March 5, 1986 Volume 30, Number 23

Awards Convocation

The MIT community is invited to submit nominations for the Institute Awards given annually to students, faculty and staff who have made outstanding contributions to the MIT community. They will be honored at the Awards Convocation May 7 at 3:30pm in Huntington Hall (Rm 10-250).

The awards are as follows. The Karl Taylor Compton Prize is given to students who have made lasting or sustained contributions to the MIT community. The William L. Stewart Jr. Awards recognize a single, outstanding contribution to a particular activity or event. The James N. Murphy Award is given to an employee whose spirit and loyalty exemplify inspired and dedicated service, especially with regard to students. The Lava W. Wiesner Award is presented to an undergraduate woman student who has most enhanced MIT community life. The Laya and Jerome B. Wiesner Awards provide two awards to students, organizations, living groups or activities for achievement in the creative and performing arts. The Louis Sudler Prize in the Arts is presented to a graduating senior who has demonstrated excellence or the highest standards of proficiency in music, theater, painting, sculpture, design, architecture or film.

Also, The Albert G. Hill Prize is awarded to the minority undergraduate junior or senior student who has maintained high academic standards and made continued contributions to the improvement of the quality of life for minorities at MIT. The Irwin Sizer Award is presented to any member or group in the community to honor significant innovations and improvements to MIT education. The Edward L. Horton Fellowship Award is given to a student group that fosters fellowship within the graduate student community. The Goodwin Medal is presented to a graduate student whose performance of teaching duties is "conspicuously effective over and above ordinary excellence

Nominations, citing the nominee's qualifications and accomplishments, should be sent in letter form to the Awards Committee, Rm 7-143 by Friday, April 4.

Credit Union move

On Monday, March 10, the MIT Employees Federal Credit Union will move from E19-601 to a newly decorated fourth floor location (E19-437). Its phone numbers, x3-2844 and x3-2845, and operating hours, 10am-3pm Monday through Friday, will remain the same.

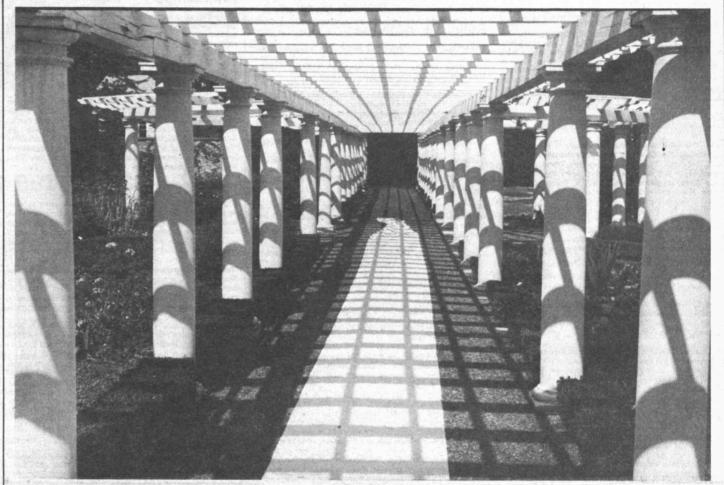
Weight Control

The Medical Department's spring Weight Control Program has been rescheduled to begin Wednesday, March 12. The leader of the 10-week program is Connie Roberts, R.D. of Brigham and Women's Hospital.

The fee is \$60 for students and MIT Health Plan members; \$75 all others. Call the Health Education Service at x3-1316 to register

Crafts Faire

MIT community members will be selling handmade crafts including jewelry, quilts, pottery, toys and edible goodies in Lobby 10 from 8:30am-4:30pm on Tuesday, March 18 and Wednesday, March 19. The faire is sponsored by the Tech Community Women.



A study in perspective, light and shadow, entitled simply "Monroe County, N.Y.," by Gordon Thomas, a senior library assistant, is included in an exhibit now open at the MIT Museum. The exhibit, called Three Photographers, also features

the work of Linda R. Cuccurullo, a library cataloguer, and Carolina S. Salguero, formerly of the Department of Architecture. The show will continue through April 19. See story on

AIDS to be discussed at Monday Colloquium

An Institute Colloquium on Monday, March 10, will focus on AIDS (Acquired Immune Deficiency Syndrome) with a late afternoon panel presentation and after-supper living group discussions.

Speakers at the panel program and discussion, from 4-6pm in Rm 10-250 (Huntington Hall), will include experts on the disease and its ramifications. The panel will be chaired by Mary Rowe, special assistant to the president.

The scheduled panelists and their topics

—Sandra Panem of the Brookings Institute, Washington, D.C., and author of *The Inter*feron Crusade, "Science and Public Policy."

