



## 演 講

# Micro Power System and its Application 微動力系統與其應用

- Speaker :** Assistant Prof. Yueh-Heng Li 李約亨助理教授  
Department of Aeronautics and Astronautics, National Cheng Kung University  
國立成功大學 航空太空工程學系
- Time :** 107 年 4 月 27 日 星期五 14:00
- Place :** 健雄館(科四館) S4-917 教室

### 摘 要 / Abstract :

The application of micro power system is prevailing. This talk would introduce the concept, design and demonstration of micro-thermophotovoltaic (micro-TPV) power system. However, the overall efficiency of micro-TPV is strongly associated with radiant efficiency and quantum efficiency. How to improve the overall efficiency of micro-TPV power system during the miniaturization process is a quintessential question to researchers. The talk would point out the inherent deficiency of a small combustion system and propose some promising strategies to overcome these defaults. In addition, the concept and demonstration of pulsed plasma thruster (PPT) and vacuum cathode arc thruster (VCA) will be mentioned eventually and both thrusters are appropriate for the electric propulsion of CubeSat.

### 講師簡歷 / Bio :

**Yueh-Heng Li** received Ph.D. degree in department of Aeronautics and Astronautics from National Cheng Kung University (NCKU) in 2008. He joined the faculty of the department of Aeronautics and Astronautics at NCKU in 2014. Dr. Li's current research interests are in combustion science, energy technology, and electric propulsion. His paper on personal power system received a Postdoctoral Scholar Research Award (MOST) in 2013. He is also a recipient of Ta-You Wu Memorial Award (吳大猷先生紀念獎, MOST) in 2016. For international collaboration, he leads the Taiwan-Poland joint call program in energy sector, and cooperates with Stuttgart University in Germany and Paris Observatory (France) in research field of electric propulsion system. More information about Yueh-Heng Li's research and publication can be found in the website of "Zic and Partners Laboratory" (ZAPLab)(<http://59.125.238.48/zaplab/index.php>).

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