

## International Isotope Society Central European Division



### 13. Workshop of the International Isotope Society – Central European Division in Bad Soden 2005

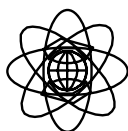
From the 16.-17. June 2005 the 13. Workshop of the International Isotope Society – Central European Division (IIS-CED) took place in Bad Soden, Germany. This event was for the second time organised by *Jens Atzrodt* and *Volker Derdau* (sanofi-aventis). 110 participants from 60 companies, universities and research centres representing 15 nations convened to discuss the newest trends and applications regarding the synthesis and application of isotopically labelled compounds.

The main topic of the eight sessions was the synthesis and application of stable and radioactive labelled compounds. This included new concepts and technologies for isotopic labelling; new synthetic methodologies for the synthesis of labelled compounds and building blocks; syntheses and applications of short-lived isotopes like  $^{11}\text{C}$  and  $^{18}\text{F}$  as well as radioactivity related topics like safety and regulatory affairs.

The organizers were very pleased by the response of the meeting, which was again attended by over 100 participants – after all they were able to keep the very ambitious scientific level of the last year's conference and even to extend the broadness of the lecture program. The organisers had been able to convince prominent speakers to give plenary lectures. Professor Istvan Marko's (UCL, Belgium) gave a very eloquent lecture wherein he pointed out the innovative benefit not always to know the theory associated with the experiment. Based on the failures and experimental disappointments of his students he was able to develop new synthetic methodologies for the synthesis of substituted polycyclic compounds. In a further plenary lecture Professor Jonathan Clayden (Manchester, UK) presented a rhetoric firework of organometallic chemistry. Another highlight was the plenary lecture of Prof. Matthias Beller (Ifok Rostock) on the catalytic implementation of C1- building blocks – valuable new synthetic approaches for isotopic labelling.



Organiser and plenary lecturers of the 13. Workshops of the IIS-CED (from left): Dr. Jens Atzrodt (sanofi-aventis), Prof. Istvan Marko (Louvain-la-Neuve), Prof. Jonathan Clayden (Manchester), Prof. Matthias Beller (Rostock), Dr. Volker Derdau (sanofi-aventis), Prof. Kristiina Wähälä (Helsinki)



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Prof. John Gardiner (Manchester, UK) demonstrated various ways for the synthesis of stable isotopically labelled sugars. Stimulated by the organizers his lecture was funded by the global IIS – a hopefully trendsetting way of knowledge sharing between the individual chapters of the IIS.

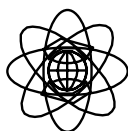
The lecture program was also enriched by presentations given by Dr. Wolfgang Dedek, (University Dresden, Germany) on the scientific work of Otto Hahn, by Prof. Hans-Christian Riekhof's talk (Private University of Applied Sciences Göttingen, Germany) on the development of a departmental strategy in R&D as well as by Prof. Jürgen Kiefer (Gießen University, Germany) who provided new insights and developments on radiation risk evaluation.

Dr. Thomas Moenius, Dr. Rhys Salter (Novartis) and Dr. Simon Harwood gave very interesting reports on the synthesis of carbon-14 labelled new pharmaceutical development candidates and their application for ADME studies. More methodically oriented scientific work on hydrogen/deuterium exchange reactions for the synthesis of mass-spectrometry standards were presented by Prof. Kristiina Wähälä (Helsinki, Finland) and Dr. John Herbert (sanofi aventis, UK).

For the first time the IIS-CED prize for the best Ph.D. thesis in the field of isotope chemistry was awarded to Dr. Björn Wängler for his scientific work entitled “*Synthesis and evaluation of <sup>18</sup>F- and <sup>11</sup>C-labeled repaglinide derivatives for quantification of pancreatic β-cell mass with Positron Emission Tomography (PET)*” All these distinguished contributions were accompanied by intensive discussions.

