ABSTRACT

INTRODUCTION
Bharat is believed to be a cultural and spiritual land. Spirituality is practiced here through different methods and among all, Yajna being highest spiritual practice. Number of ancient spiritual texts advocate positive changes of performance of Yajna at individual and at environmental levels. Empirical studies on Yajnas may support the cultural practices by understanding their mechanisms. Since these practices are very subtle in nature, it is very difficult to quantify the changes at gross levels; hence, newly developed technologies such as Electrophotonic Imaging (EPI) and EnviroTech are used in this study to observe subtle changes both in people and in the environment.

LITERATURE REVIEW
Ancient Vedic traditional literature review brings out the model of how Yajnas support subtle and gross world. The smoke generated out of Yajna Kunda (sacred pit) reaches the atmosphere generating rain clouds. Thus the eco - balance was maintained meticulously in ancient India. The scientific literature review provides suitable and apt technologies to trace the subtle changes that involve individual and collective levels.

AIM AND OBJECTIVES
The aim of the study was to investigate subtle changes in participants who were actively involved in performance of Bhaishajya Maha Yajna, through measurements of Electrophotonic Imaging parameters and to observe levels of pollution in the atmosphere during two consecutive years 2013 and 2014.
METHODS

SUBJECTS

For EPI parameters, the subjects were from Kerala, Karnataka and Andhra Pradesh, and were followers of a specific Yoga module called Jiva Yoga, led by a spiritual master from Kerala. They numbered 29 in 2013 and 21 in 2014. Air samples were taken from the surrounding area (200 meter away from Yajna Kunda) using EnviroTech to measure pollution levels.

DESIGN

EPI parameters were taken three times, including base assessment and EnviroTech parameters were taken pre and post-performance of Bhaishajya Maha Yajna.

ASSESSMENTS

Following are the EPI measured variables.

Area: the number of pixels in the image having brightness above a pre-set threshold. It is observed that area shifts in diverse situations. Increase in area is indicated by an increase in the number of pixels. Average Intensity: an evaluation of the Intensity spectrum of the pixels in the images indicating electro-photon discharges from fingertips. Entropy: an indicator of the level of chaos and disharmony in the system.

EnviroTech had \( \text{SO}_2 \), \( \text{NO}_2 \) and Respirable Suspended Particulate Matter (RSPM) as variables to measure pollution levels.
DATA EXTRACION AND ANALYSIS

Data from EPI parameters were obtained according to the norms of EPI standards, capturing images from 10 finger tips. SciLab software was used to extract the required variables to convert them into numerical data. RMANOVA was used to analyze EPI parameters using SPSS 16.0.

EnviroTech data were analyzed by comparing them to standard values.

RESULTS

EPI PARAMETERS

Area - A repeated measure of ANOVA showed, that for 29 people in 2013, the area of three measurements were statistically different, $p = 0.017$. Post-hoc analysis for three measurements confirmed the statistical difference between first measurements and second measurement $p = 0.017$. However, in 2014, for 21 people, $p = 0.001$, the post-hoc analysis showed that first measurement and second measurement were statistically significantly different, $p = 0.001$, and first measurement and third measurement were also statistically significant, $p = 0.033$.

Average Intensity - A repeated measure of ANOVA showed, for 29 people in 2013, the Average Intensity between three measurements were statistically different, $p < 0.001$, the post-hoc analysis showed the statistical difference between first measure and second measure, $p < 0.001$, and second measurement and third measure, $p = 0.047$. For 21 people in 2014, a repeated measure of ANOVA showed significant difference, $p < 0.001$. Post-hoc analysis showed significant difference between first measurement and second measurement, $p < 0.001$, and first measurement and third measurement, $p < 0.001$. 
Abstract

**Entropy** - A repeated measure of ANOVA did not show statistical difference, for 29 people in 2013, between three measurements, \( p = 0.274 \). A repeated measure of ANOVA in 2014 also, for 21 people, did not show statistical difference, \( p = 0.771 \) between the three measurements.

**ENVIROTECH VARIABLES**

**Nitrogen Dioxide** increased by 13.51 percent from pre assessment within accepted standard values (80 \( \mu g/m^3 \)),

**Sulphur Dioxide** decreased 43.39 percent from base within standard values (80 \( \mu g/m^3 \)), and

**RSPM** increased 65.15 percent from base assessment exceeding 9 numerical values from standard value (100 \( \mu g/m^3 \)).

**CONCLUSION**

The study concludes that human subjects attending BMY displayed statistical changes in Area, Average Intensity and Entropy, suggesting overall human energy field reconstruction occurred at its optimal level. Forty three percent reductions in Nitrogen Dioxide support the performance of traditional rituals to reduce pollutant levels and to lead a naturefriendly life.