

# The Study of Groundwater Anomalies Associated with Earthquakes in Taiwan: An update in 2004

# Wen-Chi Lai[1]; Chjeng-Lun Shieh[1]; Youe-Ding Lee[2]; Norio Matsumoto[3]; Naoji Koizumi[3]; Evelyn Roeloffs[4]

[1] DPRC,NCKU; [2] Water Resources Bureau, MOEA; [3] GSJ, AIST; [4] U. S. Geological Survey

In this paper we make a brief review for the past three years, and to introduce the result of the project. Follow the experience of last years; we reorganize our main work for . Also revise the strategy to the scientific challenge. In the previously work, five main items of work had been done carefully, including (1) field investigation of potential sites for observation wells, (2) the establishment of the monitoring system, (3) observation data acquisition and transfer, (4) data analysis and interpretation, (5) development and establish of the procedures of monitoring.

In this year, the establishment of the good quality observation devices and monitoring system have been promote continuously. Beside that, theoretical approach from the observation data and mechanism explanation that have been implement attentively. Five research items had been promote in this year, including (1) amplify effect of the signal from the resonate of well-aquifer system, (2) molding of a strain - pressure coupling system, (3) estimation of the rainfall effect to ground water level, (4) detecting the anomalies changes using static methods (5) radon monitoring in the groundwater. All the research items have planned to construct the different approach of the project. We hope through these works, they will offer more opportunity to contribute the knowledge of hydrological and geochemical anomalies associated with the earthquake.