## [Abstract of 2009 Grant – in – Aid for Scientific Research on Innovative Areas (Research in a proposed research area)]

Title of project	The study on the neural dynamics for understanding communication in terms of complex hetero systems
Head Investigator Name	TSUDA Ichiro, Hokkaido University, Research Institute for Electronic Science, Professor
Abstract of	The purpose of this research project is to establish a new research area on the neural information
Research Project	science for communication by elucidating the neural mechanism of communication. The
	research is performed in collaboration with applied mathematicians in complex systems science
	and experimental researchers in neuroscience. The project includes the measurements of brain
	activity during communication with or without languages and analyses with a help of a theory in
	extended dynamical systems and of a probabilistic theory. The communication paradigm is
Term of	extended to the interactions between human and human, human and animal, human and robot,
Project: 2009-2013	human and materials, and even robot and robot.