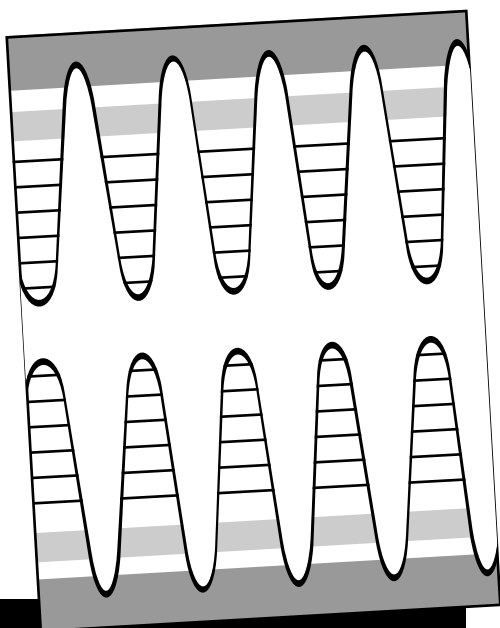


42nd

2000 ELECTRONIC MATERIALS CONFERENCE

UNIVERSITY OF DENVER
DENVER, COLORADO

June 21-23, 2000



TMS

Minerals • Metals • Materials

Advance Program

INCLUDES HOUSING AND REGISTRATION FORMS

<http://www.tms.org/Meetings/Specialty/EMC00/EMC00.html>

General Information

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

DATE AND LOCATION

The 42nd Annual Conference of the Electronic Materials Committee of The Minerals, Metals & Materials Society will be held at the University of Denver, Denver, Colorado, June 21-23, 2000. This conference is being coordinated with the Device Research Conference of IEEE, which will take place June 19-21, 2000, at the same location.

For information regarding the 2000 Electronic Materials Conference, please contact:

General Chair:

Michael R. Melloch
School of Electrical and
Computer Engineering
Purdue University
1285 Electrical Eng. Bldg.
West Lafayette, IN 47907-1285
tel: 765-494-3528
fax: 765-494-6441
e-mail: melloch@ecn.purdue.edu

Program Chair:

Ilesanmi Adesid
Microelectronics Laboratory
University of Illinois
208 N. Wright St.
Urbana, IL 61801
tel: 217-244-6379
fax: 217-244-6375
e-mail: adesida@capone.ccs.m.uiuc.edu

CONFERENCE REGISTRATION

All attendees are encouraged to register in advance to avoid delays in registering at the Conference. Both Electronic Materials Conference (EMC) and Device Research Conference (DRC) badges will be accepted by both Conferences on Wednesday, June 21. Advance registration fees are as follows: full conference \$325; one day \$275; student \$150.

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

To advance register, complete the registration form provided in the center of this mailer. **Advance registration will be accepted until June 5, 2000.**

For questions on advance registrations, please contact:

TMS Customer Service

tel: 724-776-9000 ext. 243 • fax: 724-776-3770

e-mail: mtgserv@tms.org

You may register at the Conference. On-site registration will be located in the Driscoll Center North Flounders Lounge, 2nd floor, and will begin on Tuesday afternoon and will continue Wednesday morning through Friday morning during the following hours and location.

Tuesday, June 20	3:00 PM-8:00 PM
Location: Driscoll Center North Flounders Lounge	
Wednesday, June 21	7:00 AM-5:00 PM
Location: Driscoll Center North Flounders Lounge	
Thursday, June 22	7:00 AM-4:00 PM
Location: Driscoll Center North Flounders Lounge	
Friday, June 23	7:00 AM-10:00 AM
Location: Driscoll Center North Flounders Lounge	

REFUND POLICY

A written request must be sent to TMS Headquarters, 184 Thorn Hill Road, Warrendale, PA 15086, postmarked no later than June 5, 2000. A \$50 processing fee will be charged on all cancellations. NO refunds will be issued after the deadline date.

TECHNICAL SESSIONS

The Electronic Materials technical program will commence at 8:30 AM on Wednesday, June 21. Sessions will be held on grounds at the University of Denver in several different buildings throughout the campus. Sturm Hall will be the location of the conference plenary session.

Session and paper titles are included in this brochure.

LATE NEWS PAPERS

Late news papers will be considered. Authors must submit the abstract by June 1, 2000, using the TMS Conference Management System (CMS). CMS can be accessed by the website at <http://www.cms.tms.org>. If you have questions or need assistance while using the CMS, please contact TMS Technical Programming Services at 724-776-9000 Ext. 227 or 237. Authors of accepted papers will be notified before the EMC Conference.

TECHNICAL EXHIBIT

In addition to a very strong program, EMC is having an exhibition of electronic materials technology and related services. It is an opportunity for EMC attendees to meet these providers and acquaint themselves with their capabilities and products. You are encouraged to visit the tabletop exhibits and interact with the participating vendors.

Exhibit Location: Driscoll Center North Ballroom C/D

Exhibit Dates and Hours:

Wednesday, June 21 10:00 AM–5:00 PM & 7:00 PM–9:00 PM

Thursday, June 22 10:00 AM–4:00 PM

NOTE: Companies interested in participating in this exhibit should contact TMS for details and exhibitor information at the following address, telephone, fax or email:

Cindy Wilson, Sales Coordinator
TMS/EMC Technological Exhibit
184 Thorn Hill Road

Warrendale, PA 15086-7514

tel: 724-776-9000, ext. 231 • fax: 724-776-3770

e-mail: wilson@tms.org

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 requiring specific equipment or services as an attendee of the Electronic Materials Conference to indicate your needs on the enclosed housing and registration forms.

RECORDING POLICY

Policy on Audio and Visual Recording of Technical Paper Presentations/Sessions: The Minerals, Metals & Materials Society (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.

