## [Abstract of 2008 Grant – in – Aid for Scientific Research on Innovative Areas (Research in a proposed research area)]

Title of project	Emergence of highly elaborated $\pi$ -space and its function
Head Investigator	Takeshi Akasaka
Name	
Abstract of	In this joint project, we focus on $\pi$ -electrons and wish to create hitherto unavailable molecular
Research Project	assemblies while examining various interactions, including optical, electronic, and magnetic
	interactions. We define highly elaborated $\pi$ -spaces as the sites where we create highly complex
	orders/systems that stem out from the $\pi$ -electron-based interactions. We will pursue 1) research with
	clearly defined objectives, i.e., strategic research, and 2) emergent research that comes out from the
	combination of several independent elements. By conducting these two types of research in parallel,
Term of	we wish to progress science unwaveringly and create innovation of unpredicted discovery and hope
Project: 2008-2012	to contribute to the creation of next-generation advances in chemistry.