IEEE IFEC'16

2016 International Future Energy Challenge

College Student Competition http://www.energychallenge.org/

REQUEST FOR PROPOSALS

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■ IFEC Introduction

IFEC is an international student competition for innovation, conservation, and effective use of electrical energy, which is open to college and university student teams from recognized engineering programs in any location.

The competition is sponsored by the Institute of Electrical and Electronics Engineers (IEEE) Power Electronics Society (PELS), Power & Energy Society (PES), Industry Application Society (IAS), Industrial Electronics Society (IES), Vehicular Technology Society (VTS) and Power Sources Manufacturers Association (PSMA).

■ Topic

High Power Density AC-DC Converter

Key Specifications:

Input: V_{in}: 90~264 V_{rms}; 47~63 Hz; PF>0.95 @20% load; I_{THD}<2% @50% load

Output: V_{out}: 400 V_{dc}; P_{out}: 1.3 kW; Efficiency>92% @10% load;

Power Density: >1 W/cm^3

■ Final Competition Location

National Taiwan University, Taiwan

Topic Chair:

Prof. Yaow-Ming Chen
National Taiwan Univ. Taiwan
Email: ntuymchen@ntu.edu.tw

■Participation

Participation is on a proposal basis. Those schools that are interested must submit a proposal to the topic chair before the proposal deadline. Each Proposal will be judged by a distinguished panel of volunteer experts from the IEEE and from industry. Schools with successful proposals will be notified and qualified for the rest of the competition. Deadline for each period will be posted on the IFEC website. The outstanding teams will be invited to a competition event in summer of 2016.

There will be a Grand Prize of $10,000 and three additional awards granted at $5,000, $3000 and $1,000 each.

Important Notice:

- ✧ Each university can support only one team.
- ✧ Each team should have at least 4 members. Interdisciplinary teams are encouraged. Graduate students are not excluded, but should only provide high level support.

■Timelines and Proposal Submission Email Address

Workshop at ECCE'2015	**Sept. 22, 2015**
Proposal Deadline	**Oct. 15, 2015**
Please email the proposal to: ntuymchen@ntu.edu.tw by this deadline.	
Notification of Acceptance	**Dec. 15, 2015**
Workshop at APEC'2016	**Mar. 19, 2016**
Notification of Finalist	**Mar. 30, 2016**
Final Competition	**July 18-20, 2016**

Please visit **http://www.energychallenge.org** for more detailed information.

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