UNIVERSITY OF DENVER

The University of Denver's campus is located six miles south of downtown Denver and only 45 minutes from Denver International Airport. Public transportation and shuttles offer reasonably priced transportation to and from DIA and the downtown area. The University is settled at the base of the Rocky Mountains and offers much to do both on and off campus. The Mile High City boasts over 300 days of sunshine each year with summer temperatures averaging 85 degrees in a dry climate.

MESSAGES

A telephone and message board will be located near the Registration Desk in Driscoll Center North, Flounders Lounge. 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.

CAMPUS SMOKING POLICY

University of Denver prohibits smoking in its buildings. Smoking will be allowed only outdoors.

PARKING

Parking at the University of Denver is by permit only. Parking is complimentary for those residing on-campus in the Residence Hall. When you arrive at University of Denver you will receive a parking permit from the front desk attendant in the Residence Hall.

Attendees residing off-campus may purchase a daily permit from the Resident Hall for \$5, a 4-day permit (Tuesday through Friday) for \$12, or a 6-day permit (Sunday through Friday) for \$18. Parking permits may also be purchased at the conference registration area, however, pre-purchasing of parking permits is encouraged to eliminate standing in lines.

See Housing Reservation Form to pre-purchase permit.

Parking citations are issued for failure to display permits and/or parking in incorrect areas.

RECREATION

The University Fitness Center is open Monday through Saturday. Equipment includes racquetball and squash courts, weight training rooms, and 3 swimming pools. The cost of a Recreation Center pass is \$10/adult/day. Passes can be purchased from the Coors Fitness Center in the Ritchie Cen-

ter. Consult with the Residence Halls desk attendant for hours. Those EMC participants residing on campus may also check out recreational equipment (volleyballs, basketballs, frisbees, billiard, and pingpong equipment) from the service desk by presenting your room key to the Desk Attendant.

HOUSING ACCOMMODATIONS

On-Campus Housing

We are pleased to invite EMC attendees to reside on the campus of the University of Denver. Denver 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. University of Denver residence halls and dining facilities are located within a 7–10 minute walk from the meeting rooms. Residence hall accommodations are either single or double occupancy, with single rooms reserved on a first request basis. Single private and shared suites are also available. Lodging includes beds made on arrival day and daily towel exchange. Restroom and shower facilities are located on each floor. Phones are available in the EMC Residence Halls. Also, calling card accessible phones are within the Hall lobby. The Residence Hall cannot provide a wake-up service, so you may wish to bring an alarm clock as well.

We offer the following package plans to provide planning flexibility and the option to attend both DRC and EMC. All residence hall package plans include full meal service. Residence hall rooms without meals are not available. No adjustments for lodging or meals will be made for late arrival or early departure from the chosen package.

For additional information regarding the University of Denver housing, please contact: Jennifer Chervený at the address listed below.

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

Jennifer Chervený
Conference, Meeting & Event Services
2050 E. Evans Avenue
Driscoll Center South, Room #022
Denver, CO 80208-4333
tel: 303-871-4355 • fax: 303-871-4991
e-mail: jchervený@du.edu

A confirmation of your reservation, which is received by June 1, 2000, will be sent to you by the Conference Office. Prepayment for the anticipated number of nights is required.

Meals will be served in the Driscoll Center North Cafeteria 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.

Plan A

Includes parking & lodging Tuesday through Thursday nights and the following 9 meals:

Tuesday	dinner
Wednesday	breakfast, lunch and dinner
Thursday	breakfast, lunch and dinner/evening at the museum (No dining commons meal offered Thursday night-- EMC Museum/Dinner event included in registration fee.)
Friday	breakfast, lunch

NOTE: this package includes dinner on your arrival day.

Single Occupancy	\$146.48
Double Occupancy	\$124.34
Single Private Suite	\$187.34
Single Shared Suite	\$163.49

Plan B

Includes parking & lodging Wednesday and Thursday nights and the following 7 meals:

Wednesday	lunch and dinner
Thursday	breakfast, lunch and dinner/evening at the museum (no dining commons meal offered Thursday night-- EMC Museum/Dinner event included in registration fee.)
Friday	breakfast and lunch

Single Occupancy	\$114.44
Double Occupancy	\$99.68
Single Private Suite	\$141.68
Single Shared Suite	\$125.78

Plan C

(for those planning to attend DRC and EMC) Includes parking & lodging Sunday through Thursday nights and the following 14 meals:

Sunday	dinner
Monday	breakfast, lunch and dinner
Tuesday	breakfast, lunch and dinner (no dining commons meal offered Tuesday night-- (DRC Aquarium/Dinner Event included in DRC Registration Fee)
Wednesday	breakfast, lunch and dinner
Thursday	breakfast, lunch and dinner/evening at the museum (no dining commons meal offered Thursday night-- EMC Museum/Dinner event included in registration fee.)
Friday	breakfast, lunch

NOTE: this package includes dinner on your arrival day.

Single Occupancy	\$216.66
Double Occupancy	\$193.00
Single Private Suite	\$297.00
Single Shared Suite	\$257.25

Late Departure *(on a space available basis)*

Friday Night (June 23) Room Rate: includes parking & lodging Friday evening and the following meals:

Friday	dinner <i>(breakfast & lunch included in main packages)</i>
Saturday	breakfast

NOTE: Checkout is Saturday, 10:00AM

Single Occupancy	\$45.52
Double Occupancy	\$38.14
Single Private Suite	\$59.14
Single Shared Suite	\$51.19

Commuter Lunch Package

I plan to make off-campus housing arrangements directly with the hotel/motel and wish to purchase a commuter lunch package for on-campus meals.

Three (3) lunches	\$19.40
Five (5) lunches	\$32.34

NOTE: It is important to apply early.

