

Strategic Young Researcher Overseas Visits Program  
for Accelerating Brain Circulation 2011

**“Development of Young Researchers  
Based on International Joint Research  
on Green Energy Systems”  
Progress Report**

1. Name: Suguru Motokucho
2. Title: Assistant Professor
3. Host Institution: Technische Universiteit Eindhoven (Eindhoven University of Technology, the Netherlands)
4. Host Researcher: Professor Bart Noordover
5. Duration: 25-May-2013 – 25-March-2014
6. Research Topic: Development of Novel Bio-based Polymer Synthesis
7. Overview of the Results of the Collaborative Research:

Lithium ion batteries are widely used for portable electronics and electric cars. Popular electrolyte used in the commercial Lithium ion batteries is organic electrolyte, they have some troubles due to their leak or/and explosion. To solve this problem, various solid polymer electrolytes have been studied. Recently, Prof. Noordover and co-workers reported that synthesis of novel bio-based polymer from saccharide or its derivatives.

On the other hands, efficient conversion of biomass to available materials has recently received considerable attention as a potential technology in challenging

