George Egely (Hungary)

Electric Energy Generation by LENR

ICCF-21, Abstract.

The paper is about the lost, forgotten inventions, when high voltage electric pulses were produced with LENR a plasma process of several kilowatts.

While most research effort was devoted to electrochemical LENR studies in the past decades, plasma-based studies are gaining ground also.

Historically, pulsed hydroged plasma devices were the basis of the best clean energy devices during the past 100 odd years. Their mere existence is a novelty for LENR researches. The reason is simple: even their inventors were not aware of the physical mechanisms, and their fundamental process. All of these methods were based purely on lucky accidents, then developed by trial and error. Lacking the very fundamentals of excess energy by LENR, inventors thought they were harnessing the energy of "ether."

The earliest successful devices were developed by Nikola Tesla, and Henry T. Moray. The former did not leave much technical data for us – apart from his high voltage, high frequency carbon electrode discharge lamps which produce the right circumstances to initiate LENR reactions.

Henry Moray left us many more technical details, a patent, photographs, and a number of descriptions from witnesses. Both of them worked from the 1910's to the 1940's, well before the very concept of fusion, or the structure of the nucleons was known. Since then some other inventors have found the same effect but in different technical setups.

However, mainstream science preceded them. Up to July 1914, several papers were published about transmutation of hydrogen into helium and neon, in pulsed, high voltage, discharge tubes.

The aim of this paper is twofold: to show the history of forgotten technical inventions based on LENR, and to show their common physical roots.

The common physics of these forgotten inventions is based on the step–by-step transmutation of hydrogen into deuterium, tritium and helium. Sharp edges and cavities on the surface of high voltage cathodes are the very locations where energy is released. This can be found in all the forgotten inventions.

The renaissance was in the 1980's, when the Russian Chernetzkij and the Canadian Correas developed their devices. This happened just before the days of Pons and Fleischmann, when the necessary concepts of LENR were gradually born.

Electric, mechanical and chemical energy production by LENR is more economic than low grade heat, yet these paths are neglected by researchers of LENR. The author has a 10-odd years of hands-on experience with the difficulties and pitfalls of these devices.

Henry Moray lef
descriptions from
very concept of fu