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

Method of Payment

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

- Personal Check or Money Order. Checks must be drawn on a U.S. Bank and should be made payable to "University of Denver".
- Credit Card: Visa, MasterCard, or Discover

Off-Campus Housing

Blocks of rooms have been reserved, at special conference rates, for the hotels listed below. Rooms will be released by June 1. Thereafter, reservations can be obtained only on a space available request. Please contact the hotel directly by mail, phone or fax as soon as possible. Rooms are available for either DRC, EMC or both, Sunday through Thursday nights, and you must identify yourself as either a DRC or EMC attendee. You can also stay Saturday, June 17 or Friday, June 21, if you request it at the time you make your reservations. Please note that the following rates DO NOT include 9% tax.

Hotels located in Denver area approximately 4–5 miles from campus (7–10 minutes driving time)

Best Western Landmark Hotel

455 South Colorado Boulevard • Denver, Colorado 80246
tel: 303-388-5561 • fax: 303-388-7936

Cost \$59 single/double

The hotel features complimentary shuttle service to the University of Denver and other attractions within a 3 mile radius of the hotel, large indoor pool and jacuzzi, fitness center, Country Oak Café, lounge, gift shop and barber shop.

Four Points Denver Cherry Creek

600 South Colorado Boulevard • Denver, Colorado 80222

tel: 303-758-7084 • fax: 303-758-0272

Cost \$72 single/double

The hotel features heated outdoor pool; free guest pass to Bally's Total Fitness Center located next door; Bistro open for breakfast, lunch & dinner; within walking distance of shopping, entertainment and fine dining; located near Cherry Creek Shopping Center and Denver's best restaurants just minutes from the hotel.

La Quinta Inn & Suites

Denver Cherry Creek

1975 South Colorado Boulevard • Denver, Colorado 80222-7902

tel: 303-758-8886 • fax: 303-756-2711

Cost \$69 single/double

The hotel is centrally located in the Cherry Creek area near Cherry Creek Mall; complimentary continental breakfast in the morning; free local calls; within walking distance of several restaurants and movie theater; heated outdoor pool.

Wyndham Hotel

1475 South Colorado Boulevard • Denver, Colorado 80222

tel: 303-757-8797 • fax: 303-757-2815

Cost \$75 single/double

The hotel offers complimentary shuttle service to the University of Denver and to other attractions within a 3 mile radius; advanced fire/life safety system; complimentary parking; fitness center; indoor swimming pool; and numerous surrounding attractions and activities, including the Cherry Creek Mall.

WELCOMING RECEPTION

All attendees are invited to attend a hosted Welcoming Reception on Wednesday, June 21 from 7:00 PM–9:00 PM in the Driscoll Center North, 2nd floor, Ballroom C/D and Gallery.

EVENING AT THE MUSEUM

On Thursday, June 22, conference attendees and their guests will have the opportunity to enjoy a catered dinner at the spectacular Museum of Natural History.

The cost of this event is included in the full conference and student registration fee. It is not included in the one-day registration fee.

The cost 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 at the registration desk at the conference. Deadline for ticket sales will be Noon on Wednesday, June 21, 2000.

INFORMAL COFFEE BREAKS

During the intermission of morning and afternoon sessions (at approximately 10:00–10:40 AM and 3:00–3:40 PM) coffee, tea, assorted pastries and sodas will be served in the Driscoll Center North, Ballroom C/D, location of exhibits.

DRESS

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

ABOUT DENVER

The city of Denver is the perfect city to visit in the next millennium. From the modern, state-of-the-art airport to the spectacular Denver Performing Arts Complex, from the world-class aquarium at Colorado's Ocean Journey to the exciting new Pepsi Center, there is an attraction in Denver for everyone.

Shopping opportunities are plentiful. Whether you visit the 420 stores in the Cherry Creek Shopping District, browse the art galleries of LoDo, or shop along the 16th Street Mall at the Tabor Center and Denver pavilions, you will find what you're looking for in Denver.

The famous Denver Museum of Natural History and the Denver Zoo offer a chance to see and explore some of the great treasures of the earth.

TRANSPORTATION

The Denver area may be reached by:

Car: Driving from the East and West take I-70 to I-25 (south). Take the Speer Boulevard (south) exit 212A and follow Speer to Lawrence Street. Turn left on Lawrence and it leads you into the downtown area. Driving from the North and South follow I-25 to downtown. Take the Speer Boulevard (south) exit 212A and follow the above directions.

Bus: Greyhound bus lines provide substantial service from major cities. The local station is in downtown Denver. Taxi service is available from the terminal to the University of Denver and other hotels.

Air: Denver International Airport is serviced by several major airlines and commuter airlines. See announcement in this brochure for special fares offered by US Airways for EMC/DRC. Shuttle service and taxi service are available from the airport. If driving from the airport take Pena Boulevard south from the airport to I-70 westbound. Follow I-70 to downtown and take I-25 (south). Take I-25 South through downtown to the University Boulevard Exit (South); go South on University Boulevard to Evans Avenue, turn right on Evans Avenue to Rale Street. The Driscoll Center is located on the corner of Evans Avenue and Rale Street .

Taxi: Taxi service is available from the Airport to the hotels located in the Denver area.

STUDENT TRAVEL ASSISTANCE

Student authors who plan to present a paper at the 2000 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 5, 2000 to:

Michael R. Melloch, General Chairman

School of Electrical and Computer Engineering • Purdue University
1285 Electrical Engineering Building • West Lafayette, IN 47907-1285
tel: 765-494-3528 • fax: 765-494-6441
e-mail: melloch@ecn.purdue.edu

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 21, in the Sturm Auditorium.

PUBLICATION OF CONFERENCE PAPERS

There are no formal conference proceedings, but the conference abstracts will be published in the Journal of Electronic Materials. We also encourage you to submit manuscripts on your work to the Journal of Electronic Materials. There are two special issues of the Journal of Electronic Materials scheduled with manuscript due dates shortly after the conference that might be of particular interest to conference participants. Those special issues are:

“Nitrides and Other Wide Bandgap Materials”

Because of the rapid advances in and technical importance of SiC and III-V nitride materials and devices, there will be a special issue of the Journal of Electronic Materials dedicated to these materials. This special issue is scheduled for publication in March 2001. Information for authors may be found on the inside back cover of current issues of the journal. The final date for submission of manuscripts is August 1, 2000. Papers are solicited in areas of epitaxy, processing, device applications, and electrical, optical and structural characterization.

