

【Abstract of 2009 Grant – in – Aid for Scientific Research on Innovative Areas
(Research in a proposed research area)】

Title of project	Organic Synthesis Based on Reaction Integration. Development of New Methods and Creation of New Substances
Head Investigator Name	YOSHIDA Junichi, Kyoto University, Graduate School of Engineering, Professor
Abstract of Research Project	Organic synthesis has been developed mainly based on step-by-step synthesis. This project aims to enhance the power of organic synthesis by introducing an efficient way of combining multiple steps in one-pot or in one-flow. In short, we focus on time and space integration of reactions and its applications to creation of new substances. These will be accomplished by the design and study of synthetic transformations that would be impossible without integration—such as the generation of unstable reactive species that are swiftly utilized for a further reaction before they decompose, and the synthesis of biologically interesting molecules and functional materials by taking advantage of reaction integration.
Term of Project: 2009–2013	