# 2001 ELECTRONIC MATERIALS CONFERENCE

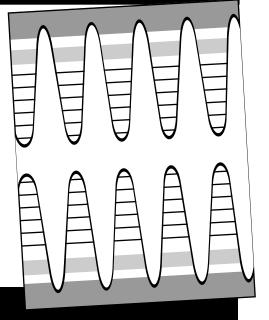
Featuring. . .

**Special Electronic Materials Exhibit** 

UNIVERSITY OF NOTRE DAME NOTRE DAME, INDIANA

June 27-29, 2001

Register in Advance to Receive Discount



TMS

**Advance Program** 

**INCLUDES HOUSING AND REGISTRATION FORMS** 

# **GENERAL INFORMATION**

Each year, over 500 people in the electronic materials industry attend the conference. The conference has become international with approximately 80% national (USA) attendees and 20% international attendees.

### INTENDED AUDIENCE:

The 43<sup>rd</sup> Electronic Materials Conference (EMC) provides a forum for topics of current interest and significance in the area of preparation and characterization of electronic materials. Individuals actively engaged or interested in electronic materials research and development are encouraged to attend this meeting. Attendees will include students, professors, scientists, engineers, researchers, technicians, R&D managers, and product managers.

### **TABLE OF CONTENTS:**

Airline Information	XX
Campus Map	XV–XVI
Car Rental	XIX
Directions	XVII
EMC Committee	XXV-XXVI
Exhibit Info	V–VI
Invited Organizers	XXVII–XXVIII
JEM	XXIII–XXIV
JEM Board	
JEM Publication	
JEM Subscription	
John Bardeen Award	XXI–XXII
Late News Papers	III
Location	II
Housing	VII–XII
Off-Campus Housing	
On-Campus Housing	
On-Campus Housing Form See Ce	enter of Brochure
Parking	XVIII
Recreation	X
Registration Form See Ce	nter of Brochure
Registration Information	III–IV
Social Events	XIII
Sponsorship Opportunities	VII–VIII
Student Awards	XXI
TMS Membership	XIV
University of Notre Dame Map	XV–XVI
Technical Sessions	1–37

### **DATE AND LOCATION:**

The 43<sup>rd</sup> Annual Conference of the Electronic Materials Committee of TMS will be held at the University of Notre Dame, Indiana, June 27-29, 2001. This conference is being coordinated with the Device Research Conference of IEEE, which will take place June 25-27, 2001, at the same location.

### **ABOUT THE UNIVERSITY OF NOTRE DAME:**

A leading Catholic research university, Notre Dame stands among the nation's top 20 universities in terms of both academics and endowment. The university is organized into four undergraduate colleges-arts and letters, science, engineering, and business-the Graduate School, the Law School, and the School of Architecture. The combination of groundbreaking research and a long tradition of excellence in undergraduate and graduate education has attracted world-class teachers and scholars to the university's 729member teaching-and-research faculty. The total student population of about 10,700 men and women is drawn from all 50 states and some 88 foreign countries and includes 1,500 graduate students and 1,150 professional students. Substantial new investments in a wide range of academic programs, institutes, centers, and major facilities have marked the past several years at Notre Dame. Founded in 1842 by a priest of the Congregation of Holy Cross, Notre Dame is located north of the city of South Bend, Indiana, and about 90 miles southeast of Chicago. Its 1,250-acrecampus contains two lakes and 104 buildings with an insured replacement value of more than \$875 million. The university's Main Building with its famed Golden Dome is among the most widely known university landmarks in the world.

For more information on the University of Notre Dame, visit the university website at http://www.nd.edu/. An online campus map is available at http://www.nd.edu/map/.

### **TECHNICAL SESSIONS:**

The Electronic Materials technical program will commence at 8:30 AM on Wednesday, June 27. All sessions will be held on grounds at the University of Notre Dame in DeBartolo Hall. The Plenary Session will be located in Washington Hall.

Session and paper titles are included in this brochure.

# **GENERAL INFORMATION**

### **LATE NEWS PAPERS:**

Late news papers will be considered. Authors must submit their abstract by June 1, 2001, using the TMS Conference Management System (CMS). CMS can be accessed on the website at http://cms.tms.org/. If you have questions or need assistance while using CMS, please contact TMS Technical Programming Services at 724-776-9000 ext. 253. Authors of accepted papers will be notified before the EMC Conference.

### PROGRAM:

A complete program with abstracts of papers to be presented at the meeting will be made available for all registrants at the time of registration.

### AMERICANS WITH DISABILITIES ACT:



TMS strongly supports the federal Americans with Disabilities Act (ADA) which prohibits discrimination against, and promotes public accessibility

for those with disabilities. In support of and compliance with this Act, we ask that those attendees of EMC requiring specific equipment or services indicate their needs on the enclosed housing and registration forms.

