## **I** History

#### 2009 ▶

2009. 04 - APRI-HCAM Joint Workshop

### 2008 ▶

- 2008. 10 HCAM Director (Prof. Alan J. Heeger) Special Lecture
- 2008. 08 A Business Report of UCSB-HCAM Center (Visit of GIST President)
- 2008. 06 The 2nd Management Committee of "Heeger Center for Advanced Materials"
- 2008. 05 The 3rd Workshop of "Heeger Center for Advanced Materials"

#### 2007 ▶

- 2007. 11 The Seminar of "Heeger Center for Advanced Materials"
- 2007. 11 The 2nd Workshop of "Heeger Center for Advanced Materials"

#### 2006 ▶

- 2006. 10 HCAM Director (Prof. Alan J. Heeger) Special Lecture
- 2006. 07 The 1st Research Committee of "Heeeger Center for Advanced Materials"
- 2006. 06 The 1st Management Committee of "Heeeger Center for Advanced Materials"
- 2006. 01 The 1st Workshop of "Heeeger Center for Advanced Materials"

#### 2005 ▶

- 2005. 09 The Formulation of Management Rules for "Heeeger Center for Advanced Materials"
- 2005. 06 A Temporary Management Committee of "Heeeger Center for Advanced Materials'
- 2005. 06 The MOU Conclusion of a Nobel laureate, Prof. Alan J. Heeger (UCSB) / GIST
- 2005. 03 A Visiting of a Nobel laureate (Prof. Alan J. Heeger) to KOREA in 2005
- 2005. 02 A Organization of invitation project for a Nobel laureate
- 2005. 01 A Plan of invitation project for a Nobel laureate in memory of 10 years after the opening of GIST



## **Heeger Center for Advanced Materials**

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## The 4th Workshop of "Heeger Center for Advanced Materials"

June 24 2009, AM 10:00, APRI Hall, GIST





## I Heeger Center for Advanced Materials

In Heeger Center for Advanced Materials (HCAM), Prof. Alan J. Heeger is appointed to a director of this center and researches for realizing flexible electronics, which are next generation industries, were planed to be executed through organizing the research centers in both Gwanju Institute of Science and Technology and University of California at Santa Barbara. The ranges of researches in the HCAM are from basic science fields to researches for realizing "plastic electronic engineering" namely Organic EL, Organic Solar Cell, Organic Thin-Film Transistor, Organic Laser and Flexible Displays. These advanced devices make it possible to commercialize wearable computer and roll type display, moreover would improve the quality of life through devoting environmental preservation using solar substitute energy.



# The 4<sup>th</sup> Workshop of "Heeger Center for Advanced Materials"

## I Workshop Program & Schedule

| Opening Re  | mark   |
|-------------|--|
| 10:00~10:05 | Vice Director : Prof. Kwanghee Lee   |
| 10:05~10:10 | Director : Prof. Alan J. Heeger  |
|             |  |
| Session I   |  |
| 10:10~10:40 | Prof. Heung Cho Ko (GIST)  |
|             | A Hemispherical Electronic Eye Camera Based on Compressible Silicon  |
| 10:40~11:00 | Optoelectronics Ph. D. Jang Jo (GIST)  |
| 10.40~11.00 | Bulk Heterojunction Nanomorphology and Vertical Component  |
|             | Distribution for High-Efficiency Polymer Solar Cells   |
| 11:00~11:20 | Ph. D. Seung-Hwan Oh (GIST)  |
|             | Synthesis of novel water-soluble polyfluorene derivatives and application  |
|             | for interfacial layer in PLEDs and organic solar cells   |
| 11:20~11:40 | Jamin Ku (GIST)  A computational study of low band-gap comonomers having   |
|             | benzothiadiazole acceptor unit   |
| 11:40~12:00 | Jae Min Kong (GIST)  |
|             | The Recovery Mechanism of Open-Circuit Voltage in a Tandem Polymer   |
|             | Solar Cell Incorporated with Titanium Oxide/PEDOT:PSS Interlayers  |
| 40.00.44.00 |  |
| 12:00~14:00 | Lunch Time   |
| Session II  |  |
| 14:00~14:30 | Prof. Hongsuk Suh (PNU)  |
|             | Organic Syntheses and Properties of Novel Conjugated Polymers for  |
|             | PLEDs and Solar Cells  |
| 14:30~15:00 | Kiseok Kim and Youna Choi (GIST)   |
| 45.00.45.00 | Hybrid solar cells using vertically aligned ZnO nanorods   |
| 15:00~15:20 | Seok-In Na (GIST)  Highly Conductive Poly(2 / ethylopediawythianhone) Poly(ctyrone)  |
|             | Highly Conductive Poly(3,4-ethylenedioxythiophene):Poly(styrene sulfonate) Films and Their Application to ITO-Free Organic Solar Cells |
| 15:20~15:50 | Prof. Han Young Woo (PNU)  |
|             | New low bandgap polymers for organic solar cells   |
|             |  |