers and participants, to pool and acquire knowledge, and to use various tools to push young researches from less-privileged countries.

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