### POLICY ON AUDIO AND VISUAL RECORDING OF TECHNICAL PAPER PRESENTATIONS/SESSIONS:

TMS reserves the rights to any audio and video reproduction of all presentations at every TMS sponsored meeting. Recording of sessions (audio, video, still photography, etc.) intended for personal use, distribution, publication, or copyright without the express written consent of TMS and the individual authors is strictly prohibited.

### **COMPUTER/NETWORK FACILITIES:**

Registrants will have access to Notre Dame's information technology infrastructure, which includes more than 500 workstations in 13 computer clusters, and the *ResNet* Ethernet network providing internet access to all campus dorm rooms and several public areas. A temporary username and password will be provided to advance registrants upon

## REGISTRATION INFORMATION

EMC Registration and Housing forms are included in the center of this brochure.

# EARLY HOUSING AND REGISTRATION ARE ADVISED.

### **CONFERENCE REGISTRATION:**

All attendees are encouraged to register in advance to avoid delays in registering at the Conference. Both Electronic Ma-

check-in. Each technical session room is equipped with both Windows and Power Mac workstations and video projectors. Speakers wishing to use PowerPoint may bring presentations on CD, floppy, or 100 Mb Zip Disks.

# For information regarding the 2001 Electronic Materials Conference, please contact:

Michael R. Melloch, General Chairman School of Electrical & Computer Engrg

Purdue University

1285 Electrical Engineering Bldg

West Lafayette, IN 47907-1285 Telephone: 765-494-3528

Fax: 765-494-6441

E-mail: melloch@ecn.purdue.edu

Ilesanmi Adesida, Program Chair Dept of Electrical & Computer Engrg University of Illinois, 208 N. Wright St.

Urbana, IL 61801

Telephone: 217-244-6379

Fax: 217-244-6375

E-mail: adesida@capone.micro.uiuc.edu

### Or contact the EMC Local Arrangements Chair:

Douglas C. Hall

University of Notre Dame

Dept of Electrical Engineering

260 Fitzpatrick Hall, Notre Dame, IN 46556-5637

Telephone: 219-631-8631 Fax: 219-631-4393 E-Mail: dhall@nd.edu

# For information regarding conference logistics, please contact:

Michael Packard, CMP Manager, Meeting Services

TMS

184 Thorn Hill Road, Warrendale, PA 15086

Telephone: 724-776-9000 ext. 225

Fax: 724-776-3770

E-mail: packard@tms.org

terials Conference (EMC) and Device Research Conference (DRC) badges will be accepted by both Conferences on Wednesday, June 27. EMC Advance registration fees are as follows:

 Full Conference
 \$345

 One Day
 \$295

 Student
 \$150

# REGISTRATION INFORMATION

Registration fee includes Welcoming Reception, Coffee Breaks, Conference Banquet, attendance to all Technical Sessions and Exhibition. One-day fee does not include banquet.

To advance register, complete the registration form provided in the center of this mailer. **Advance registration will be accepted until June 4, 2001.** For questions on advance registrations, please contact TMS Meeting Services by telephone: 724-776-9000 ext. 243; fax: 724-776-3770; or e-mail: mtgserv@tms.org.

You may register at the Conference. Please note: On-site registration fees will be higher. On-site registration will be located in McKenna Hall and will begin on Tuesday afternoon continuing Wednesday morning through Friday morning during the following hours:

Tuesday, June 26	3:00 PM-5:00 PM
Wednesday, June 27	7:30 AM-5:00 PM
Thursday, June 28	7:30 AM-4:00 PM
Friday, June 29	7:30 AM-10:00 AM

## **EXHIBITION INFORMATION**

The 2001 Electronic Materials Conference (EMC) will host an exhibition of electronic materials technology and related services. Exhibitors are invited to display equipment, instrumentation, products, software, publications and services relative to electronic materials industry and research.

The Exhibition will provide an ideal opportunity for EMC attendees to meet suppliers of related products and technology, and for attendees to acquaint themselves with new technologies and products.

Exhibit Location: McKenna Hall (lower level)

#### **Exhibit Dates and Hours:**

Wednesday, June 27 ..... 9:00 AM-4:00 PM & 7:00 PM-9:00 PM Thursday, June 28 ...... 9:00 AM-4:00 PM

### **RESERVATIONS & INFORMATION:**

Cindy A. Wilson, Exhibits Coordinator TMS/EMC Technological Exhibit

184 Thorn Hill Road, Warrendale, PA 15086-7514

Telephone: 724-776-9000, ext. 231

Fax: 724-776-3770 E-mail: wilson@tms.org

To reserve space for the 2001 EMC Exhibition, simply complete and return the Space Reservation Form. To allow sufficient time for advance planning and promotion, prospec-

### **REFUND POLICY:**

A written request must be sent to TMS Headquarters, 184 Thorn Hill Road, Warrendale, PA 15086, USA, postmarked no later than June 4, 2001. A \$50 processing fee will be charged on all cancellations. NO refunds will be issued after the deadline date.