Dr. Alan Brandt, assistant professor of the history of medicine and science at the Harvard Medical School, and author of No Magic Bullet: A Social History of Venereal Disease in the U.S. Since 1880, "Social and Cultural History of AIDS."

-Dr. George Grady, professor of medicine at Tufts Medical School, assistant commissioner in the Massachusetts Department of Public Health and state epidemiologist, 'Epidemiology and Public Health.

Larry Kessler, executive director of the AIDS Action Committee, Boston, "The High Risk Community."

Panelists and other invited guests will participate in the living group discussions following dinner.

The scheduled discussion leaders and student coordinators are:

-Next House-Sandra Panem; Robin Mowry. Senior House-Dr. Michael A. Kane, acting director of the MIT Medical Department, and Professor Samuel J. Keyser, associate provost. and Senior House faculty resident; Chris

-East Campus-Larry Kessler and Dr. Nancy H. Hopkins, MIT professor of biology; Ellen Maker.

-Delta Psi-Dr. George Grady; Steve Genn. New House-Dr. Alan Brandt and Dr. Richard M. Douglas, professor of history at MIT; Ed Ajhar.
-McCormick—Dr. John M. Moses of the

MIT Medical Department; Becky Thomas. -MacGregor-Dr. Stephan L. Chorover, MIT

professor of psychology; Kesavan Stinivasan. The program is cosponsored by the Technology and Culture Seminar at MIT and The Institute Colloquium Committee.

Study: office building boom not dependent on tax laws

A study by the Center for Real Estate Development has concluded that today's office building boom will continue even if tax laws affecting real estate are changed drastically.

In finding that current tax laws are not the major factor driving the boom, the authors estimate that office construction over the balance of the decade would decline only 15-20 per cent annually should the tax laws be altered, as has been proposed.

The report was written by William C. Wheaton, associate professor of economics and urban studies at MIT, and Professor

Raymond G. Torto of the University of

Massachusetts/Boston.

A popular explanation for the current high activity in office construction—in the face of record vacancy—is that present US tax laws, if unchanged, will strongly benefit real estate investments. The study shows, however, that while tax benefits and resultant real estate 'syndicated" partnerships are an important phenomenon, tax benefits have not contributed as much as might be expected to construction

(continued on page 7)

T is NE indoor track champ

MIT's 1600-meter relay team nipped Brandeis University by less than a 10th of a second for its lone win of the meet, but the Engineers used superior depth to successfully defend its title at the 7th Annual New England Division III Indoor Track and Field Championships February 22, at Bates College in Lewiston, Maine.

MIT finished with 76 points to edge Brandeis which had 72. Colby was third at 51 followed by Bates (45) and Williams (37). Eighteen teams scored points in the meet.

Entering the relays, MIT and Brandeis were tied at 56-56. "At that point, I thought we might be in trouble because Brandeis has such good relay squads," said MIT coach

Gordon Kelly.

However, Brandeis did not score in the distance medley relay while MIT placed second to set the stage for the 1600 relay. On the final lap of the race, senior co-captain Dan Lin held off the Judges' Ken Andrews, who earlier had won the 500-meter run, as MIT won in 3:24.74.

(continued on page 5)



Martin J. Buerger, a retired MIT professor renowned for his pioneering work in the application of X-ray crystallography, died Tuesday, Feb. 25, at his home in Lincoln at the age of 82. See obituary on page 8.

INSTITUTE **NOTICES**

** - Open to MIT Community only
*** - Open to members only

Announcements

Add Date - Since Fri, March 7 is the last day to add subjects And Date — Since Fri, March 1 is the last day to adultate to registration, the Registrat's Office reminds students that correction cards will not be accepted unless the signature of both your instructor and your faculty advisor appear on the card. (Drops require only your advisor's signature.) You are urged to obtain all signatures well before the deadlines. If your advisor is unavailable, contact your undergraduate office or department headquarters. Freshmen should go to the Undergraduate Academic Support Office, Rm 7-104

Pass-Fail Grading - Fri, March 7 is the last day for juniors and seniors to change an elective to or from Pass-Fail grading.

Career Planning and Placement Company Recruitment Presentations** - Lockheed California Company, March 5, 5-7pm, Rm 4-149. The Boeing Company, March 5, 5-7pm. berger Well Services, March 5, 5:30-7:30pm, Ashd Dining Room. Megatest Corp, March 6, 7-9pm, Rm 4-153. Acuson, March 6, 7-9pm, Rm 4-149. Siecor, March 10, 4-6pm, Rm 4-153. Peace Corps, March 10, 7-9pm, Rm 4-159. Mass. Exec. Office for Administration and Finance, March 12, 4-6pm, Rm 4-153. Naval Research Laboratory, March 12, 5-7pm, Rm 4-145. Bankers Trust, March 13, 4:30-6:30pm, Rm 4-149. Graduate students only: US citizenship required. E 4-149. Graduate students only; US citizenship required. E Systems/Melpar Division, March 13, 6-8pm, Rm 1-135. Lord Corporation, March 13, 7-9pm, Rm 4-149

TCA/American Red Cross Blood Drive - March 5-8, March 10-14, Student Ctr Sala de Puerto Rico. Info: x3-7911.

