

Call Mr. Hansen



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Dr. Ryszard Gajewski
Department of Energy
Office of Basic Energy Sciences
Director of Advanced Energy Projects
Bldg. GTN / Room G-347
Washington, D.C. 20585

Dear Dr. Gajewski:

We have watched the cold fusion progress and controversy with great interest and would like to propose a simple experiment in which the fusion reaction rate should be dramatically increased. Before writing a proposal to the Office of Basic Energy Sciences, however, we wanted to see if the concept was of any interest.

As we understand it, the reaction rate is a very strong function of the inter-molecular separation distance. The success of muon catalyzed fusion, for example, is due to the reduction of the internuclear distance of a DD or DT molecule by the same factor as the muon to electron mass ratio (~ 200). Researchers have shown that doubling the DD density can double the number of fusion reactions catalyzed before the muon is lost. Why not pursue this idea for cold fusion?

We propose to compress a properly prepared, small palladium sample, saturated with deuterium under high pressure in a diamond anvil. Similar samples could be prepared with hydrogen as a control. Diamond anvil pressures as high as 250 GPa (2.5 MBars) have been reported. (*Science* Vol. 232, pp 1419-1420)

WJSA proposes to work closely with a facility such as that at the University of California, Berkeley, which has existing diamond anvil experience and equipment. A small experiment should provide sufficient data to determine the potential efficacy of the cold fusion process at high pressures.

If you have any questions please feel free to contact me at the address above or by phone at (415) 463-1108 or fax at (415) 463-1308.

Respectfully,

William Hansen
Physicist

cc: Michael Monsler

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Idea not new - cf. Jones' "piezo-fusion"

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