### **MESSAGES:**

Telephones and a message board will be located near the Registration Desk in McKenna Hall. Messages will be posted in this area throughout the conference. Messages will also be posted in the Residence Halls. If you are residing on campus, you will receive the appropriate number to be used in an emergency in your housing packet.

# For information regarding meeting registration and pricing, please contact:

**TMS** 

Meeting Services

184 Thorn Hill Road, Warrendale, PA 15086

Telephone: 724-776-9000 Ext. 243

Fax: 724-776-3770 E-mail: mtgserv@tms.org

tive exhibitors are encouraged to return the reservation form no later than May 25, 2001.

RESERVATIONS WILL BE ACCEPTED ON A FIRST-COME-FIRST-SERVED BASIS.

### THE EXHIBITION PACKAGE:

### Your Exhibition fee of \$1,000 includes:

- 10'x10' Exhibition Space with eight-foot back drape and three-foot side drape.
- · One-eight foot table
- · Two-chairs
- · Standard Electrical Service
- Complementary listing in the Show Directory— Distributed to all meeting registrants
- One complimentary registration to the technical sessions and exhibits
- · Hosted Welcoming Reception in the Exhibition Area
- Hosted coffee and refreshment breaks in the Exhibition Area
- · One-complimentary ticket to the EMC Dinner Event
- Exhibition Management Services

# CORPORATE SPONSORSHIP OPPO

As the Exclusive Sponsor of one of the following activities at the Electronic Materials Conference, you will be given the opportunity to showcase your company name and logo to ALL conference and exhibit attendees! Each opportunity will provide you with exclusive name/logo recognition as follows:

- Signage
- · Web Site Recognition
- · In Conference Promotional Materials
- · Conference Program Recognition

# **HOUSING & ACCOMMODATIONS**

### DRESS:

Casual clothing is in order with a sweater or light jacket occasionally needed for the evenings. The University of Notre Dame is essentially a walking campus, so be sure to wear comfortable walking shoes.

### **ON-CAMPUS HOUSING ACCOMMODATIONS**

We are pleased to invite EMC attendees to reside on the campus of the University of Notre Dame. Notre Dame is a summer tourist area and accommodations can be difficult to secure. Therefore, early registration and reservations are essential. On-campus accommodations will be available on a first request basis in one of four recently constructed, airconditioned residence halls within a five-minute walk from the technical session area. Accommodations are either single or double occupancy dormitory rooms each with its own sink. Common shower and restroom facilities are designated for men and women on each floor. Guests may wish to bring a robe and shower thongs. Linen service for towels and bed sheets will be provided, however washcloths are not. Calling card accessible phones are available within the residence hall lobbies. Conference attendees bringing personal computers with Ethernet connectivity can enjoy free internet access through ResNet, Notre Dame's high-speed network wiring in every dorm room and several public areas on campus (cable with RJ-45 connector required). The residence hall cannot provide a wake-up service, so you may wish to bring an alarm clock.

Please also check the hotel listings in the Off-Campus Housing section of this brochure.

The University of Notre Dame offers the following package plans to provide planning flexibility and the option to attend both DRC and EMC. Residence hall package plans A, B, and C include full meal service. Residence hall room packages without meals are not available. No adjustments

# RTUNITIES

### PROPOSED SPONSOR ACTIVITIES:

- · Welcoming Reception
- · Coffee Breaks
- · Continental Breakfast
- · Conference Dinner Event/Banquet

Please contact Cindy A. Wilson at TMS at 724-776-9000 ext. 231, fax 724-776-3770 or e-mail wilson@tms.org to discuss these exciting sponsorship opportunities.

### http://www.tms.org/Meetings/Specialty/EMC01/EMC01.html

from the chosen package for lodging or meals will be made for late arrival or early departure.

Please indicate your plan preference on the enclosed reservation form and return it with your payment to:

Peter Lombardo

Director, Continuing Education

109 McKenna Hall, P.O. Box 1008

Notre Dame, IN 46556 Telephone: 219-631-7005

Fax: 219-631-8083

E-mail: lombardo.1@nd.edu

#### **Method of Payment:**

Payment in U.S. dollars may be made by:

- Check or Money Order. Checks must be drawn on a U.S. Bank and made payable to "The University of Notre Dame, CCE".
- Credit Card: Visa or MasterCard only

If your reservation is received at the university by May 18, 2001, the Continuing Education Office will send a confirmation of your reservation to you. Prepayment for the anticipated number of nights is required.

