SPP 1152 „Evolution metabolischer Diversität“

together with the

Graduiertenkolleg 1026 “Conformational transitions in macromolecular interactions”

2. Workshop “Evolution of Enzyme Specificity: a Structural Perspective”

Thursday, 1st December 2005

a.m. Arrival; opportunity to view crystallographic facilities, Institut für Biotechnologie

13:00	**Opening remarks**	**IAMO lecture hall**
	Part I: Theoretical background	
13:10	Crystallisation: Theory and Practice	Markus Rudolph
14:00	Crystallography: Theory and Practice	Stefan Steinbacher
14:50	Structural data bases	Christoph Parthier
15:20	Coffee break	**Institut für Biochemie**
	Part II: Practical session	**Computer Pool**
15:50	Hands-on analysis of experimental crystal data	
18:00	Dinner	**Weinberg Mensa**
	Part III: Evening lecture	**Institut für Biochemie**
19:30	Stéphane Richard, La Jolla: Structural basis for the promiscuous biosynthetic prenylation of aromatic natural products	
20:30	Evening reception	**Institut für Pflanzenbiochemie**

Friday, 2nd December 2005 **IAMO lecture hall**

Part IV: Case studies in the evolution of enzyme specificity

09:00 Stéphane Richard, La Jolla: Modelling enzyme specificity

09:40 Stefan Steinbacher, München: The HFCD family of flavoproteins: Oxidation of terminal cysteine residues in lantibiotics and coenzyme A biosynthesis

10:20 Coffee break

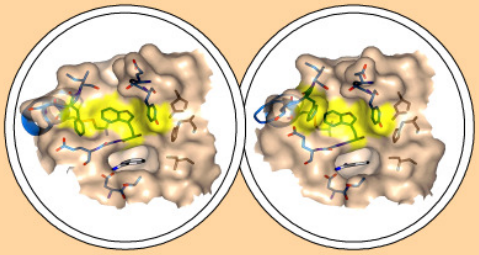
10:50 Markus Rudolph, Göttingen: Non-redox catalysis by flavoproteins: Double bond isomerization in fatty acids

11:30 Milton T. Stubbs, Halle: Domain flexibility in NRPS adenylation reactions

12:10 Concluding remarks

12:30 Lunch / Departure

Conformational transitions in macromolecular interactions



Deutsche Forschungsgemeinschaft DFG

Martin-Luther-Universität Halle-Wittenberg

Participating lecturers:

Dr. Christoph Parthier, Physikalische Biotechnologie, Institut für Biotechnologie, Martin-Luther-Universität Halle-Wittenberg

Dr. Stéphane Richard, Structural Biology Laboratory, The Salk Institute for Biological Studies, La Jolla, USA

Dr. Markus Rudolph, Abteilung für Molekulare Strukturbiologie, Institut für Mikrobiologie und Genetik, Georg-August-Universität Göttingen

Dr. Stefan Steinbacher, Lehrstuhl für Biotechnologie, Technische Universität München

Dr. Milton T. Stubbs, Institut für Biotechnologie, Martin-Luther-Universität Halle-Wittenberg