

## International Isotope Society Central European Division



### 12. Workshop of the International Isotope Society – Central European Division in Bad Soden 2004

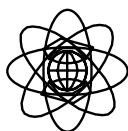
From the 17.-18. June 2004 the 12. Workshop of the International Isotope Society – Central European Division (IIS-CED) took place in Bad Soden, Germany. This event was for the first time organised by *Jens Atzrodt* and *Volker Derdau* (Aventis Radiosynthesis Center). 120 participants from 70 companies, universities and research centres (13 countries represented) convened to discuss the newest trends and applications regarding the synthesis and application of isotopically labelled compounds.

In eight sessions the following topics were discussed: (i) synthesis of small building blocks and  $^{14}\text{C}$ -isotopically labelled compounds, (ii) new concepts and technologies for the labelling with isotopes, (iii) labelling with deuterium and tritium, (iv) synthesis and use of short lived isotopes, (v) safety and regulatory affairs.

The organisers had been able to convince prominent speakers for the plenary lectures: Professor Victor Snieckus' lecture gave a special highlight. He talked on directed *ortho*-metalation reactions and their combination with cross coupling reactions for the synthesis of complex aromatic compounds. In a further plenary lecture Professor Paul Knochel presented a rhetoric firework of organometallic chemistry and demonstrated the various ways to functionalize aromatic compounds under very mild reaction conditions. Furthermore, Professor Armido Studer showed possibilities to apply radical, tin-free chemistry to labelling syntheses. These plenary lectures were followed by presentations from industry. Neil Geach (Scynexis/UK) reported on the synthesis of isotopically labelled 4-formyl-imidazoles and Ines Rodriguez (Novartis) gave an extensive lecture about the  $^{14}\text{C}$ -synthesis of descodermolide (oncology drug candidate).



Organiser and plenary lecturers of the 12. Workshops of the IIS-CED (from left): Dr. Jens Atzrodt (Aventis), Dr. Volker Derdau (Aventis), Prof. Dr. Armido Studer (Westfälische Wilhelms-University Münster), Prof. Dr. Victor Snieckus (Queen's University, Canada), Prof. Dr. Paul Knochel (Ludwig-Maximilian-University, Munich)



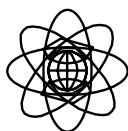
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In the new technology session Jörg Rieke-Zapp (Aventis Pharma) demonstrated the benefit of intelligent automatization approaches for the optimisation of small scale reactions. The session also included a lecture from Alan Spivey (Imperial College, London) who talked about germanium-linked solid phase synthesis of isotopically labelled compounds and another from Professor Sharon Stone-Elander (Karolinska Institut, Stockholm), who presented new insights into microwave assisted syntheses. The lecture program was also enriched by presentations given by Christ Filer (PerkinElmer) on applications of radionuclides for mechanistic investigations of reactions and by Norbert Zoubek (Aventis Pharma) who brought to attention the actual changes of regulatory affairs concerning the handling and simplified waste management of radioactive material. All these distinguished contributions were accompanied by intensive discussions.

All 17 lectures are listed here:

- **Prof. Dr. Victor Snieckus**, Queen's University, Canada  
*"The Directed ortho Metalation - Cross Coupling Symbiosis in Aromatic Synthesis"*
- **Dr. Ines Rodriguez**, Novartis, Switzerland  
*"C-14 Labelling of Anti Cancer Natural Products Epothilone B and Discodermolide"*
- **Dr. Neil Geach**, Scynexis, United Kingdom  
*"Isotopically labelled 4-formylimidazole"*
- **Prof. Dr. Armido Studer**, Marburg University, Germany  
*"New Concepts in Tin-Free Radical Chemistry"*
- **Dr. Alan Spivey**, Imperial College London, United Kingdom  
*"Opportunities for Isotope Labelling via Solid Phase Synthesis with Organogermanium Linkers"*
- **Prof. Dr. Paul Knochel**, LMU Munich, Germany  
*"New Catalyzed Halogen-Metal Exchange Reaction. An Efficient Synthesis of Functionalized Mg and Zn Organometallics"*
- **Dr. Crist Filer**, PerkinElmer, United States  
*"Excursions in Isotopic Labelling Compounds of Interest"*
- **Gary Shemilt**, Amersham Biosciences, United Kingdom  
*"The synthesis of carbon-14 labelled PEGs"*
- **Dr. Jörg Rieke-Zapp**, Aventis Pharma, Germany  
*"Optimization of Reaction Conditions on mg-Scale by use of Screening Devices"*
- **Prof. Dr. Sharon Stone-Elander**, Karolinska Institute, Sweden  
*"Rerouting Radiochemistry with"*
- **Jens Krüger**, University Paderborn, Germany  
*"H/D-exchange in aromatic systems using transition metall catalysis."*
- **Björn Wängler**, Mainz University, Germany  
*"Radiosynthesis of (S)-2-(2-[<sup>11</sup>C] methoxy)-4-([3-methyl-1-(2-piperidin-1-yl-phenyl)-butyl-carbamoyl]-methyl)-benzoic acid ([<sup>11</sup>C]repaglinide)"*
- **Dr. Frank Wüst**, Research Centre Rossendorf, Germany  
*"Synthesis of a <sup>11</sup>C-labelled Nonsteroidal Glucocorticoid Receptor Ligand as Potential Radiotracer for Imaging Brain Glucocorticoid Receptors with Positron Emission Tomography (PET)"*



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- **Peter Mäding**, Research Centre Rossendorf, Germany  
“<sup>18</sup>F-Labeling of a Potent Nonpeptide CCR1 Antagonist for the Diagnosis of the Alzheimer’s Disease”
- **Dr. Matthias Scheunemann**, Institute of Interdisciplinary Isotope Research Leipzig  
“Synthesis and F-18 labelling of a novel class of vesamicol analogues for imaging the VAcHT”
- **Dr. Michael Marx**, EaglePicher Pharmaceutical, United States  
“GMP and radiolabelled syntheses of Capsaicin“
- **Dr. Norbert Zoubek**, Aventis Pharma, Germany  
“New german federal regulation: improvements in release of low level radioactive material”

Selected abstracts from the 2004 workshop will be published 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. 9 posters were presented and 19 vendors set up exhibits/booths.

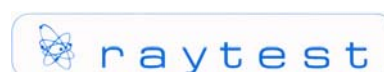
At the annual member's convention, Ulrich Pleiss gave a short overview on all chapter activities. Subsequently, Gunther Jaeger presented his report on the good financial situation of the CED. The election for the new board of the IIS-CED confirmed the representatives of the last year: *president* Ulrich Pleiss (Bayer HealthCare), *vice-president* Juergen Gay (Schering), *treasurer* Gunther Jäger (Biotrend). The organisers Jens Atzrodt and Volker Derdau were asked during the business meeting of the IIS Central European Division e.V. to organise also the next Bad Soden meeting in 2005.

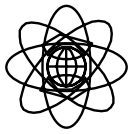
To keep this meeting on a high scientific level with invited speakers from academia and industry and to enable student participation an important contributing factor was the generous financial support from many companies.

**A special thank you to our sponsors for generously financial support:**



**BASF**





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## Impressions from the Poster session/vendor exhibition

