

# **APS** assembles in Detroit

Poster sessions, an SPS symposium, business meetings, a Cornell LASSP reunion, a Placement Center, APS Show and newsroom are all set for this year's March Meeting.

The American Physical Society will hold its 1984 March Meeting in Detroit, Michigan, 26–30 March. The Detroit Westin in the Renaissance Center is the headquarters hotel for this meeting and will hold all of the technical sessions. Two other hotels, the Pontchartrain and the Book Cadillac, are also holding a block of rooms for the Society.

There will be on-site registration, beginning Sunday (25 March), from 4 p.m. to 9 p.m., outside the Ontario Exhibit Hall on Level 3 of the Westin. Registration will continue Monday through Thursday (26–29 March), from 8 a.m. to 4 p.m., and on Friday, from 8 a.m. to 11 a.m.

This meeting is organized into 46 invited paper sessions and 131 contributed paper sessions, which are distributed between Monday morning at 9:00 and Friday at noon. The total number of contributed papers received for this meeting is 1960.

Poster sessions will be held in the Ontario Exhibit Hall on Tuesday afternoon at 2:00. The Division of High

Polymer Physics will hold four poster sessions on Wednesday in the Mackinac Ballroom. As the demand warrants, post-deadline poster sessions will be established. They will be held in the Ontario Exhibit Hall.

All invited sessions will be supplied with overhead and 35 mm projectors; contributed sessions will have only overhead projectors.

# Ceremonial session

On Wednesday afternoon at 1:15 in the Columbus Room, the Ceremonial

# INVITED PAPERS, SPECIAL SESSIONS

# MONDAY

#### Morning

- Symposium of the Division of Condensed Matter Physics: Wetting. Cummins, Wortis, Sutton, Dash, Moldover.
- Symposium of the Division of Condensed Matter Physics: Recent development in semiconductor alloys. *Pollak, Mikkelsen, Zunger, Barnett, New*man, Holloway.
- Symposium of the Division of Biological Physics: Luminescence probes in biophysics and medicine. Lamola, Weber, Jacobson, Gratton, Illiman
- Symposium of the Division of Fluid Dynamics: Turbulence, chaos, and instabilities in fluids. *Marcus*, *Ahlers, Behringer, Cross, Donnelly.*

SPS Symposium.

# Afternoon

- Symposium of the Division of Condensed Matter Physics: Heavy fermions. Remeike, Ott, Smith, Allen, Coleman.
- Symposium of the Division of Condensed Matter Physics: Dynamics and frustration. Ramaswamy, Bhattacharya, Gollup, Levelut, Saupe.
- Joint Symposium of the Divisions of Biological and Chemical Physics: Dynamical concepts for chemical and biochemical reactions. *Berne, Fleming, Frauenfelder, Wolynes.*
- Symposium of the Division of Electron and Atomic Physics: Laser spectroscopic techniques. Hougen, Kliger, Lawler, Amer, Tam.

SPS Symposium.

# Evening

- Symposium of the Division of Nuclear Physics: Nuclear techniques in condensed-matter physics. Philipps, Hohenemser, Heffner, Carrigan.
- Symposium of the Forum on Physics and Society: Scientific communication and national security. Park, Ferguson.

# TUESDAY

# Morning

- Symposium of the Division of Condensed Matter Physics: Surface reconstruction: New techniques and new results. *Binning, Aono, Estrup, Robinson, Marks.*
- Symposium of the Division of Condensed Matter Physics: Random fields. *Grinstein, Belanger, Wong.*
- Symposium of the Division of Biological Physics: Bacterial behavior. Adler, Purcell, Berg.
- Symposium of the Committee on Applications of Physics: New permanent magnet materials by rapid solidification. Croat, Herbst, Hadjipanayis, Koon.
- Symposium of the Division of Condensed Matter Physics: Correlation effects in itinerant magnets near and above the critical temperature. *Lynn, Shirane*.

# Afternoon

SPS Invited Lecture.

Symposium of the Division of Fluid Dynamics: New vortices in superfluid He<sup>3</sup>. Serene, Fetter, Simola, Salomaa, Zotos.

