

# ONR MURI Review

## *Polarization Effects in Nitride Semiconductors*

February 23 and 24, 2000, San Diego, CA

### Outline

*The Polarization in Nitride Semiconductors MURI Review will cover projects and progress in two multiuniversity MURI projects which are exploring the physics and applications of piezoelectric effects and spontaneous polarization in nitride materials. These programs are sponsored by ONR / DUSD(S&T), and monitored by Dr. Colin Wood; participants include Cornell University and Yale University ("MURI II Semiconductor Interface Electronics"), and UCSD, UCSB, NCSU, UC Berkeley and U of Michigan ("POLARIS" MURI).*

*The MURI Review will be held on the UCSD campus (La Jolla, CA) during the afternoon of Wednesday, February 23, and the morning of Thursday, February 24. WOCSEMMAD (Workshop on Compound Semiconductor Microwave Materials and Devices) is slated to be held in San Diego earlier in the week - so WOCSEMMAD attendees need only spend a little more travel time to learn about polarization effects!*

*The MURI Review will cover efforts to quantify the polarization charge effects in GaN, AlN, InN and their alloys, through 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. Talks by the MURI participants and additional invited speakers will be given.*

*The Review format will provide ample opportunity for interaction between participants, in addition to the scheduled presentations. To this end, a dinner will be held on Wednesday evening, and box lunches will be provided at mid-day on Thursday.*

### Meeting Location

*Sessions will be held in Gallery A and B, on the second floor of UCSD's Price Center. The Price Center is a short walk from the Engineering Building Unit 1, and near UCSD's unique Library building. Please see attached campus map.*

*On-site registration will be set up in the Lobby of the Price Center Gallery. General information regarding UCSD is available at the website [ucsd.edu](http://ucsd.edu).*

**Sponsorship:** DUSD(S&T)  
ONR

MURI II  
Semiconductor Interface  
Electronics



### Schedule

**Wednesday, February 23 - Gallery B**

**1:30 pm Welcome**

**1:45 - 5:15 pm Session I**

**7:00 pm Dinner**

**Thursday, February 24 - Gallery A**

**8:00-8:30am Continental Breakfast**

**8:30am-12:30pm Session II**

**12:30pm Box Lunch**

*(N.B.: Specific times may be updated as the review date approaches !!!)*

### **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 dinner on Wednesday, the box lunch on Thursday, and the handouts. On-site registration will be possible at the Price Center Gallery.*

### **Parking**

*Parking is a perennial problem at UCSD. There are numerous parking lots in the vicinity of the Price Center (see, for example, Lots 502, 506, and others shown in the accompanying map). A parking permit is required. Only spaces labelled B or S may be used. Parking permits must be purchased from one of the booths at the entrances to UCSD, and are not included in the price of registration. Expect a \$6 fee for parking, per day. The permit must be placed on the dashboard of your car.*

### **Accommodations**

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

<b>Radisson La Jolla*</b>	<b>858-453-5500</b>
<b>Residence Inn By Marriott*</b>	<b>858-587-1770</b>
<b>Double Tree Del Mar</b>	<b>858-481-5900</b>
<b>Embassy Suites</b>	<b>858-453-0400</b>
<b>Lodge at Torrey Pines</b>	<b>858-453-4420</b>

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

### **Local Arrangements & Information**

**Michell Parks (UCSD), [parks@ece.ucsd.edu](mailto:parks@ece.ucsd.edu), Ph: 858-534-2498, fax: 858-534-0556**

**Peter Asbeck (UCSD), [asbeck@ece.ucsd.edu](mailto:asbeck@ece.ucsd.edu), Ph: 858-534-6713, fax: 858-534-0556**

**MURI website: [POLARISMURI.ucsd.edu](http://POLARISMURI.ucsd.edu)**

## **ONR MURI Review**

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**Registration Form**

Name .....

Affiliation.....

Address .....

.....

City ..... State..... Zipcode.....

Phone ..... email.....

**Registration Fee**

*Advance Registration (until Feb. 15) \$65*

*On-Site Registration \$70*

*Registration fee covers admission to all sessions, coffee breaks, dinner, box lunch, one copy of the handouts. (Parking permit not included).*

**Payment Method: Check \_\_\_\_\_ Visa \_\_\_\_\_ Mastercard \_\_\_\_\_**

**Please make checks out to University of California Regents**

**Send registration form and payment to:**

Michell Parks  
ECE Dept., Mail Code 0407  
UCSD  
9500 Gilman Drive  
La Jolla, CA 92093-0407  
Ph: 858-534-2498  
Fax: 858-534-0556

Credit Card # .....

Expiration Date .....

Signature .....

*Sponsorship*

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