Evolution of the Lattice Energy Converter

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Throughout history, many great discoveries resulted from mistakes or experiments that didn't produce the anticipated results. Such is the case of the Lattice Energy Converter, (LEC). Initial experiments were designed to see if we could do electrolysis through a dry gas by using a radioactive source to partially ionize the gas so a current could be conducted. However, we observed a conduction phenomenon indicating that the gas contained more ions than that which the radioactive source could provide. Additional experimentation, in the absence of the radioactive source, confirmed that the gas was being ionized by a phenomenon unknown to us. This spontaneous ionization was not predicted for the gas densities, temperatures, and non-radioactive materials that we were using. A quote from *The Case-Book of Sherlock Holmes,* by Arthur Conan Doyle states "When you have eliminated all which is impossible, then whatever remains, however improbable, must be the truth." By following where our experiments were leading, we travelled from the improbable to the reality of the Lattice Energy Converter.

This paper reports the evolution of the LEC from initial experiments that didn't produce the expected results, to the realization that something was ionizing the gas where the ions between a pair of electrodes will directly produce an electric voltage and current, i.e, direct energy conversion. The LEC has demonstrated the unexpected ability to spontaneously self-initiate and self-sustain the production of ionizing radiation without the use of naturally radioactive materials. This extraordinary claim is supported by extraordinary evidence including experimental results, peer reviewed papers,[1,2] presentations at international conferences,[3,4] and multiple independent replications.[5,6,7,8] Although demonstrated electrical power levels are small, these phenomena are real and, with further development to increase the output, it can be exploited for multiple critical needs including "green" energy production, medical treatments, space propulsion, and applications yet to be identified.

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