- Symposium of the Division of Condensed Matter Physics: Noise and turbulence. Weissman, Fleetwood, Koch, Swinney, Clarke.
- Symposium of the Division of Condensed Matter Physics: Microemulsions. *Nicoli, Safran, Belloca.*
- Symposium of the Division of Chemical Physics: New spectroscopies at surfaces. Slichter, Duncan, Mills, Sibener.
- Symposium of the Committee on Applications of Physics: Symposium on rock physics. *Johnson, Sheng, Pohl, Madden.*
- Division of High Polymer Prize Symposium and 40th Anniversary Session. Karasz, MacKnight, Koningsveld, Sanchez, Wood, Flory.
- Symposium of the Division of Condensed Matter Physics: Transmission electron microscopy. Cowley, Gibson.

#### Evening

- Symposium of the Forum on Physics and Society: Civil defense. *Dowling, Harrell, Sullivan, Haa*land. Casper.
- Symposium of the Committee on Applications of Physics: Physics in the automotive industry. Jamerson, Reitz.

# WEDNESDAY

# Morning

- Symposium of the Division of Condensed Matter Physics: Fractional quantum hall effect. *Tsui, Gossard, Stormer, Laughlin, Mendez.*
- Symposium of the Division of Condensed Matter Physics: Mechanical properties of materials I: Dislocations and deformation. Kroner, Kocks, Weiner, Vitek, Gupta.
- Symposium of the Committee on Applications of Physics: Magnetic storage and beyond. *Bate, Hopfield, Benner, Moerner.*
- Symposium of the Division of Biological Physics: Biophysical studies of double-helical DNA. Wartell, Swicord, Lindsay, Prohofsky.

# Afternoon

- Business Meeting of the Division of Biological Physics.
- SPS Invited Lecture.
- Ceremonial Session of the Division of Condensed Matter Physics. Marshak, Anderson, Cardona.
- Symposium of the Division of Condensed Matter Physics: Mechanical properties of materials II. Failure and fracture. Landman, Dienes, Hart, Ohr, Lawn.
- Symposium of the Division of Chemical Physics: Small particles and electron microscopy. Sintelt. Smalley, Cowley, Schmidt.
- Symposium of the Committee on Applications of Physics: The future of optical storage. Bell, Connell, Botez, Michl.
- Symposium of the Division of Condensed Matter Physics: Nonequilibrium phonon dynamics. Bron. Brav.
- Business Meeting of the Division of Chemical Physics.
- Business Meeting of the Division of Condensed Matter Physics.

Business Meeting of the Division of High Polymer Physics.

#### Evening

- Symposium of the Division of History of Physics: History of solid-state physics. *Smith, Weart, Szymborski.*
- Symposium of the Committee on Opportunities in Physics: Research opportunities in the Federal small business innovation research program. Gajewski, Bastress, Brophy.

# THURSDAY

### Morning

- Symposium of the Division of Condensed Matter Physics: Growth, aggregation, and scaling. Sander, Meakin, Weitz, Ball, Langer.
- Symposium of the Division of Condensed Matter Physics: Photoemission, surfaces, and films. Tobin, Chiang, Fauster, Kevan, Raue.
- Symposium of the Division of Chemical Physics: Chemically modified surfaces. White, Goodman, Fisher, Stair.
- Symposium of the Committee on Applications of Physics: Packaging. Blodgett, Bartlett, Tuckerman, Class. Osgood.

# Afternoon

SPS Invited Lecture.

- Symposium of the Division of Condensed Matter Physics: Experimental tests for solitons in solids. Epstein. Scott. Orenstein, Clark, Ramirez, Steiner.
- Symposium of the Division of Condensed Matter Physics: Semiconductor superlattices. *Abeles, Dohler, Gourley, Fiory, Faurie.*
- Symposium of the Division of Chemical Physics: Phase transitions on surfaces. Roelofs, Williams, Birgeneau, Kosterlitz.
- Symposium of the Committee on Applications of Physics: Corrosion. Kelly, Bertocci, Pickering, Latanision.

# Evening

Symposium of the Division of Particles and Fields. Cline, Sinclair, Quigg.

