Coffee Lectures – A new format for teaching information and communication technology skills

In natural sciences, digital tools for information management are essential but formats for teaching them were missing. Coffee Lectures provide such a format, which is now successfully adopted by 50 institutions Europe-wide.

Since scientific data and information became digital, a steadily increasing number of databases and tools for the retrieval, analysis and management of information has emerged, especially in chemistry and life sciences. Using them efficiently and effectively during the research process is a competitive advantage and helps to stay ahead of the field. However, scientific databases and tools are generally underutilized and often not known. This is also due to the fact that so far, a suitable format for teaching and learning digital literacy was missing, as traditional course formats do not apply. At the Chemistry | Biology | Pharmacy Information Center (ICBP) at ETH Zurich, we have, therefore, developed such a format. Coffee Lectures allow students and researchers to learn about new and existing scientific databases and tools, to know about possible use cases and to critically judge when and which database or tool should be applied for a particular research question.

The curriculum we build consists of more than 60 databases, tools and concepts we think students and researchers should know about. We present those frequently in short and problem-based Coffee Lectures in an informal setting around noon, with free coffee and tea. Coffee Lectures are only 10 minutes long and no registration is required. Each Coffee Lecture presents a typical problem most researchers in a field are familiar with and shows the solution, i.e., a database, web service, app, or a concept that can be utilized. Coffee Lectures are preferably presented in an entertaining style.

At ICBP we have launched the Coffee Lectures in December 2013 as three-week series, with nine different Coffee Lectures per series. Software, tools, or databases are shown live with real examples. All attendees are provided with a Coffee Lecture Card, where basic information and the main features are summarized. A Coffee Lecture Card Album that we also provide allows to keep track of Coffee Lectures one already attended – or of those that one missed out.

Meanwhile, about 50 institutions, mostly university libraries in Germany, Switzerland, and Austria have successfully adopted the format. A first user group meeting was held at the Karlsruhe Institute of Technology in April 2018, and a website for the Coffee Lecture User Community (www.blogs.ethz.ch/coffeelectures) has been set up.