

# Realization of a low carbon society through game changing technologies

**R&D Project Title :** Development of novel organic semiconductors and challenge for 20% efficiency in organic solar cells

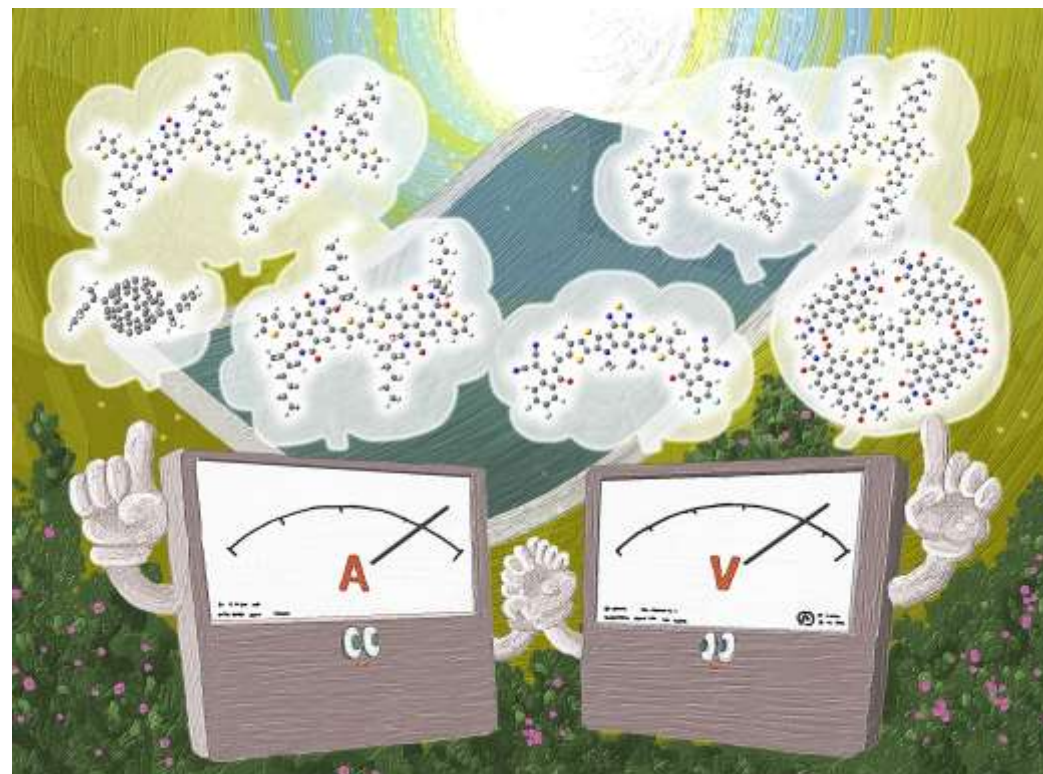
**Project Leader :** Itaru Osaka, Professor  
Graduate School of Advanced Science and Engineering  
Hiroshima University

**R&D Team :** Hideo Ohkita, Professor, Kyoto University  
Hiroyuki Yoshida, Professor, Chiba University



## Summary :

Organic solar cells that used a blend of organic semiconductors in the photoactive layer are an important next-generation photovoltaic system, which offers ultra-thin, light-weight, flexibility, and semi-transparency in contrast to the conventional silicon-based solar cells. Improving the trade-off between photocurrent and photovoltage and thereby the power conversion efficiency is a crucial issue in organic solar cells. In this project, we will develop novel high-performance organic semiconductors for overcoming the issue and aim at realization of the power conversion efficiency as high as 20%.



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