

# A Survey on the evolution of Yearly Works on Pd-D, Ti-D and Ni-H Systems within Cold Fusion Field

#Luciano Ondir Freire <sup>1</sup>, Delvonei Alves de Andrade <sup>1</sup>

<sup>1</sup> Instituto de Pesquisas Energéticas e Nucleares (IPEN / CNEN - SP), Brazil

E-mail: [luciano.ondir@gmail.com](mailto:luciano.ondir@gmail.com)

More than 30 years have been passed since Stanley and Pons press conference announcing the discovery of “Cold Fusion”. This work aims at presenting a general view of the evolution of experimental works in the various sub-fields, like Pd-D, Ti-D, Ni-H systems. For each subfield, this work presents the yearly number of successful and unsuccessful works published in conferences or journals. For Pd-D systems, since 1989, the number of positive results (finding some nuclear reactions) is superior to negative results but there is a trend of reduction of yearly works. Ti-D systems follow the same tendency. Ni-H systems, on the other hand, present a rising tendency besides having a higher ratio of successful/unsuccessful experiments. Perhaps the smaller cost of materials and easier replication is being decisive for new research groups starting in the field, besides enterprises starting advertisement of products based on the Ni-H system.