Meals will be served in the South Dining Hall, conveniently located near the residence halls, during the following hours:

 Breakfast
 7:00 AM–8:00 AM

 Lunch
 11:45 AM–1:15 PM

 Dinner
 5:30 PM–7:00 PM

NOTE: Food facilities on campus close at 7:00 PM.

# HOUSING & ACCOMMODATIONS

Plan A: Includes lodging Tuesday through Thursday			
nights and the follo	•		
Tuesday			
	breakfast, lunch, and dinner;		
Thursday	breakfast and lunch (dinner in down-		
	town South Bend included with EMC		
	registration - no dining commons meal offered);		
Friday	breakfast and lunch		
Single Occupancy	\$167.30		
	\$149.30		
<b>Plan B:</b> Includes lonights and the follo	odging Wednesday and Thursday		
Wednesday			
	breakfast and lunch (dinner in down-		
Thursday	town South Bend included with EMC		
	registration - no dining commons meal		
	offered);		
Friday	breakfast and lunch		
Single Occupancy	\$117.70		
	\$105.70		
	planning to attend DRC and EMC) In-		
	nday through Thursday nights and the		
following 13 meals			
Sunday			
	breakfast, lunch, and dinner;		
Tuesday	breakfast and lunch (picnic dinner at		
	St. Mary's Lake on campus included		
	with DRC registration - no dining com-		
	mons meal offered);		
	breakfast, lunch, and dinner;		
Thursday	breakfast and lunch (dinner in down-		
	town South Bend included with EMC		
	registration - no dining commons meal		
	offered);		
Friday	breakfast and lunch		
	\$274.50 \$244.50		
Double Occupancy	Ψ244.30		
<b>EARLY ARRIVAL</b> Saturday Night (June 23) Room Rate.			
<b>NOTE:</b> No meals be accepted in the	are included with prices. Cash will e dining hall.		
Single Occupancy	<i>y</i> \$29.00		
Double Occupand	sy\$23.00		

### **LATE DEPARTURE**

Friday Night (June 29) Room Rate.

**NOTE:** Friday night and Saturday morning meals are <u>not</u> included with prices. Cash will be accepted in the dining hall.

Checkout on Saturday is 10:00 AM

Single Occupancy	\$29.00
Double Occupancy	

### **COMMUTER LUNCH PACKAGE:**

Attendees that plan to make off-campus housing arrangements directly with the hotel/motel and wish to purchase a commuter-lunch package for on-campus meals, the following packages are available through the University of Notre Dame.

NOTE: It is important to apply early.

Three (3) lunches	\$31.50	)
Five (5) lunches	\$52.50	)

### NO REFUNDS WILL BE MADE FOR LATE ARRIVALS, EARLY DEPARTURES, OR MISSED MEALS.

### **CAMPUS SMOKING POLICY:**

The University of Notre Dame prohibits smoking in its buildings, including residence halls. Smoking is allowed only in designated areas outside buildings.

#### RECREATION:

Conference nametags must be worn at all times and room keys must be presented in order to use the recreational facilities. The 9-hole ND Golf Course (phone 219-631-6425) is located on campus and the new 18-hole Warren Golf Course (phone 219-631-4653) is located just north of the campus. Call for times, availability, and prices. Tee times may be made seven days in advance. Swimming is available at two locations on campus with a \$3.00 charge for use of the facility. Call 219-631-5980 and 219-631-5297 to verify times. Racquetball, basketball, squash, and weigh lifting are other options for recreation. There is a \$3.00 charge for the facility. Please call 219-631-5297 to verify times and availability. The Courtney Tennis Center is an allweather outdoor court available during daylight hours on a first come, first serve basis. Walking and jogging route maps with distances are available with distances at the Information Desk in the Center for Continuing Education, McKenna Hall.

For further facility information see http://www.nd.edu/~recsport.

More complete information will be available when you arrive for the conference.

# **HOUSING & ACCOMMODATIONS**

# For information regarding the University of Notre Dame on-campus housing, please contact:

Peter Lombardo Director, Continuing Education 109 McKenna Hall PO Box 1008

Notre Dame, IN 46556 Telephone: 219-631-7005

Fax: 219-631-8083

E-mail: lombardo.1@nd.edu

### **OFF-CAMPUS HOUSING ACCOMMODATIONS:**

Blocks of rooms have been reserved at special conference rates for the hotels listed below. Rooms will be held at these rates until June 1, 2001. Thereafter, reservations can be obtained only on a space available request. Please contact the hotel directly by mail or phone as soon as possible. Rooms are available for DRC, EMC, or both, Sunday through Thursday nights, and you must identify yourself as either a DRC or EMC attendee. You may also stay Friday or Saturday night, if you request at the time your reservation is made, however, the special rates below DO NOT apply to weekend rates. Friday and Saturday rates will be higher. Room rates do not include the local 11% tax rate.

