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Ethanol reforming in pulse plasma-liquid system with postdischarge pyrolitic chamber VALERIY CHERNYAK, SERGIJ SIDORUK, SERGIJ OLSZEWSKI, KYIV NATIONAL TARAS SHEVCHENKO UNIVERSITY, PR-T ACAD. GLUSHKOVA 2/5, KYIV 01033, UKRAINE TEAM — This paper presents the results of experimental investigations of the process of nonthermal plasma-assisted reforming of aqueous ethanol solutions in the dynamic plasma liquid systems using the Pulse electric discharges in a gas channel with liquid wall. Also plasma assisted high temperature partial oxidation pyrolisis of ethanol was investigated. The energy efficiency vs. pyrolisis chamber temperature and vs. ethanol-to-oxygen molar ratio were obtained. The best regimes for highest energy efficiency were obtained. The outflow syngas components was investigated.

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