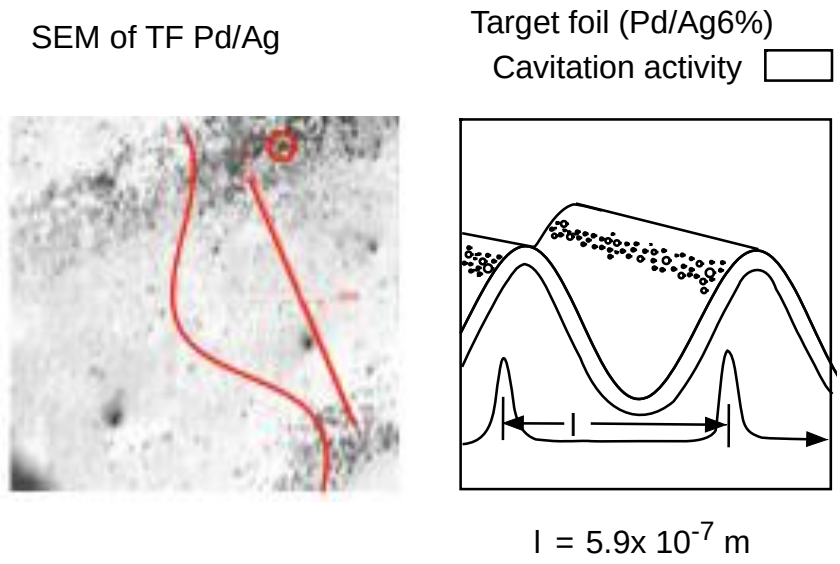
Investigation of Cavitation Effects Related to LENR

Roger Stringham[1], Thomas Claytor and Malcolm Fowler [2]
[1]Firstgate Labs, Kauai Hi, USA
[2] High Mesa Technology, Los Alamos NM, USA
Rogerssbiz@gmail.com, Claytor@att.net

Several high frequency cavitation experiments have produced interesting data. A new miniaturized cavitation system was operated at 1.7 MHz using D_2O and was small enough to fit into a sensitive Seebeck calorimeter. The 1.7 MHz reactor was designed to pass 50 ml of D_2O in 120s through the 1cc cavitation volume. This procedure minimized heating of the transducer and target foil, however after each run, the D_2O had to be cooled prior to another test. Strategically placed thermocouples (TCs) at the entrance and at the exit from the cavitation cell measured the delta T to supplement the Seebeck data. Many different target foils (TF), (5 x 18 x 0.1mm) were run in the system and a few showed some interesting surface features. Tritium barely above the background was found in one sample, and while sample to sample variations occurred in the heat output, none was greater than 10%. The melted PdAg alloy TF SEM is shown below.



SEM of the PdAg TF exposed to D_2O cavitation for 120 seconds. The wave pattern is shown in the exaggerated drawing. This shows the active zone at about 10% as measured in earlier measurements. [1]

[1] R. Stringham, Sonofusion's, "Transient Condensate Clusters", JCMNS, Jean-Paul Biberian Ed., Vol. 13, 508, 2014.