## Annexure-I

## Study and implementation of 40kHz power source for plasma activated water generation and optimization.

## **Abstract**

A 5kV, 100mA, 40 kHz supply has been designed. This power supply will be used to generate an air plasma jet for producing plasma activated water. Based on the results of activation the power supply components will be modified in terms of topologies such that 700 or higher ORP (Oxygen reduction potential) is generated. This water can be used for various applications like agriculture, sterilization in biomedical application, food preservation etc.

## **Relevant references [Publications, web links etc.]:**

Many publications are available at <u>www.ieee.org</u> etc. for power supplies. The other journals are available at various sites on plasma activated water.

Eligibility: Only students of M.E./M.Tech electrical/electronics branch can submit their application at following email addresses.

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