Original manuscripts with original figures suitable for reproduction, two copies of the manuscript, and a completed copyright form should be submitted to one of the co-editors listed below.

Ilesanmi Adesida

Microelectronics Laboratory • University of Illinois
208 North Wright St., Urbana, IL 61801
tel: 217-244-6379 • fax: 217-244-6375
e-mail: adesida@capone.ccsu.uiuc.edu

Joan Redwing

Pennsylvania State University
Department of Materials Science and Engineering
221 Steidle Building, University Park, PA 16802
tel: 814-865-8665 • fax: 814-865-2917
e-mail: jmr31@psu.edu

Laura Rea

Air Force Research Laboratory • AFRL/MLPO
3005 P. St., Suite 6, Wright Patterson AFB, OH 45433-7707
tel: 937-255-4474 Ext. 3213 • fax: 937-255-4913
e-mail: laura.rea@wpafb.af.mil

C.-M. Zetterling

KTH Royal Institute of Technology
Department of Electronics, Electrum 229, Kista S-164 40, SWEDEN
tel: 46-8-752-1409 • fax: 46-8-752-7850
e-mail: bellman@ele.kth.se

“Quantum Dots and Other Quantum-Confined Structures”

There will be a special issue of the Journal of Electronic Materials dedicated to quantum dots. This special issue is scheduled for publication in May 2001. Information for authors may be found on the inside back cover of current issues of the journal. The final date for submission of manuscripts is September 1, 2000. Papers are solicited in areas of quantum dot formation, processing, device applications, and electrical, optical and structural characterization.

Original manuscripts with original figures suitable for reproduction, two copies of the manuscript, and a completed copyright form should be submitted to one of the co-editors at the addresses below.

Prof. Supriyo Bandyopadhyay

Dept. of Electrical Engineering
University of Nebraska, Lincoln, NE 68588-0511
tel: 402-472-0294 • fax: 402-472-4732
e-mail: bandy@quantum1.unl.edu

Prof. Clivia M. Sotomayor-Torres

Institute of Materials Science & Dept of Electrical Engineering
University of Wuppertal
Gauss-Strasse 20, 42097 Wuppertal, GERMANY
tel: 49-202-439-2920 • fax: 49 -202- 439-3037
e-mail: clivia@uni-wuppertal.de

Prof. Akio Sasaki

Osaka Electro-Communication Univ.
Department of Electronics
Neyagawashi 572, Japan
tel: 81-720-24-1131 • fax.: 81-720-24-0014
e-mail: sasaki@isc.osakac.ac.jp

JOURNAL OF ELECTRONIC MATERIALS

The full conference member \$357, USA Nonmember \$475 and NON-USA Nonmember \$499 registration fees includes a subscription to the 2001 *Journal of Electronic Materials* which will include manuscripts of papers presented at the 2000 Electronic Materials Conference. Those who register for one day may order a subscription to the 2000 JEM on the registration form.

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.

Officers

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INVITED ORGANIZERS FOR THE 2000 EMC CONFERENCE

The Electronic Materials Conference wishes to thank the following invited organizers for their support and contribution to the technical program presented at this years conference:

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University of Nebraska

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Werner Seifert
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TRW

James Sturm
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King-Ning Tu
University of California,
Los Angeles

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Iowa State University

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Lawrence Berkeley National
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Subscription Information

Journal of Electronic Materials

A monthly publication of the Electronic Materials Committee of TMS and the Electron Devices Society of IEEE.

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Attention: TMS Non-Member Attendees

For New TMS Members Only!

We want you to join TMS and experience the Society and what it has to offer. Pay only \$54 and receive membership in TMS for the remainder of 2000!

Receive a six month subscription to the hardcopy of JOM; be eligible for member discounts on TMS conference fees and publications such as *JEM*, where you can enjoy symposia proceedings, including selections from the annual Electronic Materials Conference; have easy access to the World Wide Web (www) with TMS OnLine, plus an array of other membership benefits and services. Once you've been a part of TMS and seen all that's happening in electronic materials programming, you'll want to continue your membership long into the future.

All you need to do is complete a TMS application and return it to the TMS Registration Desk during the conference, along with your \$54 payment. Or, you may opt to mail your application and payment to TMS Headquarters, 184 Thorn Hill Road, Warrendale, PA 15086, U.S.A.

(Your membership cannot be processed without a completed application.)

Non-member students may apply for Joint ASM/TMS Student Membership for \$25 annually (students living in North America only), or TMS Student Membership for \$15 annually (students living outside North America.)

Contact Information

For information regarding meeting registration, subscription and pricing contact:

The Minerals, Metals & Materials Society (TMS)
184 Thorn Hill Road, Warrendale, PA 15086
tel: 724-776-9000 Ext. 270 • fax: 724-776-3770
e-mail: mtgserv@tms.org

For information regarding conference logistics contact:

Marlene Karl, Meeting Coordinator
The Minerals, Metals & Materials Society (TMS)
184 Thorn Hill Road, Warrendale, PA 15086
tel: 724-776-9000 Ext. 232 • fax: 724-776-3770
e-mail: karl@tms.org

For information regarding University of Denver on-campus housing contact:

Jennifer Chervený
Conference, Meeting & Event Services
Driscoll Center South, Room #022
2050 E. Evans Avenue, Denver, CO 80208-4333
tel: 303-871-2397 • fax: 303-871-4991
e-mail: jchervený@du.edu

For further information pertaining to the Device Research Conference, DRC registration and DRC housing forms, contact:

Mark Rodder, DRC General Chair
Texas Instruments
13560 North Central Expressway, MS 3739, Dallas, TX 75243
tel: 972-995-2873 • e-mail: rodder@epcot.spdc.ti.com
or
Mark Rodwell, DRC Technical Program Chair
Department of Electrical and Computer Engineering
University of California, Santa Barbara, CA 93106
tel: 805-893-3244 • fax: 805-893-3262
e-mail: rodwell@ece.ucsb.edu

Attention EMC Attendees

Nominations are Needed

You are encouraged to submit a nomination for the TMS 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, just pick up a nomination form at the TMS Registration desk at EMC, or you may download the nomination form from the TMS Homepage on the WWW at <http://www.tms.org>.

