



# NATIONAL TECHNICAL UNIVERSITY OF ATHENS

School of Electrical & Computer Engineering

9, Iroon Polytechniou str., 15773, Zografou, Athens, Greece

---

## HIGH VOLTAGE AND ELECTRIC MEASUREMENTS LABORATORY

*Date: 22 February 2006*

*Tel: +302107273558*

*E-mail: ntheodor@central.ntua.gr*

*Subject: **Letter of Recommendation***

### **To whom it may concern,**

This document represents the judgment of members professors of the High Voltage and Electrical Measurements Laboratory of the School of Electrical and Computer Engineering of N.T.U.A. for the “Floating Solar Chimney” Technology, presented to us by the inventor of the Floating Solar Chimney, prof. Christos Papageorgiou, Associate professor in Electromechanical Systems of Thrust and Power of N.T.U.A.

Taking into consideration:

- The research papers of the inventor as appeared in various proceedings of related conferences and magazines
- The unpublished research material of the inventor, as presented to us
- And his patents documents

We consider that the “Floating Solar Chimney” Technology is a major breakthrough towards the efforts for production of clean renewable electric energy using the solar irradiation.

The possibility of achieving high efficiencies by the related Power Plants of this technology, named by the inventor as “Solar Aero-Electric Power Plants”(SAEPPs), due to their similarity to “Hydro Electric Power Plants”, combined to low construction, operation and maintenance costs of these power plants can guarantee a low cost electric energy production.

His latest research work have shown also that the SAEPPs can operate, with appropriate low cost thermal storage, 24 hours per day 365 days per year with a guaranteed production power profile and thus can replace fuel consuming conventional electric power production plants. This is a very useful property of the SAEPPs for the environmental protection. Using the renewable solar electric power of SAEPPs the inventor have shown that cheap and clean Hydrogen can be produced, by electrolysis, and a possibility of a realistic solution to the fuel problem can be achieved.

Our Laboratory, with its scientific and engineering staff, is ready to support the “Floating Solar Chimney” technology towards its realization, especially in the following areas:

- Lightning protection of the tall Floating Solar Chimneys
- Engineering support in studies related to electrical apparatus and equipment for proper electric operation of the SAEPPs and connection to the electric grid.

The representative of the involved members of the High Voltage and Electrical Measurements Laboratory of National Technical University of Athens,

Prof. Nicolaos Theodorou

Head of School of Electrical and Computer Engineering of NTUA

Athens, 22 February 2006