

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

<b>Title of project</b>	Elucidation of New Hadrons with a Variety of Flavors
<b>Head Investigator Name</b>	IJJIMA Toru, Nagoya University, Graduate School of Science, Associate Professor
<b>Abstract of Research Project</b>	Hadrons, such as protons, neutrons and pions, are composite particle of constituent quarks bound together with the strong interaction. While this has been well known, the theory of strong interaction (QCD) still cannot predict if there are new type of hadrons beyond ordinal mesons (quark and anti-quark) and baryon s(3 quarks). It even cannot answer how hadron mass are generated. In this project, we try to answer these fundamental important questions by promoting experiments at the B factory, Spring-8 and J-PARC to study exotic hadrons consisting of 4 or 5 quarks, and also to investigate how the quark mass is modified inside nuclear matter.
<b>Term of Project: 2009–2013</b>	