Holiday Inn – University Area 515 N. Dixie Way South Bend, IN 46637 (219) 272-6600, ext. 7456 (Kathy Hoban)

This hotel has gone undergone extensive renovation and remodeling in the past few months, and all are expected to be completed by May 2001. The famed "Gipper's Lounge" is a widely known local evening gathering place.

Room rate: \$72.95 per night per room

Ask for Kathy Hoban when you call for your reservation.

Best Inns of America 425 N. Dixie Way South Bend, IN 46637 (219) 277-7700

Located next door to the Holiday Inn – University Area. This is a very comfortable inn with spacious and friendly accommodations. A light, continental breakfast is included in the room rate.

Room rate: \$56.99 per night per room.

### Marriott Hotel of South Bend 123 N. St. Joseph Street South Bend, IN 46601 (219) 234-2000

One of South Bend's finest and most luxurious hotels. The Marriott is located in the heart of downtown South Bend, convenient to nightlife and fine dining.

Room rate range: \$89.00 - \$119.00 per night, single accommodation

The Morris Inn (on the campus of the University of Notre Dame) P.O. Box 1085 Notre Dame, IN 46556 (219) 631-2000

A small, but very convenient hotel on the University campus. This hotel offers excellent views of the campus and fine dining in its Sorin's Restaurant.

Room rate: \$82.00 - \$96.00 single,

per night; \$90.00 - \$104.00 double per night.

For more information on the University of Notre Dame, visit the university website at http://www.nd.edu/. An online campus map is available at http://www.nd.edu/map/.

## **SOCIAL EVENTS**

### WELCOMING RECEPTION:

All attendees are invited to attend a Welcoming Reception on Wednesday, June 27, from 7:00 PM-9:00 PM at the University of Notre Dame in McKenna Hall, Lower Level.

### **EVENING BY THE RIVER:**

On Thursday evening, June 28th, conference attendees and their guests will have the opportunity to enjoy an evening "by the bend" in the heart of downtown South Bend, situated near the southernmost bend of the St. Joseph River. Following a reception and catered dinner, participants can enjoy touring two adjacent museums: the College Football Hall of Fame, one of the world's major sports shrines, and the South Bend Regional Museum of Art. Both museums and their gift shops will be open only to the conference group, and admission fees are included. Bus transportation will be provided between the social event and Notre Dame. The cost of this event is included in full conference and student registration fees. It is not included in one-day registration fees.

The cost of the conference banquet for one-day registrants and guests is \$55 for adults and \$25 for children 12 and under. You may order tickets for this event on the registration form. You are encouraged to purchase your tickets in advance. Tickets will be available for purchase at the EMC registration desk. Deadline for ticket sales will be Noon on Wednesday, June 27, 2001.

### **INFORMAL COFFEE BREAKS:**

During the intermission of Wednesday and Thursday's morning and afternoon sessions (at approximately 10:00 AM-10:40 AM and 3:00 PM-3:40 PM) coffee, tea, assorted pastries, and sodas will be served in McKenna Hall, the same location as exhibits. Friday coffee breaks will be served outside the technical sessions in DeBartolo Hall.

# ATTENTION: TMS NON-MEMBER ATTENDEES

# Become a TMS Member

# TMS addresses the issues in Electronic Materials

- Get involved with the activities of the Electronic Materials Committee.
- Tap into a monthly archival reference source for scholarly work on electronic materials and resultant devices by subscribing to the Journal of Electronic Materials.
- Network with a prestigious membership through international conferences sponsored by TMS

All TMS members receive discounted pricing on meetings, publications, and short courses. Members also receive a complimentary subscription to *JOM*, the highly respected society journal, and access to the TMS Membership Directory available on TMS OnLine.

To join today, complete and submit the TMS membership application form inside this brochure.

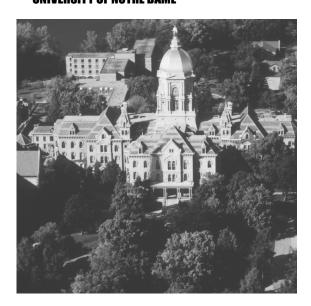
For more information, contact Telephone: 724-776-9000, ext. 221 Fax: 724-776-3770

E-Mail: membership@tms.org

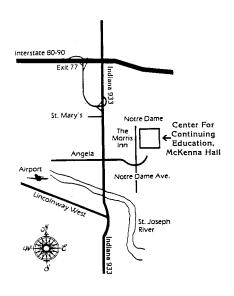
www.tms.org

## **MAP OF CAMPUS** Post Office Center for Continuing Education [1] N. House Dame Avenue University Club Hall Faculty Staff Parking \ Conference Parking C1 **Student Parking** `10 US 33 Angela/ Edison C1 Senior Bar