Jeffrey L. Pressman Award for Political Science - open to all MT juniors. Application deadline, March 14. Information available in Rm E51-201G or from the Political Science Undergraduate Office, Rm E53-460, x3-3649.

John Asinari Award for Undergraduate Research in the Life Sciences - For undergraduates in Course VII, VII-A and VII-B. Deadline: April 25, 1986. For details see Tom Lynch, x3-4711 Rm 56-524

MIT Craftspeople — Students, staff, etc invited to request table space for Tech Community Women Spring Crafts Fair, March 18-19. Info: Mary Helen Miller, x3-225 or 494-5217 eves.

International Careers Forum - UN Association of Greater Boston/Office of International Student Affairs/Office of Career Services Forum, April 5, 8:30am-5pm, Rm 26-100. Explore careers in the international finance, business, law, health, etc. Register now by picking up registration form at Office of Career Services, Rm 12-170.

Free Museum of Science Admission for MIT Students -With MIT student ID, provided by MIT chapter of Tau Beta Pi, the Engineering National Honor Fraternity. Also, reduced ad-

MIT Hunger Drive Food Drive - We need non-perishable, unopened foods for Boston's less fortunate. Ongoing collection all day and night at drop-off boxes in Lobby 7, Walker, McGregor

Arts Hotline - Recorded information on all arts events at MIT may be obtained by dialing x3-ARTS. Material is updated every Monday morning.

e** - a student-run hotline open every evening of the term, 7pm-7am. If you need information about anything or you just want to chat, give us a call. We're here to listen. x3-7840.

Faculty Members — Technology Review would like to hear about books being published by MIT faculty members. Please notify us, as far in advance as possible, of your upcoming book. Technology Review, Rm 10-140, x3-8250.

Club Notes

WMBR** - is looking for students interested in radio and tech nical work. Contact Eli Polonsky, x3-4000. Leave name and phone number.

MIT Student Cable Programming Group** - Looking for students interested in programming the MIT Cable Television channels. Contact Randy Winchester, x3-7431.

Tool & Die - MIT's humor magazine** - meets every Weds, 7pm. Rm 50-309 (Walker). Everyone welcome

Student Center Committee (SCC)** - Has fun every Sunday, 7pm, Student Ctr Center Lounge. Do you? Call x3-3916 anytime for more info.

Animal Rights Forum** - Meets 2nd & 4th Weds each month, 5pm, Rm 8-105.

College Republicans at MIT (CRAMIT)* - First meeting sponsored by MIT Students for Individual Freedom, Tues, March 11, 9pm, Rm 18-290. Open to all interested in Republican views,

MIT Student Duplicate Bridge Club* - Bridge games every Sat, 7pm; every Thur, Sun & Mon, 6:30pm, \$.75 entry fee, Rm 407, Student Center. Lessons free w/entry at 6:15pm from Bridge Senior Masters. No partners necessary, all welcome.

MIT/DL Bridge Club* - Duplicate bridge, Tues, 6:30pm, Student Center Rm 349. ACBL masterpoints awarded; come with or without partner, newcomers always welcome. Special touronthly. Handicap game, 3rd Tues every month. Info call Gary Schwartz, x8-2459 Draper, or Mark Dulcey, 272-8428. Admission: \$1/students, \$2/non-students.

MIT Outing Club* - Camping, cycling, climbing, canoeing cabins: meets M/Th, 5-6pm, Student Center Rm 461. Also, see our bulletin board in "Infinite Corridor" next to Athena

MIT Table Tennis Club** - Meets Fri, 8-10pm; Sat, 6pm, T-Club Lounge. Info: Hoang Do, x3-2843.

MIT Go Club** - Meets M/Th, 5-7pm, Rm NE43 3rd flr Playroom. Play the ancient oriental game of skill. Knock to get in if the door is locked.

MIT Hobby Shop** - Complete supervised facilities for wood-working and metalworking, Rm W31-031, M-F, 10am-6pm; Wed, 10am-9pm. Fees: \$15/term students; \$25/term community. Info, x3-4343.

