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Emission spectroscopyp of single buble sonoluminescence using argon mixuture water RYOKO YAMADA, MAKOTO MATSUI, SHUN ITO, Shizuoka Univ — If the liquid has been degassed and is irradiated with a standing acoustic wave, a single bubble sonoluminescence (SBSL) can be generated. It is think that very high temperature and pressure environment is generated inside a SBSL bubble with emission of light. However, little is known about the SBSL emission mechanism. The study is intended as an elucidation of SBSL emission mechanism. In this study, to generate SBSL, the Ar mixture pure water in the 200 ml round bottom flask was irradiated with ultrasound at about 24.1 kHz. SBSL emission of light was detected by PMT. We will acquire the emission spectrum of SBSL using spectroscope and ICCD camera next.

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