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:

Y. Austin Chang

Citation:

Professor Chang is a world leader in the field of seminal contributions to understanding of metal/compound semiconductor interactions.

Y. Austin Chang is a professor at the University of Wisconsin, Madison, Department of Materials Science & Engineering.

Dr. Chang earned his B.S. and M.S. in Chemical Engineering from the University of California, Berkeley, and University of Washington, Seattle, respectively, and his Ph.D. in metallurgy from the University of California, Berkeley. He spent several years in industry before joining the faculty at the University of Wisconsin, Milwaukee, where he was appointed department chair.

“I am proud to be a TMS member and extremely pleased that I have been selected to receive this great honor.”

Dr. Chang is active in many professional organizations and has received numerous awards and honors, including election to the National Academy of Engineering. He has authored or coauthored more than 380 publications and holds one patent.



U·S AIRWAYS

Official Carrier **of the 2000 Electronic Materials Conference**

US Airways agrees to offer an exclusive low rate for the attendees traveling to the 2000 Electronic Materials Conference in Denver, Colorado.

This special fare will offer a 7% discount off First or Envoy Class and any published US Airways promotional round trip fare. A 12% discount off unrestricted coach fares will apply with seven day advance reservations and ticketing required. Plan ahead and receive an additional discount by ticketing 60 days or more prior to departure. These discounts are valid provided all rules and restrictions are met and are applicable for travel from all points on US Airways' route system.

The above discounts are not combinable with other discounts or promotions, and are valid three days before and after the meeting dates. Additional restrictions may apply on international travel.

To obtain these discounts, you or your professional travel consultant must call US Airways' Meeting and Convention Reservation Office at (800) 334-8644; 8:00 AM–9:30 PM, Eastern Time. Select option "1" when making the call.

REFER TO GOLD FILE NO. 22631205

Once your reservations are confirmed, we will mail the tickets to you or suggest several other convenient methods of purchase.

If you normally use the services of a travel agent or corporate travel department, please have them place the call so that they may obtain the same advantages for you. The special meeting fare is only available through the Meeting and Convention Reservation Office.

Hertz Rent-a-Car System



*Hertz Rent-a-Car System has been selected
as the Official Car Rental company for the
Electronic Materials Conference in Denver, Colorado.*

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 Colorado 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#010P0004

Meeting Rates from all Southern California Locations

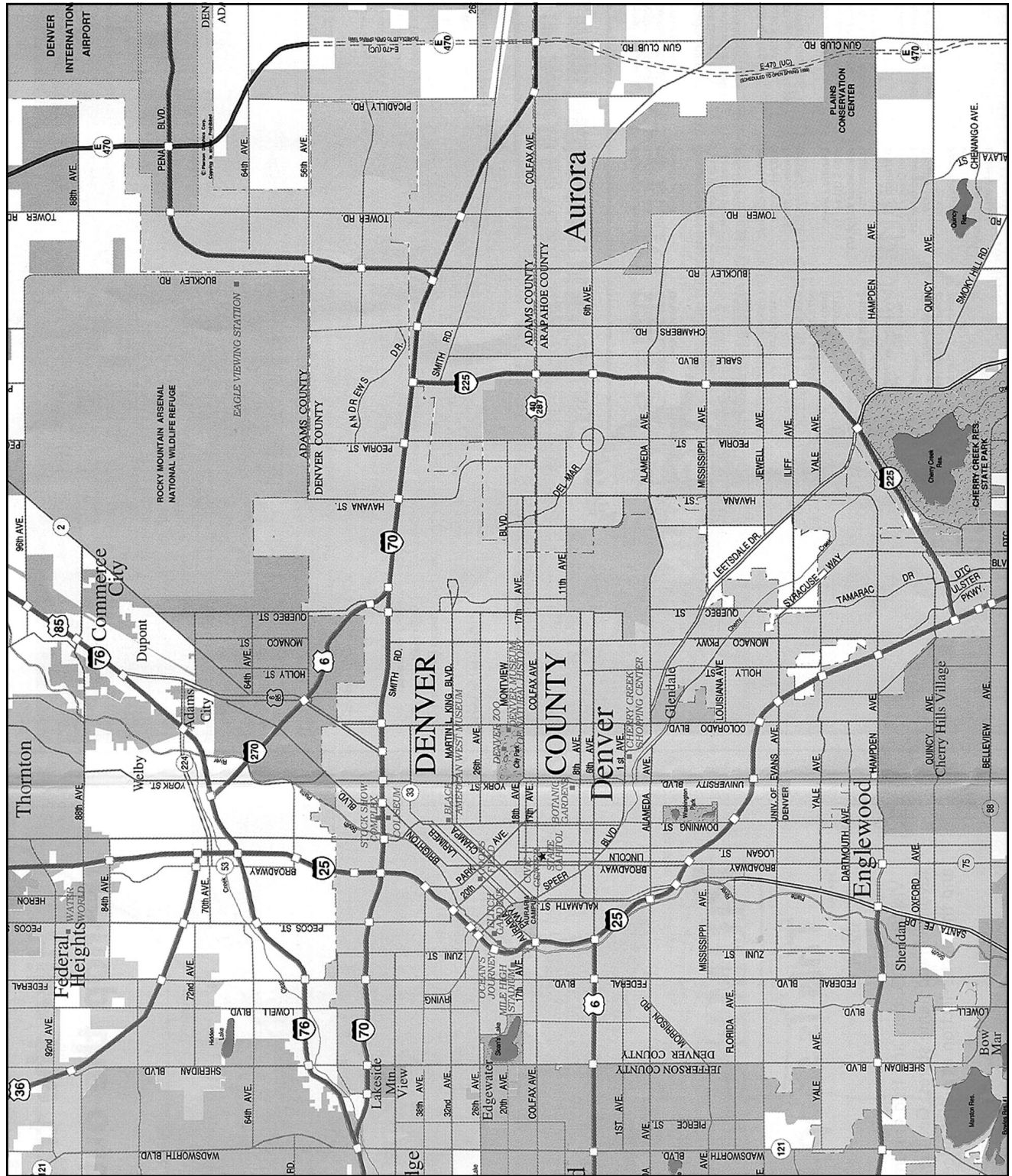
	DAILY	WEEKEND	WEEKLY
CAR CLASS	Per Day	Per Day	5-7 Day
A Economy 2DR	\$34.99	\$21.99	\$129.99
B Compact 4DR	\$37.99	\$23.99	\$144.99
C Midsize 2/4DR	\$40.99	\$25.99	\$159.99
D Sporty 2DR	\$43.99	\$30.99	\$174.99
F Fullsize 4DR	\$47.99	\$32.99	\$189.99
I Luxury	\$65.99	\$62.99	\$294.99
L 4 Wheel Drive	\$65.99	\$62.99	\$274.99
R Minivan	\$65.99	\$62.99	\$274.99

