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# **Overview of Theoretical and Experimental Progress in Low Energy Nuclear Reactions (LENR)**

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Y. Srivastava: [Theoretical Review, 30 minutes]

F. Celani: [Experimental Overview, 30+ minutes]

An overview will be given on the main progress made –since March 1989- through experimental/theoretical studies on thermal/nuclear anomalies observed in forced interactions of Hydrogen isotopes (H, D), in non-equilibrium conditions, with pure or alloyed materials (mainly Palladium, Nickel).

Most of the experiments used electrolytic environments at moderate temperatures (20-50°C). More recently, gas environments have been used at higher temperatures (between 200-400°C and even temperatures between 500-900°C have been employed).

Specific nanostructures have begun to play a crucial role both in basic studies as well as in, recently claimed, technological/industrial applications.

A plethora of theoretical models have been proposed to explain several experimental anomalies in LENR. A brief description of a weak interaction model shall be presented that claims to explain almost ALL of the anomalous effects found so far.

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