Poster

Curious Chemist summer camp at the Research Centre for Natural Sciences in Hungary

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The Curious Chemist summer research camp has been organized in thirteen consecutive years so far for secondary school students in the Research Centre for Natural Sciences (RCNS). We only accept the application of 24 students a year and the number of supervisors dealing with the students is comparable to this. The supervisors are the enthusiastic researchers and PhD students of the RCNS. They introduce the secondary school students into their own research topic. An experiment is chosen that can be successfully executed within the one week of the summer camp. On the last day, the students give a short presentation about the work they've completed in our laboratories. In the following months, the students write a paper about their work and a booklet is compiled of these papers.

The participating students are mostly interested in laboratory work however, we also put a lot of emphasis on community building during the camp. It is a boarding camp and every evening, we organize community programs together with the supervisors. We have a traditional student-researcher football match and a team game that is played by the students all over the one week of the summer camp.

Figure 1. Working in the lab.

The research subjects of the summer camp are very diverse. Some of our latest topics are X-ray scattering, fuel cells, chemistry of polymer gels, extracellular vesicles, modelling of the docking of drug molecules on proteins, antibody conjugates in cancer research, technical ceramics, cell membrane mimetics, brain age estimation by MRI using artificial intelligence, 3D printing of polymer composites and ABC multidrug transporters. In my presentation, I will show in details the single crystal X-ray diffraction and the SAXS laboratory practices.

The goal of the Curious Chemist summer camp is mainly scientific dissemination and to enable students to get to know scientific research work really close-up. It is a great pleasure for us to be able to welcome many participants of the camp as PhD students and colleagues later in RCNS.

Figure 2. Community building.

I wish to acknowledge our colleagues the enthusiastic work they do every year as supervisors in the Curious Chemist research camp.