Standard rental and credit qualifications apply. Taxes, vehicle licensing fees/tax reimbursement, transportation fee, transaction fee and optional items, such as refueling, are extra. At many airports and hotels, a 5%–12.75% airport/hotel concession fee recovery applies on car rental.

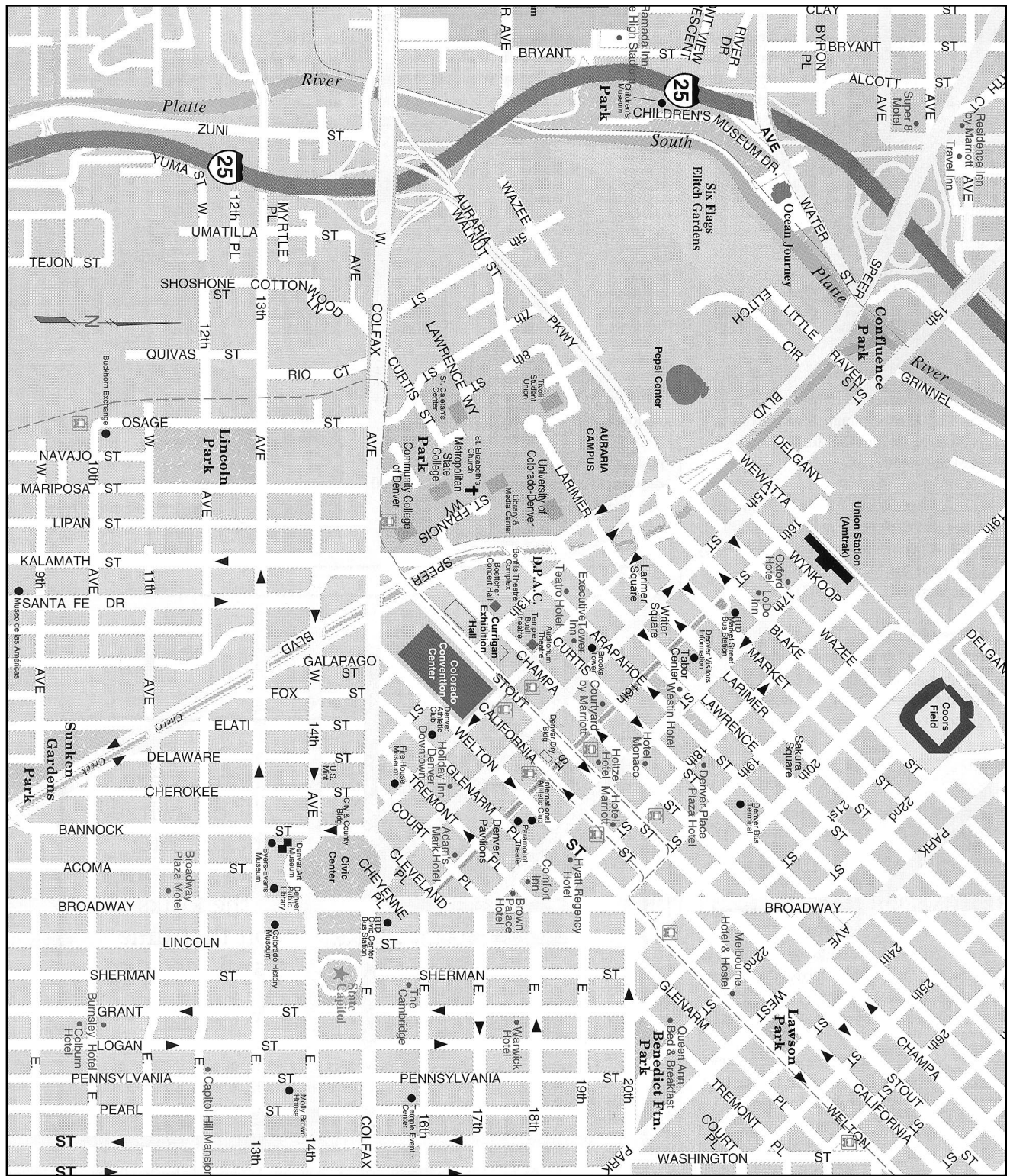
Terms and Conditions

- 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 coverages (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.

