

Andreas Winkler



Current Position: Postdoctoral fellow in the Department of Biomolecular Mechanisms at the Max-Planck Institute for Medical Research in Heidelberg

Education: Ph.D. in Biochemistry (2009) from Graz University of Technology

Non-scientific Interests: Family (2-year-old son Alexander), football (soccer), skiing and hiking

In the final stage of my undergraduate education, I joined the group of Peter Macheroux who offered a project dealing with an enzyme involved in alkaloid biosynthesis. Due to my chemistry education, I was intrigued by the chemical reaction catalyzed by berberine bridge enzyme, and in close collaboration with Anton Glieder's group, I managed to obtain larger amounts of protein suitable for a more detailed characterization. Therefore, I continued my studies on this enzyme as a member of the interdisciplinary Ph.D. program, "DK Molecular Enzymology," which enabled me to also work on structural aspects of this project guided by Karl Gruber. The combination of biochemistry and structural biology has enabled us to better understand the molecular mechanism of how this enzyme operates. It also was invaluable for studying the bicovalent attachment of the FAD cofactor (which, at the time of discovery, was uncharacteristic to occur in BBE) and for addressing the relative importance of the two covalent linkages described in this paper. I defended my Ph.D. thesis on May 5, 2009.

Read Dr. Winkler's article entitled: Structural and Mechanistic Studies Reveal the Functional Role of Bicovalent Flavinylation in Berberine Bridge Enzyme

<http://www.jbc.org/cgi/content/full/284/30/19993>