

2016 Postgraduate workshop of the section „Natural Products“ of the German Society for Plant Sciences (Deutsche Botanische Gesellschaft, DBG).

The workshop of the section “Natural products” takes place every second year with the aim to promote the exchange of early stage researchers from groups active in this area of research. Venue of this year’s meeting was the Parkhotel Schloß Meisdorf, at the foot of the Harz mountains with a nice view to the castle Burg Falkenstein. 49 Participants from Germany, Italy and Poland representing nearly twenty institutions joined the meeting from the 11th to the 13th of September this year. All presentations were given by early stage researchers, most of them were PhD students. The topics demonstrated the many facets of current research on “Natural Products” and covered a wide diversity of compounds and biochemical pathways, fundamental research as well as biotechnological applications, the detailed characterization of single enzymatic reactions and the assessment of metabolomics patterns. The diversity of topics was reflected by the methods and technologies applied in the individual studies. As in previous section meetings, the discussion about research concepts and exchange on potential pitfalls of techniques were major benefits for the young researchers.

The significance of low molecular weight compounds for plant defense towards biotic and abiotic stresses was discussed in several of the presentations. Many of the other presentations focused on the potential medicinal and pharmaceutical use of compounds from specialized metabolism. The diversity of phytochemical compounds was reflected by the wide number of plant species studied and hence, in contrast to many other plant biology meetings, *Arabidopsis* was not the dominating species used for research. The lack of many of the resources and information already available for this model plant still describes the challenges in phytochemical research with non-model species. It became clear during the meeting that the progress of genomic sequencing techniques will also have a deep impact on the research in specialized metabolism in the near future.

Progress of phytochemical analysis and the rise of metabolomics approaches in recent years strongly relates to the advancement of mass spectrometric instrumentation. Application chemists from two of the leading vendors of mass spectrometrical equipment presented recent technical developments and their impact on biological research.

In the afternoon of the second day a walking tour lead the participants to the Burg Falkenstein erected in the 12th century, one of the best preserved medieval castles in Saxonia-Anhalt and one of the most popular sites in the Harz area.

At the end of the meeting, Professor Dietrich Ober announced the forthcoming meeting of the German Botanical society, taking place from the 17th to the 21st of September 2017 and hosted at the University of Kiel.

Finally the participants followed the invitation to visit the collection of genetic resources in the genebank of the IPK Gatersleben. The guided tour given by Dr.

Andreas Börner was highly appreciated by the group. His presentation was accompanied by many questions related to different aspects, such as preservation and evaluation of the accessions as well as access to the resources.

As the organizers we would like to thank all the participants for their stimulating presentations and engaged discussions. The financial support from the mother society DBG as well as from different companies is gratefully acknowledged. We also thank the IPK Gatersleben for organizational support and Dr. Andreas Börner for the guided tour through the genebank collection.

Hans-Peter Mock (IPK Gatersleben, local organizer)
Prof. Dr. Wolfgang Kreis, Erlangen; Prof. Dr. Maike Petersen, Marburg; section speakers.

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