### **UNIVERSITY OF NOTRE DAME**



### **MAP OF NOTRE DAME/SOUTH BEND**



XV XV

## TRANSPORTATION

Notre Dame is located approximately 90 miles southeast of Chicago and may be reached as follows:

### By Air

Notre Dame is about 15 minutes from **South Bend Regional Airport** (http://www.sbnair.com). Ask your travel agent to book you to South Bend, Indiana. From the airport take "Lincolnway West" East (Left out of the airport) to downtown South Bend. Turn Left on Indiana 933 (Michigan St.). Stay on Indiana 933 to Angela Boulevard, second stop light north of the St. Joseph River. Turn right onto Angela Boulevard then left at the first stop light onto Notre Dame Avenue. Visitor parking is located on the right side of Notre Dame Ave about 200 yards from Angela Blvd.

You can also fly to **Chicago International Airport** and drive or take a shuttle bus. The university is about 2 hours (by car) from O'Hare airport, less to Midway. From O'Hare Airport: Take Route 190 east out of O'Hare to Route 90 east (Kennedy Expressway) toward downtown Chicago where it merges with Route 94 south (Dan Ryan Expressway). Take the Skyway exit off the Dan Ryan and remain on Route 90 to the Indiana Toll Road, which eventually merges with Route 80. Get off at Exit 77 (South Bend/Notre Dame).

### By Car

From the north: The University is located just south of the Indiana Toll road (Interstate 80/90). Exit Interstate 80/90 at exit 77 and turn right onto Michigan (Indiana 933). Make a left at the 4th stop-light (Angela Boulevard). Make a left at the first stop light (Notre Dame Avenue). Visitor parking is located on the right side of Notre Dame Ave about 200 yards from Angela.

From the south: Take US 31 north which becomes Indiana 933 just south of South Bend. Stay on Indiana 933 to Angela Boulevard, second stop light north of the St. Joseph River. Turn right onto Angela Boulevard then left at the first stop light onto Notre Dame Avenue. Visitor parking is located on the right side of Notre Dame Ave about 200 yards from Angela.

#### By Train

The South Shore Line trains (see http://www.nictd.com) run directly from the Chicago Loop to the South Bend Regional Airport in South Bend. AMTRAK services South Bend via east and west trains.

#### By Taxi and Limousine:

The campus is easily accessible from South Bend's airport by a 10-minute taxi ride. Limousine (motor coach bus) service is provided by United Limo directly to and from the campus and both Chicago's O'Hare and Midway Airports with ten trips daily. Buses leave the Bus/Shuttle Center at O'Hare and arrive on campus at the main gate on Notre

Dame Avenue. Buses run on a schedule, and will not accommodate reservations. Seating is first-come-first-serve basis. On rare occasions, a bus will fill to capacity, but ordinarily this will not be the case. United Limo buses leave from Midway Airport between doors 3 and 4 (via Tri State Coach), from O'Hare International terminal #5 and from the O'Hare Bus Shuttle Center.

Online maps are available at http://www.ne.edu/visitor.

### **PARKING:**

Visitor parking is permitted in the parking lot south of the Hesburgh Center, off Notre Dame Avenue. Coupons to exit the lot (\$1.00 each) are available at the Information Desk of the Center for Continuing Education (CCE) in McKenna Hall. The parking fee is not included in the cost of housing. Cars parked illegally are subject to ticketing. The parking lot of the Morris Inn is restricted to overnight and dining guests of the Inn. Parking for handicapped guests with appropriate license designations is located in the drive, north of the CCE.

### STUDENT TRAVEL ASSISTANCE:

Student authors who plan to present a paper at the 2001 Electronic Materials Conference may be eligible for travel assistance depending on the particular circumstances involved. To apply for student travel assistance, submit an application no later than June 4, 2001 to:

Michael R. Melloch, General Chairman Purdue University School of Electrical and Computer Engineering 1285 Electrical Engineering Building West Lafayette, IN 47907-1285

Telephone: 765-494-3528 Fax: 765-494-6441

E-mail: melloch@ecn.purdue.edu

### SPECIAL RENT-A-CAR



### Hertz Rent-a-Car System...

has been selected as the Official Car Rental Company for the Electronic Materials Conference in Notre Dame, Indiana.

Meeting rates listed below, with free unlimited mileage, are guaranteed one week before through one week after the actual meeting dates and **are subject to car availability.** Rates are available from all Indiana locations.

Advance reservations may be made by calling the Hertz reservations number (US: 1-800-654-2240; Canada: 1-800-263-0600; International: contact your nearest Hertz reservation center) and identify yourself as an attendee of the Electronic Materials Conference and reference the CV number which follows:

You must give the reservations agent the Hertz CV#010P0011.