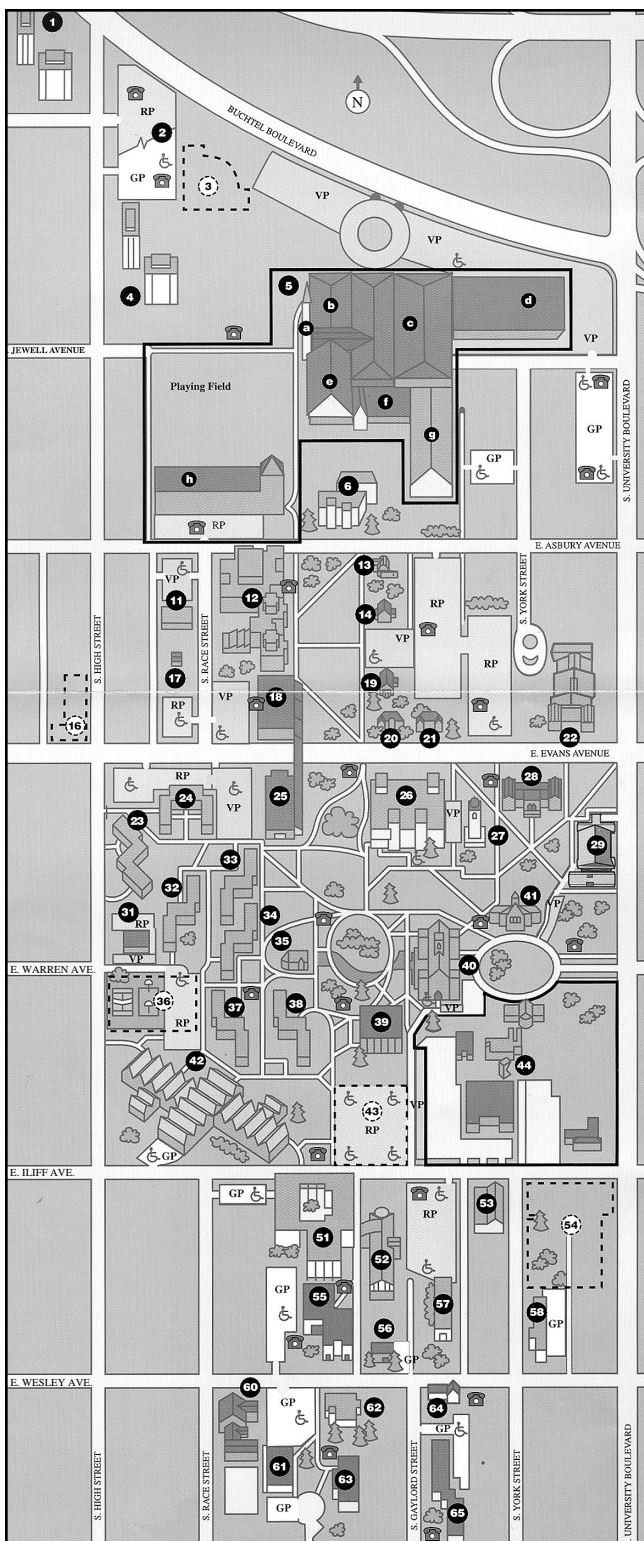
Central Denver



Downtown Denver



University Park



Legend

Centennial Towers	1
Buchtel Parking Structure	2
Centennial Halls	4
Ritchie Center for Sports & Wellness	5
Williams Tower and Carillon	a
Hamilton Gymnasium	b
Magneess Arena	c
Joy Burns Arena	d
El Pomar Natatorium	e
Coors Fitness Center	f
Gates Field House	g
Stapleton Tennis Pavilion	h
Shwayder Art Building	6
Multicultural Center	11
Sturm Hall	12
Driscoll Center North	18
Ricks Center	22
Spruce Hall	23
Columbine Hall	24
Driscoll Center South	25
Penrose Library	26
Buchtel Memorial Tower	27
Margery Reed Hall	28
Mary Mac Building	31
Frontier Hall	32
Pioneer Hall	33
Skyline Hall	34
Evans Chapel	35
Hilltop Hall	37
Aspen Hall	38
Ben M. Cherrington Hall	39
Mary Reed Building	40
University Hall	41
Johnson-McFarlane Hall	42
Boettcher Center	51
F.W. Olin Hall	52
Seeley G. Mudd Science Building	55
Wesley Hall	56
John Greene Hall	57
Knudson Hall	58
Physics Building	62
Ammi Hyde Building	63
Metallurgy	65

(VP) Visitor Parking

(RP) Restricted Parking

(GP) Permit/General Parking

NOTE: Legend is condensed to show points of interest only.

Advance Registration Form

WEB	Take advantage of the convenience of on-line pre-registration via the TMS website: http://www.tms.org Web registration requires credit card payment.	FAX	Fax this form to TMS Educational Department USA 724-776-3770 Fax registration requires credit card payment.	MAIL	Return this form with payment to Educational Department TMS 184 Thorn Hill Road Warrendale, PA 15086
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Advance Registration Deadline: June 5, 2000

Payment must accompany form. Forms received after June 5th will be processed at the next higher fee.

Please print or type

☐ Dr. ☐ Prof. ☐ OMs. **Member Identification Number:** (TMS or IEEE) _____

☐ Mr. ☐ Mrs. **This address is:** ☐ Business ☐ Home ☐ New Address ☐ Address Correction

LAST NAME FIRST NAME MIDDLE INITIAL

Employer: _____

Address: _____
CITY STATE/PROVINCE ZIP/POSTAL CODE COUNTRY

Telephone: _____ **Fax:** _____
COUNTRY AREA/CITY LOCAL NUMBER COUNTRY AREA/CITY LOCAL NUMBER

E-Mail Address: _____

Please check the appropriate category and enter the totals where indicated.

