



UNIVERSITY AT BUFFALO

State University of New York



School of Engineering and Applied Science

The Electrical Engineering Department

## DEPARTMENT OF ELECTRICAL ENGINEERING

Graduate Seminar Guest Speaker

Dr. Adam Chen

Pactiv, Inc.

### “Light Management in a Liquid Crystal Display (LCD)”

Friday, April 20, 2007

11:00 AM

Knox 109

#### ABSTRACT

Light usage efficiency in a LCD panel is typically very poor, around 5-6%. Therefore, the backlight module makers have been trying to increase the amount of “usable” light by: recycling it, collimating it into the usable viewing cone and pre-polarizing it before it reaches the rear polarizer. This presentation will give an overview of a LCD structure with the emphasis on technologies being developed by the industry to boost light efficiency or longer battery life.

#### BIOGRAPHY

Dr. Adam Chen received his MS and PhD degrees in Materials Science and Engineering from University of Illinois at Urbana-Champaign. He came to U.S. in 1981 for his graduate study after receiving his BS degree in Chemical Engineering from National Taiwan University. His research focus has been in the area of polymer structure-property-process relationship. He joined Eastman Kodak Company in 1987 and has been working on flexible substrates for photographic film applications. For the last few years, he is working on various materials and process technologies to manufacture light management films for LCD backlight modules. He joined Pactiv Corporation in June 2006. His current research is centered on materials development for consumer packaging systems.