

# I-FMP01

## International Poster Session

13:00-13:50

Chair : Lee Man Hyung (Pusan National Univ.)

Room : Terrace(3F)

Co-Chair : Suh Il Hong (Hanyang Univ.)

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13:00 – 13:50

I-FMP-13

### **A New Method of Object-based Tracking Modules for the Interactive Media**

Young-Ouk Kim (Korea Electronics Technology Institute) Sang-Bong Suh (AcaneTV Co., Ltd)

With the prolific growth of cable, satellite digital broadcasting and internet related industry, new digital contents are being demanded. Today, more end-users seek participations in the media through interactivity. Visual tracking technology, based on image processing, is mainly used in fields of human face tracking, security inspection, and traffic monitoring applications. In this research, we describe the interactive modules such as information display, e(T)-commerce and other services along with on-screen visuals on the streaming media using object visual tracking technology. The ...

13:00 – 13:50

I-FMP-14

### **Memoryless Feedback Temperature Control of an Extruder by the Switching Actuating Value**

Hitoshi Onogaki, Shuichi Yokoyama, Hiroto Hamane (Kogakuin Univ.)

In this paper, we presented a switching-based control algorithm for improving the speed of response on temperature control of an extruder. We proposed a switching actuating value method in a temperature control of extruder and showed the effect of  $H^\infty$  control and PID control. Recently, the memoryless feedback control had proposed, which was not only the real time integration element, but also the memory elements. We examined the application of a switching actuating value method to a memoryless feedback, in a unit barrel temperature control of an extruder.

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13:00 – 13:50

I-FMP-15

### **Modeling and Analysis of a Gas Sweeping Process for Polycarbonate Polymerization**

Dae-Hyung Kim, Kyoung-Su Ha, Hyun-Ku Rhee and Kwnag-Ho Song (Seoul National University)

This article deals with the development of a mathematical model for the finishing polycarbonate polymerization process using a horizontal rotating disk-ring reactor with counter-current gas sweeping and the performance analysis of the reactor system by using the model. Here we intend to propose a model describing the reactor system consisting of two phases, in which by-product(phenol) is removed from the polymer of high molecular weight compatible with the products of commercial grades. The vapor phase is represented by a tanks-in-series model while the polymer melt phase is regarded as a plug flow reactor...

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