## Abstract Submitted for the HAW05 Meeting of The American Physical Society

Structure and Formation of Mesic Atoms and Mesic Nuclei SATORU HIRENZAKI, Department of Physics, Nara Women's University — The light pseudoscalar mesons are interpreted as the Nambu-Goldstone bosons and their properties, especially meson mass spectra, are explained as the consequences of the symmetry breaking pattern of QCD in vacuum. Thus, it seems very interesting to study the meson properties in nucleus to obtain new information on chiral dynamics at finite density, especially the partial restoration of chiral symmetry around normal nuclear density. In this context, meson-nucleus bound systems (mesic atoms and mesic nuclei) are one of the most interesting systems. We study the structure and formation of these systems and discuss the experimental feasibilities.

Satoru Hirenzaki Department of Physics, Nara Women's University

Date submitted: 17 May 2005 Electronic form version 1.4