



# Joint Symposium of Rothamsted Research, the Institute of Organic Chemistry and Biochemistry (IOCB) Prague and the MPI-CE

April 7-8, 2015



Max Planck Institute  
for Chemical Ecology

Venue: Schleiden-Stahl Seminar Room, Max Planck Institute  
for Chemical Ecology, Hans-Knöll-Straße 8, 07745 Jena

## Tuesday, April 7, 2015

21:00 Welcome Meeting, discussion (SWOT analysis) of the "H2020 UK/CZ/DE Twinning Proposal" and dinner at the [Hotel Schwarzer Bär](#), Lutherplatz 2, 07743 Jena

## Wednesday, April 8, 2015

09:00-09:15 **David G. Heckel**, Managing Director MPI-CE  
Welcome Address; Research at the MPI for Chemical Ecology

09:15-09:30 **Achim Dobermann**, Managing Director Rothamsted  
Research at Rothamsted Research

### Session 1 – Molecular Genetics of Insect Olfaction

09:30-09:50 **Ewald Große-Wilde**, MPI-CE  
Evolution of insect olfaction

09:50-10:10 **Jing-Jiang Zhou**, Rothamsted  
Molecular genetics of insect olfaction

10:10-10:30 **Chris Jones**, Rothamsted  
Genetics of insect migration

10:30-11:00 Coffee Break, Cafeteria MPI-CE

### Session 2 – Metabolic Flux in Terpene / Terpenoid Biosynthesis

11:00-11:20 **Abith Vattekkatte**, MPI-CE  
Mechanistic Insights into multiproduct terpenoid synthases from *Zea mays* using isotope sensitive branching

11:20-11:40 **Wilhelm Boland**, MPI-CE  
Metal matters! Co and Mg ions control chain length of prenyl diphosphates in insects

### Session 3 – Insect Resistance to Transgenic Crops and Insecticides

- 11:40-12:00 **Nicole Joußen**, MPI-CE  
Novel P450 gene CYP337B3 confers pyrethroid resistance in worldwide populations of *Helicoverpa armigera*
- 12:00-12:20 **Mirel Puinean**, Rothamsted  
Target site resistance
- 12:20-14:00 Lunch, canteen Abbezentrum on campus  
Coffee, Cafeteria MPI-CE

### Session 3 (cont.) – Insect Resistance to Transgenic Crops and Insecticides

- 14:00-14:20 **David G. Heckel**, MPI-CE  
Insect resistance to transgenic plants: Bt toxins and RNAi
- 14:20-14:40 **Christoph Zimmer**, Rothamsted  
Metabolism/insect transgenesis

### Session 4 – Rhizosphere Interactions

- 14:40-15:00 **Andre Sarria**, Rothamsted  
Plant-insect interactions via the rhizosphere
- 15:00-15:20 **Arne Weinhold**, MPI-CE  
Manipulating the plant microbiome
- 15:20-15:40 **Jozsef Vuts**, Rothamsted  
Rhizosphere chemical ecology of insects
- 15:40-16:00 **Julia Wilde**, MPI-CE  
The importance of the arbuscular mycorrhizal network for *N. attenuata* communities
- 16:00-16:30 Coffee Break, Cafeteria MPI-CE
- 16:30-17:00 **Aleš Svatoš**, MPI-CE  
MOuLTing: MOleculEs for Life and Therapy - Improving food and health security through modern chemistry

**17:00** **Twining Proposal Satellite Meetings**