Invited Lecture

118 Semesters with young and not so young crystallographers

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I interpret the title of this microsymposium ‘How to address questions, doubts and struggles of a young crystallographer’ as meaning that young crystallographers are *curious, critical and perseverant*. Of course, sometimes you get stuck, you can’t find the answers to your questions, you doubt about what you are doing and you struggle to get out of your problems. I don’t know what your individual problems are, but hopefully some of my experiences are helpful to you.

Addressing questions, doubts and struggles of a young crystallographer is a task for both the young crystallographers themselves and their mentors, teachers and professors. The students must learn to recognize the point where they reach their (intellectual or personal) limits, i.e. where asking for external help is no longer a convenience but becomes a necessity. An analogous argument holds true for the mentors: too much help is counterproductive, because it slows down the students' development as a professional and social being. Conversely, too little help kills the students' motivation. Thus asking for or giving help needs some careful balancing by both parties between making things too easy or too hard. I will discuss a few difficult situations in a student's professional life,: e.g. how to cope with a seemingly unsurmountable hurdle in their research work; what to do when the broader meaning of the students' endeavors hides behind the everyday hassle in the lab; what the role of curiosity and serendipity might be; how to plan the next step in one's career. Illustrations come from my personal experience and are correspondingly biased.

Most of this presentation recalls trivialities. They often are forgotten, just because they are trivial.