

Abstract Submitted  
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**Pulse discharge in the focus of the converging acoustic wave in the water** VALERIY CHERNYAK, SERGIJ SIDORUK, VITALIJ YUKHYMENKO, EVGEN MARTYSH, Kyiv National Taras Shevchenko University, OLEG FEDOROVICH, Institute of Nuclear Research, National Academy of Sciences of Ukraine, KYIV NATIONAL TARAS SHEVCHENKO UNIVERSITY TEAM, INSTITUTE OF NUCLEAR RESEARCH, NATIONAL ACADEMY OF SCIENCES OF UKRAINE TEAM — Generation of the acoustic signals made by the two successive microsecond's discharges in the liquid system of cylindrical geometry was investigated. The ratio of the radius of stainless steel cylinder to its height is  $\sim 13.5$ . Both discharges are realized between two electrodes placed on the cylinder axis. The ratio of the cylinder height to the distance between electrodes is  $\sim 3$ . Controlled time delay between discharges was changed in the wide range: from the moment when the first divergent acoustic wave (generated by the first discharge in the water) reaches the metal wall of cylinder till the time after the axial collapse of the converging acoustic wave (reflected from the cylinder wall). The energy in storage capacitors was changing in the range of  $1 \div 1000$  joules. The air discharger and hydrogen thyratron were used as commutators for the first and the second discharges correspondingly.

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