

__ Press Release

Heinrich Wieland Prize 2009 awarded for outstanding achievements in the synthesis of key natural products

Ingelheim, Munich, Germany, 29 October 2009 - Professor Steven V. Ley of the Cambridge University (UK) was awarded this year's Heinrich Wieland Prize in appreciation of his extraordinary scientific achievements in the fields of synthesis, structural analysis and biological characterization of natural products. The award endowed with EUR 50.000 was given to him at the Ludwig Maximilian University of Munich today. Since 1964, the Heinrich Wieland Prize has been awarded annually to promote innovative research on chemistry, biochemistry, physiology and clinical medicine of lipids and other biologically active substances.

Professor Ley's innovative research comprises the total syntheses of more than 120 compounds -mostly of specific biological activity- and covers a wide field of organic chemistry. An important project of his is the synthesis of five members of the Thapsigargin family. These molecules are even in low concentrations excellent inhibitors of the calcium pump of cellular organelles¹ and serve as probes in the study of intracellular information paths all over the world.

Recently, Professor Ley concluded the synthesis of the marine natural products Bengazole A and B, a new class of lipophilic molecules, which possess antifungal activity. The recent synthesis of the insect-antagonising natural product Azadirachtine caused attention and was the final result of 22 years of research. Ley's synthesis of the immunosuppressive and tumorantagonising compound Rapamycine contributed to his worldwide reputation.

In addition to these methods, designed for the synthesis of natural products, Professor Ley developed numerous techniques for the production of pharmaceutical lead structures. His contributions to the green chemistry, which reduces or eliminates the use and generation of hazardous substances impress just as much. Worldwide Steven V. Ley is known as pioneer in the

¹ The sarco/endoplasmatic reticulum



development of automatised synthesis and leading in this area of research. He developed micro- and macro-flow reactors, which are essential for and therefore revolutionised multi-step chemical syntheses.

Professor Ley's methods are broadly used in the pharmaceutical industry to speed up the development of new lead structures. As a result, medications are sooner available for patients. Steven V. Ley's versatile chemistry and its importance for industry and science make him one of the most excellent chemists of our time.

The Heinrich Wieland Prize is named after the German Nobel Laureate Prof. Heinrich Otto Wieland (1877-1957). Heinrich Wieland was a cousin of Helene Boehringer, the wife of Albert Boehringer, who was the founder of Boehringer Ingelheim. From 1915 to the end of 1920, he was advisor at Boehringer Ingelheim and during this time he established the first scientific department of the company. The prize is one of the most treasured international science awards in Germany. Its special importance is reflected by the list of former laureates, which includes many famous scientists. Michael S. Brown and Joseph L. Goldstein of Dallas/Texas (USA), rewarded the Heinrich Wieland Prize in 1974, have been awarded the Nobel Prize for medicine in 1985. To date it has been presented to 59 scientists. The Heinrich Wieland Prize is sponsored by Boehringer Ingelheim and awarded by an independent Board of Trustees.

Boehringer Ingelheim

The Boehringer Ingelheim group is one of the world's 20 leading pharmaceutical companies. Headquartered in Ingelheim, Germany, it operates globally with 138 affiliates in 47 countries and 41,300 employees. Since it was founded in 1885, the independent, family-owned company has been committed to researching, developing, manufacturing and marketing novel products of high therapeutic value for human and veterinary medicine.

In 2008, Boehringer Ingelheim posted net sales of 11.6 billion euro while spending one fifth of net sales in its largest business segment Prescription Medicines on research and development.

For more information please visit www.boehringer-ingelheim.com

Please be advised

This release is from Boehringer Ingelheim Corporate Headquarters in Germany. Please be aware that there may be national differences between countries regarding specific medical information, including licensed uses. Please take account of this when referring to the information provided in this document. This press release is not intended for distribution within the



U.S.A.

- ends -

Contact

Julia Meyer-Kleinmann Science & Technology Communications Boehringer Ingelheim GmbH 55216 Ingelheim/Germany

Phone: +49 - 6132 - 77 8271 Fax: +49 - 6132 - 77 70 77

E-mail: <u>press@boehringer-ingelheim.com</u> Twitter: <u>www.twitter.com/boehringer</u>