## **Current Science, Special Section: Low Energy Nuclear Reactions**

The journal Current Science, Vol. 108, No. 4, published on February 25, 2015 includes 35 papers about cold fusion, Special Section: Low Energy Nuclear Reactions. The online edition is here.

The Preface begins:

Low energy nuclear reactions

A quarter century has gone by since Martin Fleischmann and Stanley Pons, two chemistry professors from the University of Utah, USA, made a 'historic' announcement at a press conference in Salt Lake City in March 1989, where they claimed that they had observed sporadic episodes of massive amounts of 'excess heat', over and above what is electrically put into the electrolytic cell. They suggested that in their experiments, the Pd rod which was deployed as cathode got heavily 'loaded' with deuterium (D), thus forming PdD, from the LiOD electrolytic solution during electrolysis. They went on to postulate that the observed large amounts of 'excess heat', which is far beyond the chemical energy available, must be attributed to the occurrence of some sort of nuclear fusion reactions between the deuterons, d, embedded within the Pd metal matrix. This claimed occurrence of fusion reactions at room temperature soon came to be dubbed as 'cold fusion (CF)'. . . .

## <u>Papers</u>

Preface Srinivasan, M.; Meulenberg, A. https://www.currentscience.ac.in/Volumes/108/04/0491.pdf

Cold fusion: comments on the state of scientific proof McKubre, Michael C. H. <a href="https://www.currentscience.ac.in/Volumes/108/04/0495.pdf">https://www.currentscience.ac.in/Volumes/108/04/0495.pdf</a>

Extensions to physics: what cold fusion teaches Meulenberg, A.

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Phonon models for anomalies in condensed matter nuclear science Hagelstein, Peter L.; Chaudhary, Irfan U.

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Development status of condensed cluster fusion theory Takahashi, Akito

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Model of low energy nuclear reactions in a solid matrix with defects Sinha, K. P.

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Selective resonant tunnelling — turning hydrogen-storage material into energetic material Liang, C. L.; Dong, Z. M.; Li, X. Z.

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Coherent correlated states of interacting particles — the possible key to paradoxes and features of LENR

Vysotskii, Vladimir I.; Vysotskyy, Mykhaylo V.

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How the explanation of LENR can be made consistent with observed behaviour and natural laws Storms, Edmund

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Introduction to the main experimental findings of the LENR field Storms, Edmund

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Review of materials science for studying the Fleischmann and Pons effect Violante, V.; Castagna, E.; Lecci, S.; Sarto, F.; Sansovini, M.; Torre, A.; La Gatta, A.; Duncan, R.; Hubler, G.; El Boher, A.; Aziz, O.; Pease, D.; Knies, D.; McKubre, M.

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Sidney Kimmel Institute for Nuclear Renaissance Hubler, G. K.; El-Boher, A.; Azizi, O.; Pease, D.; He, J. H.; Isaacson, W.; Gangopadhyay, S.; Violante, V.

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Progress towards understanding anomalous heat effect in metal deuterides Azizi, O.; El-Boher, A.; He, J. H.; Hubler, G. K.; Pease, D.; Isaacson, W.; Violante, V.; Gangopadhyay, S.

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Replicable cold fusion experiment: heat/helium ratio Lomax, Abd ul-Rahman

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Observation of radio frequency emissions from electrochemical loading experiments Kidwell, D. A.; Dominguez, D. D.; Grabowski, K. S.; DeChiaro Jr, L. F.

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Condensed matter nuclear reactions with metal particles in gases Cravens, Dennis; Swartz, Mitchell R.; Ahern, Brian

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Use of CR-39 detectors to determine the branching ratio in Pd/D co-deposition Mosier-Boss, P. A.; Forsley, L. P.; Roussetski, A. S.; Lipson, A. G.; Tanzella, F.; Saunin, E. I.; McKubre, M.; Earle, B.; Zhou, D.

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Brief summary of latest experimental results with a mass-flow calorimetry system for anomalous heat effect of nano-composite metals under D(H)-gas charging Kitamura, A.; Takahashi, A.; Seto, R.; Fujita, Y.; Taniike, A.; Furuyama, Y.

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Condensed matter nuclear science research status in China Dong, Z. M.; Liang, C. L.; Li, X. Z.

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Dry, preloaded NANOR®-type CF/LANR components Swartz, Mitchell R.; Verner, Goyle M.; Tolleson, Jeffrey W.; Hagelstein, Peter L.

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Directional X-ray and gamma emission in experiments in condensed matter nuclear science Hagelstein, Peter L.

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Observation and investigation of anomalous X-ray and thermal effects of cavitation Vysotskii, V. I.; Kornilova, A. A.; Vasilenko, A. O.

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Martin Fleischmann Memorial Project status review Valat, Mathieu; Hunt, Ryan; Greenyer, Bob

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Observation of neutrons and tritium in the early BARC cold fusion experiments Srinivasan, Mahadeva

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Introduction to isotopic shifts and transmutations observed in LENR experiments Srinivasan, Mahadeva

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Transmutation reactions induced by deuterium permeation through nano-structured palladium multilayer thin film Iwamura, Yasuhiro; Itoh, Takehiko; Tsuruga, Shigenori

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Energy gains from lattice-enabled nuclear reactions Nagel, David J.

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Lattice-enabled nuclear reactions in the nickel and hydrogen gas system Nagel, David J.

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Summary report: 'Introduction to Cold Fusion' — IAP course at the Massachusetts Institute of Technology, USA

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