Long Term Anomalous Heat from 9 nm Pd Nanoparticles in an Electrochemical Cell

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We report 58 days of 90 milliwatts anomalous excess heat in an electrochemical cell which integrates to 453,000 Joules of liberated energy, including 4 days of anomalous heat after electrolysis power was shut off. The Pd cathode was placed in tension and 9 nm Pd nanoparticles were deposited on the cathode in situ at the onset of the experimental run. We employed a Fleischman-Pons type open electrochemical cell, modified to allow ultrasonic stimulation of the cathode. The electrochemical cell was surrounded by a liquid water jacket to facilitate the transduction of ultrasonic wave energy into the electrochemical cell. The electrochemical cell and water jacket are placed inside a mass flow calorimeter. There are thermal sensors in the water jacket and adjacent to the cathode. The ultrasonic transducers were not used in this experiment. All temperature sensors were consistent in reporting of the anomalous heat. Details of the experiment will be described.