	DAILY	WEEKEND	WEEKLY
Car Class	Per Day	Per Day	5-7 Day
A Economy 2DR	\$34.99	\$21.99	\$129.99
B Compact 4DR	\$39.99	\$25.99	\$149.99
C Midsize 2/4DR	\$42.99	\$27.99	\$164.99
D Sporty 2DR	\$45.99	\$32.99	\$179.99
F Full-size 4DR	\$49.99	\$34.99	\$194.99
I Luxury	\$65.99	\$62.99	\$274.99
L 4 Wheel Drive	\$70.99	\$67.99	\$324.99
R Minivan	\$65.99	\$62.99	\$274.99

Standard rental and credit qualifications apply. Taxes, vehicle licensing fees/tax reimbursement, transportation fee, transaction fee, city fees, and optional items, such as refueling, are extra. At some locations, an airport access fee of up to 10% may apply. At many airports and hotels, a 5% - 12.75% airport/hotel concession fee recovery applies on car rental.

### **Terms and Conditions:**

- UNLIMITED MILEAGE ALLOWANCE ON ABOVE RATES.
- One-way service fee will apply when cars are not returned to renting location.
- Additional daily charges for optional coverage (Loss Damage Waiver, Personal Accident Insurance, Personal Effect Protection, refueling and state tax) are not included in the above rates.
- Drivers must meet standard Hertz age, driver, and credit requirements.
- Hertz is a frequent flyer partner with US Airways, Delta, Northwest, United and American Airlines. Frequent flyer information may be requested at time of car booking.

### **SPECIAL AIRFARE**

## U·S AIRWAYS

## Official Carrier of the 2001 Electronic Materials Conference

US Airways agrees to offer an exclusive low rate for the attendees traveling to the 2001 Electronic Materials Conference in Notre Dame, Indiana. Offer applies to flights on US Airways via Chicago, Illinois and South Bend, Indiana.

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## AWARDS

### STUDENT AWARDS:

Three \$500 student awards are given annually by the Electronic Materials Committee for the best presentations by students at the conference. Student papers will be judged on both scientific content and presentation at the Electronic Materials Conference. Awards will be presented during the plenary session on Wednesday, June 27, in Washington Hall.

### **2001 JOHN BARDEEN AWARD**

The John Bardeen Award, established in 1994, recognizes an individual who has made outstanding contributions and is a leader in the field of electronic materials.

**Recipient:** Alex Zunger

Citation: For his seminal contributions to the theoretical understanding and prediction of "spontaneous ordering," phase-stability, and electronic prop-



erties of semiconductor alloys; for the impact that this work has had on experimental studies of electronic materials, and for his continued leadership in the field.

Alex Zunger is an Institute Research Fellow and leader of the Solid State Theory at the U.S. Department of Energy's National Renewable Energy Laboratory (NREL). He received his B.Sc, M.Sc, and Ph.D education at the Tel Aviv University in Israel and did his post-doctoral training at Northwestern University (1975-1977) and (as IBM Fellow) University of California, Berkeley (1977-1978). He joined the newly founded NREL in 1978 where he established the Solid State Theory group and has since trained and collaborated with 35 post-doctoral fellows.

Dr. Zunger is an author of 400 journal publications, including over 85 in Physical Review Letters and Rapid Communication. According to recent research done by the Institute of Scientific Information (ISI), he is the 39th most cited physicist out of more than 500,000 physicists examined, based on publications in 1981-1997 in all branches of physics (his work was cited 8,000 times). His work centers on development and application of first-principles electronic structure theory of real materials. It includes the development of firstprinciples Pseudopotentials; accurate exchange-correlation functionals; the momentum-space total energy formalism; simultaneous relaxation of atomic positions and electronic wave functions; order N electronic structure approaches; and cluster expansions for alloy thermodynamics. He applied these techniques to metal alloys, quantum semiconductor nanostructures, points defects, and surfaces.

"I am honored and would like to thank my National Renewable Energy Laboratory post-docs and staff for exciting collaborations on this project: J. Bernard, A. Franceschetti, S. Froyen, D. Laks, K. Mader, R. Magri, J.L. Martins, T. Matilla, A. Mbaye, R. Osorio, V. Ozolins, G.P. Srivastava, D.M. Wood, S.H. Wei, and S.B. Zhang."

### **JOHN BARDEEN AWARD NOMINATIONS**

You are encouraged to submit a nomination for the TMS 2003 John Bardeen Award. This award recognizes an individual who has made an outstanding contribution and is a leader in the field of electronic materials.

The award is named in honor of John Bardeen, who through a career of theoretical and experimental research, set the foundation for the current state of understanding of electronic materials. Two areas where Bardeen had great impact were the invention and development of the solid-state transistor and the theory that developed greater understanding of superconductivity.

