

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Electrodynamic Component of Pd Electrical Conductivity

MITCHELL SWARTZ, JET Energy, PO Box 81135, Wellesley Hills, MA 02481 —
The electrical resistance of $\text{Pd}_{1-x}\text{D}_x$, $[\rho_{Pd}]$ has been used to estimate loading^{1,2}.
We discuss with experimental evidence that ρ_{Pd} has electrodynamic components;
some may trigger Lattice Assisted Nuclear Reactions (LANR). Type “B” (anode
plate) Pd/D2O/Pt PhusorTM LANR devices^{3,4} (excess heat \approx 175 percent, 1.99
watts) demonstrate two time constants of $\rho_{Pd}(t)$. The first (< 5 seconds) is not
from deuteron loading. Also, at high loading, Type “B” systems produce an insta-
bility oscillation. These possible electrodynamic effects, and the supralinear rise of
 ρ_{Pd} , may trigger, or maintain, LANR.

¹Bambakidis, G., et al, Phys. Rev. 177, 1044 - 1048, 1969

²McKubre, M. et al, ICCF-1, 1990.

³Swartz, M, Fusion Technology, 31, 228-236, 1997.

⁴Swartz, M, Fusion Technology, 31, 228-236, 1997.

Scott Chubb
Naval Research Laboratory

Date submitted: 29 Nov 2008

Electronic form version 1.4