Evaluation of Kongsberg Simrad magnesium seawater battery SWB 600 aimed to very long term ocean bottom observation

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For very long term ocean bottom observation more than several years, we made evaluation of Kongsberg Simrad AS seawater battery SWB 600(anode: magnesium, cathode: fibre glass carbon) around Japanese Sea in December, 1998. In present experiment, we measured voltage of seawater battery directly using a digital recorder and cement resistors. Seawater battery began to produce electric power just after touch with seawater. Maximum power output of 3W(1.83V) was observed at the beginning of deployment, and most of this value indicated 2W(1.5V). In this experiment, we found that output voltage from seawater battery was strongly influenced by electrochemical circumstances in seawater.