# FRIDAY

# Morning

- Symposium of the Division of Condensed Matter Physics: Fractals in physics. Mandelbrot, Orbach, Stanley, Stapleton, Gelen.
- Symposium of the Division of Condensed Matter Physics: Flux quantization effects in normal conductors, Imry, Bergmann, Blonder, Umbach.
- Symposium of the Division of Condensed Matter Physics: Laser sources of far-ultraviolet radiation. McIlrath, Rhodes, Kilkenny, Zare, Bokor.
- Symposium of the Division of Electron and Atomic Physics: Photoemission of atomic and molecular species. Samson, Sonntag, Shirley, Krause.



Session of the Society will take place. President Mildred Dresselhaus will award the following seven APS prizes: the Biological Physics Prize, to Edward M. Purcell and Howard C. Berg; the Oliver E. Buckley Prize, to D. C. Tsui, H. L. Stormer and A. C. Gossard; the High Polymer Physics Prize, to Frank E. Karasz and William J. MacKnight; the International Prize for New Materials, to J. P. Remeike; the Frank Isakson Prize, to Manuel Cardona; the George E. Pake Prize, to Arthur G. Anderson; and the Earle K. Plyler Prize, to Jon T. Hougen.

# Society of Physics Students

Invited lectures for the SPS are scheduled for Tuesday, Wednesday and Thursday afternoons, at 1:00. An allday contributed paper symposium is scheduled for Monday.

# Other events and services

On Monday evening at 5:30, the APS will hold an informal reception in the Renaissance Ballroom. A cash bar will be set up, and the Society will provide the hors d'oeuvres.

The Laboratory of Atomic and Solid-State Physics at Cornell invites its alumni, current members, former Postdoctoral Associates, and visitors to a 25th Anniversary reunion Tuesday evening, 27 March. There will be an open lecture and coffee beginning at 5:30 p.m. in the Michelangelo Room, followed by a dinner at 6:30 p.m. in the Marquette Room. After the dinner, an open reception will be held in the La Salle Room. Cost and reservation information for the dinner (which is limited to 150 people) is available from David Solomon, Cornell University, LASSP, 511 Clark Hall, Ithaca, NY 14853, (607) 256-4249.

The Department of Physics at the University of Illinois at Urbana-Champaign invites the alumni and former postdoctoral Fellows of the University of Illinois to a Coffee Hour on Tuesday evening, from 5:30 to 7:30, in the Nicolet Room at the Westin.

The Division of High Polymer Physics is scheduling a short course, "Introduction to Polymer Physics in Electronic Devices," on Saturday and Sunday, 24-25 March, from 9 a.m. to 5 p.m. both days, in the Joliet Room of the Westin.

# **Business meetings**

The APS Business Meeting-open to all-will take place at 5 p.m. Sunday, 25 March, in the Deluth B room of the Westin. Divisional business meetings are scheduled as follows:

- ▶ Biological Physics, Wednesday at noon in the Kent Room;
- ▶ Chemical Physics, Wednesday at

5:30 p.m. in the Cartier Room;

- ► Condensed Matter Physics, Wednesday at 5:30 p.m. in the Cabot Room; ► High Polymer Physics, Wednesday at 5:30 p.m. in the Raphael Room.
- Placement center, physics show

For the first time in four years, the American Institute of Physics will have a Placement Center at the March Meeting. To be held in the Windsor Room, it will be open Monday through Thursday, from 9 a.m. to 5 p.m., and on Friday from 9 a.m. to noon. Personal interviews between physicists seeking employment and representatives of employers will be arranged during this

Organized by the American Institute of Physics, this year's APS Show will be held in the Ontario Exhibit Hall. The show will feature and display research instruments, apparatus and materials, as well as scientific books and periodicals. The hours of the show are as follows: Tuesday, 11 a.m. to 6 p.m.; Wednesday, 10 a.m. to 5 p.m.; Thursday, 10 a.m. to 4 p.m.

# Newsroom

Under the supervision of Audrey Likely, the American Institute of Physics will operate a newsroom throughout the meeting; it will be located in the Monet Room of the Westin.