**Professor Christos D. Papageorgiou**, PhD (Imperial College) and CEO of the company **PAP-LENR IKE**, has dedicated a significant part of his research at the **National Technical University of Athens (NTUA)** to studying explosive phenomena triggered by electric pulses in metal wires or sheets of various shapes and compositions.

After years of research, thousands of experiments, and extensive theoretical analysis, he concluded that some of these explosive phenomena may be linked to **Low-Energy Nuclear Reactions (LENRs)**, specifically the transmutation of **Lithium (Li) into Helium (He)**. This hypothesis is further supported by observations of lithium battery explosions occurring **before** chemical fires—even in expired ("zombie") batteries with negligible remaining electrical energy. In some cases, these depleted batteries have produced unexpectedly large explosions.

Professor Papageorgiou proposes that the intense explosions in lithium batteries result from **lithium-to-helium transmutation**, potentially initiated by curved conductive metal structures within the batteries. As he has theoretically demonstrated, **curved conductive materials** can self-ignite due to quantum effects related to their geometry.

With the support of a specialized team, Professor Papageorgiou will continue investigating these phenomena, aiming to develop a **novel device** capable of generating **clean thermal energy without nuclear radiation**. The evolution of this technology could lead to a **revolutionary nuclear energy solution**—providing **unlimited, radiation-free energy for thousands of years**.

**Key Research Objectives**

The most critical step is uncovering the mechanism behind the **PAP-LENR phenomenon**, as understanding it will enable refined experimental applications. Once scientifically validated, this mechanism will form the **core intellectual property (IP)** of PAP-LENR IKE.

**Research & Development (R&D) Phases**

1. **Phase 1:**
   * Establish a **safe laboratory** to test conductive wires/sheets coated with various materials and lithium (Li).
   * These materials, based on **quantum theoretical analysis**, are suspected to be sensitive to explosive phenomena under electromagnetic pulses.
   * Conduct multiple experiments applying **different electromagnetic pulses** to Li-based samples. Strong explosions would serve as preliminary evidence of **Li-to-He transmutation**.
2. **Phase 2:**
   * Develop a **prototype device** that operates continuously, using controlled explosive reactions in lithium samples.
   * The device will convert **low-energy electromagnetic pulses into high thermal energy** via lithium transmutation.
   * This **elementary Li-based machine** will mark the first step toward replacing fossil fuels, offering a **clean, sustainable energy alternative**.

**Long-Term Vision**

Lithium reserves—sufficient for **thousands of years**—could secure the planet’s energy future. The transmutation of lithium into helium presents a **game-changing solution** to global energy demands and climate change.

**Funding & Timeline**

* **Phase 1** is estimated to take **<2 years**, requiring **€1,000,000** in funding.
* PAP-LENR IKE is open to **investment negotiations**, offering a percentage of company shares to interested investors.