Registration Fees (includes a one year subscription to <i>Journal of Electronic Materials</i>)	Fees to June 5, 2000	Fees after June 5, 2000
<input type="radio"/> Full Conference Member	\$357 MJ	\$407 OMJ
<input type="radio"/> Full Conference USA Nonmember	\$489 NJ	\$539 ONJ
<input type="radio"/> Full Conference NON-USA Nonmember	\$519 NNJ	\$569 ONNJ
<input type="radio"/> One Day Member Day Attending: _____	\$307 OMJ	\$357 OOMJ
<input type="radio"/> One Day USA Nonmember Day Attending: _____	\$439 ONJ	\$489 OONJ
<input type="radio"/> One Day NON-USA Nonmember Day Attending: _____	\$469 ONNJ	\$519 OONNJ
<input type="radio"/> Air Mail Delivery of <i>Journal of Electronic Materials</i> (Outside North America)	\$30 AIR	\$30 OAIR

Registration Fees (without a one year subscription to <i>Journal of Electronic Materials</i>)	Fees to June 5, 2000	Fees after June 5, 2000
<input type="radio"/> Full Conference	\$325 AF	\$375 OF
<input type="radio"/> One Day Day Attending: _____	\$275 AO	\$325 OO
<input type="radio"/> Student (Copy of student school identification card must accompany form.)	\$150 AS	\$200 OS

Social Function Ticket (Thursday, June 22 evening at the Museum/Dinner event included in full conference and student registration fees.)

☐ Adult One Day Attendee or Guest Number: _____ @ \$55/ea. = _____ ZA

☐ Child (5-12 years) Number: _____ @ \$25/ea. = _____ ZC

☐ Check if you require transportation to the museum. Number: _____ Z

Payment Method

☐ Check payable to TMS.
Payment should be made in US dollars drawn on a US bank.

☐ VISA ☐ MasterCard ☐ Diner's Club ☐ American Express

Card No.: _____ Exp.: _____

Cardholder Name: _____

Signature: _____

Totals

Registration Fees \$ _____

Additional Museum/Dinner Tickets \$ _____

Total Fees Paid \$ _____

REFUND POLICY: Written requests must arrive at TMS no later than June 5, 2000. A \$50 processing fee will be charged for all cancellations.

Housing Reservation Form

Return this form no later than June 1, 2000 • DO NOT MAIL OR FAX TO TMS

Attendees wishing to be housed on campus are required to complete this form. Payment in full must accompany this form in order to reserve a room.

Please print or type

☐ Dr. ☐ Prof. ☐ Ms.
☐ Mr. ☐ Mrs.

Member Identification Number: (TMS or IEEE) _____

This address is: ☐ Business ☐ Home ☐ New Address ☐ Address Correction

Employer: _____

Address: _____

Telephone: _____

E-Mail Address: _____



Please indicate any special needs: _____

The residence hall accommodations reserved at the University are single and double rooms for individuals or couples. Both facilities are shared. Rooms will be assigned on a first-request basis so early reservation is recommended.

I plan to attend EMC only and wish to make the following arrangements.

See On-Campus Housing in this brochure for details.

Plan A

Lodging Tuesday through Thursday and 9 meals • includes parking

☐ Plan A: Single Occupancy \$146.48
☐ Plan A: Double Occupancy \$124.34
☐ Plan A: Single Private Suite \$187.34
☐ Plan A: Single Shared Suite \$163.49

Plan B

Lodging Wednesday and Thursday and 7 meals • includes parking

☐ Plan B: Single Occupancy \$114.44
☐ Plan B: Double Occupancy \$99.68
☐ Plan B: Single Private Suite \$141.68
☐ Plan B: Single Shared Suite \$125.78

Plan C

Lodging Sunday through Thursday and 14 meals • includes parking

I plan to attend both DRC and EMC. I understand that I must register for the Device Research Conference separately on the DRC Registration Form, but wish to make my housing and meals arrangements on this form as follows: (submit one Housing Reservation Form only.)

☐ Plan C: Single Occupancy \$216.66
☐ Plan C: Double Occupancy \$193.00
☐ Plan C: Single Private Suite \$297.00
☐ Plan C: Single Shared Suite \$257.25

Friday Night Room Rate

Lodging Friday, June 23 and meals Friday and Saturday

☐ Single Occupancy \$45.52
☐ Double Occupancy \$38.14
☐ Single Private Suite \$59.14
☐ Single Shared Suite \$51.19

NAME OF PERSON SHARING DOUBLE ROOM

Requesting shared double accommodation; please assign roommate.

Roommate will be assigned on a first request basis.

☐ Single ☐ Double / ☐ Male ☐ Female

Arrival Date: _____ Departure Date: _____

Commuter Lunch Package & Parking for Off-campus attendees

I plan to make off-campus housing arrangements and wish to purchase a Commuter Lunch Package for on-campus meals.

☐ 3 EMC Lunches No. _____ @ \$19.40/person = \$ _____
☐ 5 DRC/EMC Lunches No. _____ @ \$32.34/person = \$ _____

University of Denver Parking

☐ 4-day Permit (Tuesday through Friday) \$12.00 \$ _____
☐ 6-day Permit (Sunday through Friday) \$18.00 \$ _____

Museum Transportation

Please indicate your method of transportation to the museum.

☐ Require busing to museum ☐ Driving to museum

Fee Totals

Total U.S. dollars accompanying this form \$ _____

Payment Method

☐ Check payable to TMS.

Payment should be made in US dollars drawn on a US bank.

☐ VISA ☐ MasterCard ☐ Discover

Card No.: _____ Exp.: _____

Cardholder Name: _____

Signature: _____

Date: _____

Return Instructions

Complete this form and send with your remittance to:

Mail: EMC c/o Conference Meeting & Event Services
Special Programs Division, University of Denver
2050 East Evans Avenue, Suite 22, Denver, CO 80208

Fax: 303-871-4991 (if paying by credit card)

Confirmation of reservation (received by June 1, 2000) will be sent to you by the University of Denver Conference Office.

If you have questions regarding on-campus reservations, please call 303-871-4355; fax: 303-871-4991; or e-mail jcherveny@du.edu

DO NOT
MAIL
OR FAX
TO TMS