Japan Geoscience Union Meeting 2014
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Activities of JAGH relating to the earthquake disaster and disaster relief

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Followings are the activities of Japanese Association of Groundwater Hydrology (JAGH) relating to the 2011 off the Pacific coast of Tohoku Earthquake.

Program Committee (Chair: Makoto Nakashima) organized the symposium “ The way of groundwater use as the emergency water source at the time of the earthquake ” on May 26, 2012, at the Kashiwa Campus of the University of Tokyo. In the symposium, following presentations were given; “ Ensuring safety and security of the water supply system ” by Kenichi Yamamoto (Ministry of Land, Infrastructure, Transport and Tourism), “ The securing water in areas affected by the Great East Japan Earthquake Tsunami ” by Yoshiharu Ueno (Iwate prefecture), “ About the use of groundwater as a domestic water at the time of the disaster in Nagoya ” by Kazuhiro Takemoto (Nagoya City), “ Investigation of the effect of tsunami induced by the Great East Japan Earthquake on groundwater ” by Kei Nakagawa (Nagasaki University). Then, the panel discussion was coordinated by Makoto Taniguchi (Research Institute for Humanity and Nature). In this symposium, difference of water usage between emergency and non-emergency times, management method and registration system were discussed based on the presentations.

Editorial Committee (Chair: Tomochika Tokunaga) organized and published two special issues. In the special issue of “ The 2011 off the Pacific Coast of Tohoku Earthquake and groundwater ” (Vol.54, No.1, Feb, 2012), Technical Report of “ Change in groundwater environment caused by the 2011 off the Pacific Coast of Tohoku Earthquake in the southern part of Sendai Plain ” by Kazushi Mori et al. and Research-in-Progress of “ Impact of Tsunami caused by the 2011 off the Pacific coast of Tohoku Earthquake on groundwater usage and quality in Asahi-city, Chiba Prefecture Japan ” by Fumi Sugita are published. In the special issue of “ Earthquake Hazard and Groundwater ” (Vol.55, No.1, Feb, 2013), Review of “ Importance of groundwater as security ” by Makoto Taniguchi, Research-in-progress of “ Field study on the damages of a well due to the Great East Japan Earthquake ” by Kunio Ohtoshi et al., Data of “ Effect of Tsunami induced by the 2011 off the Pacific coast of Tohoku Earthquake on groundwater ” by Kei Nakagawa et al., Data of “ Treatment and effective utilization of debris and tsunami deposits generated by the Great East Japan Earthquake ” by Takeshi Katsumi et al., and Data of “ Symposium, The way of groundwater use as the emergency water source at the time of the earthquake ” by Makoto Taniguchi and Makoto Nakashima were published. All these papers have been published in the J-stage (https://www.jstage.jst.go.jp/browse/jagh/-char/ja/).

Prof. Ichirow Kaihotsu organized the joint investigation team of JAGH and JSHWR (Japan Society of Hydrology and Water Resources). They visited public water works offices and collected water samples at the wells of the city in Kamaishi city, Rikuzen Takata city, and Minami Sanriku town during June 16-19 and August 1-3, 2011. They also sampled water at the well for disaster in Wakaba-ku, Sendai City at that time. As a follow up of these investigations, the team of University of Tokyo and Nagasaki University sampled groundwater, river water and soil in Minami Sanriku town. In these investigations, we mainly focused on recovery from the salinization of groundwater due to tsunami induced by the earthquake.

Keywords: JAGH, The 2011 off the Pacific coast of Tohoku Earthquake, Symposium, Special issue, Joint investigation team, Salinization of groundwater