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Steven B. Krivit
Editor, New Energy Times
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[redacted]

Steve:

Here is my answer to you November 26th email:

According to my theory, D-D fusion is initiated at local areas in a metal where there is maximum stress. In most metals, stress is inherent in their structure and largely a result of the rate and mode of cooling of the metal when it is being cooled down from the liquid state.

Now the relation between the local solubility c_x and the local stress σ is

$$c_x = c_0 e^{-\sigma_x \frac{\overline{V}}{RT}}$$

where σ_x is the stress at point x and c_x and the solubility there (σ is negative for tensile stress); $\overline{V}$ is the partial molar vol of H. Values of σ_2 at DISLOCATION boundaries is extremely high. H and D are drawn to those points and create conditions of local concentration so high (i.e., atoms forced together) that fusion occurs. This is supported by the fact that nuclear phenomena occur only when the interior of the metal is sufficiently damaged, i.e., populated by increased number of points of tri-lateral stress. The long waiting time for the switch on of nuclear activity is the key evidence. A long electrolysis would bring about more dislocations and

each of these, thermodynamically would give rise to a super high concentration of D atoms and hence a local presure at which fusion of D becomes possible.

Sincerely,

John O'M. Bockris

JOMB/ts
November 29, 2007