

ONR MURI Review

Polarization Effects in Nitride Semiconductors

February 3 and 4, 2003, San Diego, CA

Outline

The Polarization in Nitride Semiconductors MURI Review will cover projects and progress in a multiuniversity MURI program exploring the physics and applications of piezoelectric effects and spontaneous polarization in nitride materials. The program is sponsored by ONR / OSD, and monitored by Dr. Colin Wood; participants include UCSD, UCSB, NCSU, UC Berkeley and U of Michigan ("POLARIS" MURI). An overview of a companion MURI, the Cornell University and Yale University program "MURI II: Semiconductor Interface Electronics ") will also be presented.

The MURI Review will begin with a box lunch at mid-day on Monday, February 3. Talks will be given during the afternoon, and during the morning of Tuesday, February 4. There will also be a dinner on Monday evening, offering an opportunity to discuss nitride physics and other matters in a less formal setting.

The MURI Review will cover efforts to quantify the polarization charge effects in GaN, AlN, InN and their alloys, with both theory and experiment; to understand strain, surface and interface effects in the nitrides; to grow defect-free nitride materials; and to use polarization / piezoelectricity to optimize the design of devices including HFETs, HBTs, LEDs, lasers, vacuum emitters and others.

Meeting Location

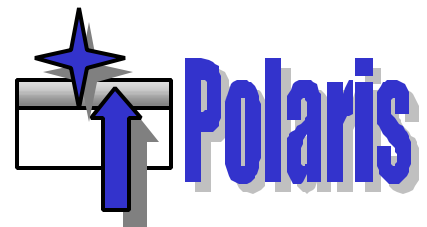
The meeting will take place at UCSD's Center for Magnetic Recording Research (CMRR), which is a short walk from Engineering Building Unit 1.

Please see the attached campus map.

On-site registration will be set up in the CMRR lobby.

General information regarding UCSD is available at the website ucsd.edu.

Sponsorship: Office of the Secretary of Defense
Office of Naval Research



Schedule

Monday, February 3 - CMRR Auditorium
12:30 - 1:30 pm **Box Lunch and Registration**
1:30-1:50 pm **Welcome and Overview**
1:50 - 3:15 pm **Session I**
3:15-3:30 pm **Break**
3:30pm-5:10 pm **Session II**

6:30 pm **Dinner**

Tuesday, February 4 - CMRR Auditorium
8:00 - 8:30 am **Continental Breakfast**
8:30 - 10:00 am **Session III**
10:00 - 10:20 am **Break**
10:20 - 11:10 am **Session IV**
11:10 - 11:30 am **Wrap-Up and Feedback to Participants**

Registration

Please register by filling out and fax / emailing the form attached. There is a registration fee, payable by check to UC Regents or by credit card, which will cover the cost of the box lunch, refreshments dinner and the handouts. On-site registration will be possible at the meeting site (CMRR).

Parking

Parking is a perennial problem at UCSD. A parking permit must be purchased upon entering campus. There are numerous parking lots in the vicinity of the CMRR (see, for example, Lot 502, and others shown in the accompanying map). Only spaces labelled B or S may be used. There is a significant amount of construction near Lot 502, unfortunately.

Accommodations

San Diego has numerous fine places to stay. Hotels and motels in the vicinity of UCSD include the following:

Radisson La Jolla*	858-453-5500
Residence Inn By Marriott*	858-587-1770
Double Tree Del Mar	858-481-5900
Embassy Suites	858-453-0400

*** within (long) walking distance of the Review. See UCSD map.**

Local Arrangements & Information

Michell Parks (UCSD), parks@ece.ucsd.edu, Ph: 858-534-2498, fax: 858-534-0556
Peter Asbeck (UCSD), asbeck@ece.ucsd.edu, Ph: 858-534-6713, fax: 858-534-0556

MURI website: POLARISMURI.ucsd.edu