

Georg Thieme Verlag, the International Union of Pure and Applied Chemistry, and the Editors of SYNTHESIS, SYNLETT, Science of Synthesis, and Houben-Weyl are pleased to announce the recipient of the

2004 Thieme–IUPAC Prize in Synthetic Organic Chemistry



John F. Hartwig



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The Thieme–IUPAC Prize, consisting of €5000, is awarded every two years on the occasion of the IUPAC International Conference on Organic Synthesis (ICOS) to a scientist under 40 years of age, whose research has had a major impact on the field of synthetic organic chemistry. We are pleased to announce that the seventh Thieme–IUPAC Prize will be presented to John F. Hartwig at the Award Lecture on August 3, 2004 at ICOS-15 in Nagoya, Japan.

John F. Hartwig was born in 1964 in Illinois, and raised in upstate New York. He obtained his BA in 1986 from Princeton University and then went on to complete his Ph.D. in 1990 under the collaborative direction of Robert Bergman and Richard Andersen at the University of California, Berkeley. Following a postdoctoral fellowship for the American Cancer Society with Stephen Lippard at the Massachusetts Institute of Technology, he joined the faculty at Yale University in 1992, where he is now Professor of Chemistry.

John F. Hartwig's independent research program is focused on the discovery, development, and understanding of new reactions catalyzed by transition metals. The scope of his research is extensive and he has created practical, catalytic synthetic methods that have a direct and relevant impact on synthetic chemists in many fields worldwide. Such goals have been achieved by obtaining insight from detailed mechanistic studies.

In the process of John F. Hartwig's independent research, he has been a co-developer of the palladium-catalyzed amination of aryl halides, the resulting aryl amines being ubiquitous among pharmaceutically relevant compounds. This chemistry is now used on a daily basis by medicinal and agrochemical chemists.

His expertise in palladium chemistry has been extended to the catalytic α -arylation of carbonyl compounds. The development of

this chemistry has allowed synthetic chemists to expand the repertoire of traditional enolate/electrophile pairs to include aryl halides, which do not couple with enolates in the absence of a catalyst. These α -arylations can be used to generate a number of biologically active compounds, including ibuprofen, naproxen, and tamoxifen.

In his efforts at alkane functionalization, John F. Hartwig has successfully addressed C–H activation, a subject of significant importance to mainstream organometallic chemists, with results that have immense potential. He has also investigated olefin hydroamination, a long-standing goal for transition-metal catalysis, discovering catalysts for the addition of amines to vinylarenes and dienes by novel combinatorial methods. More recently, John F. Hartwig has explored the iridium-promoted enantioselective allylic amination and etherification of terminal allylic carbonates. These latter reactions are still in their infancy, yet have a high impact potential for future regular use throughout various chemical industries.

These reactions only broadly categorize John F. Hartwig's achievements. He has been a tremendous source of inspiration, leading by example to produce talented and highly motivated students, and he is dedicated in making this remarkable chemistry widely available to the end user.

John F. Hartwig has received numerous accolades. These include the Leo Hendrick Baekeland Award 2003, the A. C. Cope Scholar Award in 1998, the Camille Dreyfus Teacher–Scholar Award in 1997, a Union Carbide Innovative Recognition Award in 1995 and 1996, the National Science Foundation Young Investigator Award in 1994, and both the DuPont and Dreyfus Foundation New Faculty Awards in 1992.

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