### All 21 oral presentations are listed here:

- **Prof. Dr. Istvan Marko**, Louvain-la-Neuve University, Belgium  
*“Novel orthoesters in organic synthesis “*
- **Dr. Simon Harwood**, Glaxo Smithkline, UK  
*“The Synthesis of Stable Labelled Ketamine “*
- **Dr. Thomas Moenius**, Novartis, Switzerland  
*“C-13, C-14, N-15 Labelling of 4-Cyano benzylbromide - a versatile labelling intermediate “*
- **Prof. Dr. Jonathan Clayden**, Manchester University, UK  
*“Synthesis and Stereocontrol with Lithiated Amides “*
- **Dr. Rhys Salter**, Novartis, Switzerland  
*“Isotopic Labelling of STI571 and its Metabolites in the Development of Glivec”*
- **Prof. Dr. John Gardiner**, Manchester University, UK  
*“Synthesis of Labelled Carbohydrates”*
- **Dr. Wolfgang Dedek**, University Dresden, Germany  
*“125 Years Otto Hahn (1879 – 1968)”*
- **Prof. Dr. Matthias Beller**, Ifok Rostock, Germany  
*“Homogeneous Catalysis – A Powerful Tool for the Synthesis of Pharmaceuticals “*
- **Jan Kozempel**, Charles University, Prague, Czech Republic  
*“Preparation of ortho-radiohalogenated phenylazides and triazenes, versatile building blocks for indirect labelling”*
- **Dr. Conrad Raab**, Merck Sharp & Dohme, United States  
*“MRL's Approach to Labelled Compound Synthesis”*
- **Prof. Dr. Kristiina Wähälä**, Helsinki University, Finland  
*“Controlled polydeuteration of estrogenic compounds”*



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- **Dr. Andreas Roßmann**, Isolab GmbH, Germany  
*"Fundamental facts and some applications of stable isotope analysis in food control"*
- **Dr. Detlef Stöckigt**, Symrise GmbH & Co. KG, Germany  
*"Authentication of Natural Products"*
- **Dr. Björn Wängler**, Deutsches Krebsforschungszentrum, Heidelberg  
*"Synthesis and evaluation of  $^{18}\text{F}$ - and  $^{11}\text{C}$ -labeled repaglinide derivatives for quantification of pancreatic  $\beta$ -cell mass with Positron Emission Tomography (PET)"*
- **Dr. John Herbert**, Sanofi aventis, UK  
*"Catalyst Stability in Iridium-mediated Isotope Exchange"*
- **Dr. Cor Janssen**, Johnson & Johnson, Belgium  
*"Pd/C catalyzed hydrogenolytic H/T exchange in solvents. Effects on solvent and product in a bromine-tritium exchange reaction."*
- **Prof. Dr. Hans-Christian Riekhof**,  
Private University of Applied Sciences Göttingen, Germany  
*"Development of a Departmental Strategy in R&D"*
- **Prof. Dr. Jürgen Kiefer**, Gießen University, Germany  
*"Radiation risk - new insights and developments".*
- **Peter Mäding**, Research Centre Rossendorf, Germany  
*"A new module-assisted synthesis of the versatile, bifunctional labelling agent [ $^{18}\text{F}$ ]SFB: From radiochemistry to applications"*
- **Dr. Steffen Fischer**, Institute of Interdisciplinary Isotope Research Leipzig, Germany  
*"Synthesis of  $^{18}\text{F}$  labelled bicyclic analogues of vesamicol as potential VAcHT imaging agents"*
- **Prof. Dr. Friedrich Hammerschmidt**, University Vienna, Austria  
*"First direct chemical synthesis of chiral methanol (CHDTH) of 98% ee and its use to determine the stereochemistry of the methyl transfer in the biosynthesis of fosfomycin."*

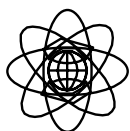
Abstracts from the symposium will be published in full in an upcoming issue of *Journal of Labelled Compounds and Radiopharmaceuticals*.

A poster session and the very well visited industrial exhibition completed the success of the meeting. On Thursday late afternoon a receipt took place featuring an abundance of food and drink's provided the opportunity for discussions and new collaborations.



Dr. Jürgen Gay

At the annual member's convention, which was held at the first day, Prof. Ulrich Pleiss gave a short overview on all chapter activities. Subsequently, Gunther Jaeger presented his report on the financial situation of the IIS-CED. After the decision of Prof. Ulrich Pleiss to resign from the position as the chapter president, a new board was elected: Dr. Juergen Gay (Schering, Germany) was elected as the new president of the IIS-CED chapter. The board is completed by Dr. Dietrich Seidel (Bayer Healthcare) as its vice-president and Gunther Jäger (Biotrend) as its secretary-treasurer. The new chapter president and all participants thanked Prof. Ulrich Pleiss for his steady and successful work over the past years.



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In order to avoid a competition with the global IIS-meeting in Edinburgh 2006, the member's convention also decided to skip the Bad Soden meeting in 2006. Hence, the 14th workshop of the IIS-CED will be held in 2007 and will be organized again by Jens Atzrodt and Volker Derau of sanofi-aventis Germany.

To keep this meeting on a high scientific level with invited speakers from academia and industry and to enable student participation an important contributing factor was the generous financial support from many companies. **Special thanks to our sponsors for generously financial support:**



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### Impressions from the Poster session/vendor exhibition