For award criteria and additional information, pick up a nomination form at the TMS Registration Desk at EMC, or you may download the nomination form from the TMS website at http://www.tms.org/.

## PUBLICATION INFORMATION

### **PUBLICATION OF CONFERENCE PAPERS:**

There are no formal conference proceedings, but the conference abstracts will be published in *the Journal of Electronic Materials (JEM)*. We also encourage you to submit manuscripts on your work to *JEM*.

### **JOURNAL OF ELECTRONIC MATERIALS:**

JEM, a monthly archival publication of TMS and the Institute of Electrical and Electronics Engineers (IEEE), was created to serve as the publication of the Electronic Materials Conference. Throughout the year, JEM publishes selected papers presented at the Electronic Materials Conference, and welcomes



the submission of related electronic materials articles.

The journal contains technical papers detailing critical new developments in the electronics field, as well as invited and contributed review papers on topics of current interest, designed to enable those in the field of electronics to keep abreast of activities in areas vital to their own technical interests.

Articles that appear in *JEM* are reviewed, selected, and edited by peers in the field who serve as voluntary members of the editorial board or the board of associate editors or as section editors. Generally, they are members of the Electronic Materials Committee of TMS or are members of IEEE.

General manuscripts should be sent to Theodore C. Harman, Editor of the *Journal of Electronic Materials* at the following address:

Theodore C. Harman
Massachusetts Institute of Technology
Lincoln Laboratory
244 Wood Street
Lexington, MA 02420-9108
Telephone: 781-981-4418

Fax: 781-981-0122

E-mail: tharman@11.mit.edu

Detailed manuscript submission guidelines are available from the *JEM* web site at http://www.tms.org/pubs/journals/JEM/jem.html.

### **JEM SUBSCRIPTION INFORMATION:**

The Journal of Electronic Materials acts as a forum for the rapid circulation of the results of original research, enabling those in the electronic materials field to keep abreast of activities peripheral to their own. The journal focuses on electronic memory and logic structures, magnetic-optical recording media, superlattices, packaging, detectors, emitters, metallization technology, superconductors, and low thermal-budget processing and includes general papers on electronic materials for device application, structure making, reliability and yield. Articles on methods for preparing and evaluating the chemical, physical, and electronic properties of electronic materials are also included.

JEM subscriptions are available in both print and electronic formats. In addition to receiving on-line access to the current issues of the journal, electronic subscribers have unlimited access to past journal issues with their subscription.

TMS and IEEE members receive significant discounts on *JEM* subscriptions. See the registration form in this program to subscribe to *JEM* along with registration fees.

Individual issues of the journal may also be purchased through the TMS Document Ordering Center (DOC) for \$15 a copy, plus shipping, at http://doc.tms.org or through TMS Subscriptions Representative, Mark Cirelli, at the following address.

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### **Advance Registration Deadline: June 4. 2001**

Payment must accompany form. Forms received after June 4th will be processed at the next higher fee. Please print or type O Dr. O Prof. OMs. Member Identification Number: (TMS or IEEE) OMr. O Mrs. This address is: O Business O Home O New Address O Address Correction LAST NAME FIRST NAME MIDDLE INITIAL Employer: \_\_\_\_ Address: STATE/PROVINCE ZIP/POSTAL CODE COUNTRY Telephone: \_\_\_\_\_ Fax: \_ COUNTRY AREA/CITY LOCAL NUMBER AREA/CITY LOCAL NUMBER E-Mail Address: \_\_\_\_\_ Guest/Spouse Name: \_\_ Please check the appropriate category and enter the totals where indicated. **Registration Fees** (includes a one year subscription to *Journal of Electronic Materials*) Fees to June 4, 2001 Fees after June 4, 2001 O Full Conference Member \$377 \$427 O Full Conference USA Nonmember \$516 \$566 O Full Conference NON-USA Nonmember \$536 \$586 Day Attending: \_\_\_\_\_\_ \$327 .....\$377 One Day Member Day Attending: \_\_\_\_\_\_ \$466 ......\$516 One Day USA Nonmember ......\$486......\$536 One Day NON-USA Nonmember Day Attending: O Air Mail Delivery of Journal of Electronic Materials (Outside North America) \$20 \$20 \$20 **Registration Fees** (without a one year subscription to *Journal of Electronic Materials*) Fees to June 4, 2001 Fees after June 4, 2001 O Full Conference \$345 \$395 \_\_\_\_\_ \$295 .......\$345 One Day Day Attending: O Student (Copy of student school identification card must accompany form.) \$150 \$200 **Social Function Ticket** (Thursday, June 28, Dinner Event included in full conference and student registration fees.) Totals **Payment Method** O Check payable to TMS. Registration Fees .....\$

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