MIT Yoga Club* - Rejuvenate your mind and body with Kundalini Yoga, the science of awareness, MTW, 5:15pm, Burton Dining Hall. Beginners welcome. Th Seminar Class with Dr. Gurucharan Singh Khalsa, 5pm, Rm 24-624. Info: Fred Martin or Jeff Tollaksen, 247-0506 or x3-3157.

m. Aikido is a non-competitive Japanese martial discipline.

MIT Wu Tang Club* - teaches northern Chinese kung fu. Tues & Thurs, 8pm, Burton Dining Hall; Sat, 10am, Athletic Center. Beginners welcome. For info call Meilin Wong, x5-8713

MIT Tae Kwon Do Club** - The Kwon Do is a Korean mar-tial art. Meets Sun, 4pm, Tclub Lounge; M/W, 6pm, Burton Dining Hall; Fri, 6pm, Tclub Lounge. For info call In Ho Kim,

MIT Wonhwa-do Club* - A synthesis of karate-do-type and judo-type martial arts. Meets MWF, 7-8:30pm, DuPont Exercise Rm. Beginners welcome. Info: Victor Lin, x3-8264 or Karl

Scuba Club** – The club sponsors dives throughout the term. Call scuba locker (x3-1551) for info and equipment rentals. For more info contact Dave Summa, x3-6464 or Mike Fox 492-4407.

MIT Guild of Bell Ringers* - meets Mondays, 6:30-9pm, 2nd floor Lobby 7, for change ringing on handbells. We also ring the tower bells at Old North Church. Beginners are welcome. Contact Steve Costenoble, x3-3664 for more information.

The Chapel is open for private meditation 7am-11pm daily.

Christian Science Organization at MIT* - Weekly Testimony Meeting, Thurs, 5:45pm, Rm 4-145

Tech Catholic Community* – Roman Catholic Masses; Sun, 9am, 12noon, 5pm (& 10pm, through 3/16); Weekdays: TTh: 5:05pm & Fri 12:05pm. Penitential Service: March 11, 7pm. All Services in MIT Chapel. Morning Prayer: M.F, 8:15am, Chapel Basement. Bible Study: Sun, 10:35am, Ashdown Hulsizer Rm &

Lutheran Ministry and Episcopal Ministry** - Weekly service of Holy Communion: Wed, 5:10pm, MIT Chapel. Supper following at 312 Memorial Drive. For further info, call

Reform, 5:30pm, Hillel; Orthodox, 5:30pm, Walker Hall Rm 50-010; Shabbat Dinner, 6:45pm, Kosher Kitchin, Rm 50-007. Paid dinner reservations due by 5pm Thursday, at Hillel, \$6.50 in Validine or cash. Want to practice your Hebrew? Come to the Hebrew Table every Tuesday at 5:30pm in the Kosher Kitchen (Walker Rm 50-007). Dinner available for \$5.75.

7pm, MIT Chapel.

prayer, Ashdown House 12:30-1pm, Khutba starts at 12:30pm, congregation at 12:55pm.

Meditation and Discourse on the Bhagavad Gita* - Swami Sarvagatananda, MIT Vedanta Society/Ramakrishna Vedanta Society of Boston, meets Fridays through May 23,

United Christian Fellowship** - MIT Chapter of Inter-Varsity Christian Fellowship, weekly meetings: large group for worship and sharing from God's word, Fri, 7pm, Student Ctr Rm 491 small group meetings for Bible Study and support, weekly at

John Ivan, x3-3880. A fellowship group also meets for a time of prayer and sharing for faculty, staff and graduate students in Sloan School, Thurs, 12noon, Rm E51-024. Contact Andy Hamlin, 926-8472.

Seekers Teaching and Worship Time, Sundays, 9:15am, enjoy our biblical teaching, worship and sharing at Park Street Church, right in front of the Park Street T stop. MIT Seekers leave from McCormick at 8:30am. Come join us.

eves, Rm 37-252. Fellowship, scripture teaching, prayer, singing, refreshments & fun. Tues, prayer time, 7:30-9am, W20-441, Student Center. Call x5-9153 dorm.

Kiln Brook III, Rm 239. Annie Lescard, x2899 Linc.

Morning Bible Studies - Fri, 7:30-8:30am, L-217. Ed Bayliss, x3456 Linc.

Noon Bible Study* - Every Wed, Rm E17-109, bring lunch.

Edgar Cayce Study Group* - Tuesdays, 6:30-9pm, Edgar Cayce's Search for God material will be used as the basis for group discussion & meditation. For info: Douglas McCarroll, 497-0819 12-9pm or Scott Greenwald, x3-7423.

Graduate Studies

Unless otherwise indicated, contact Dean Jeanne Richard at the Graduate School Office, Rm 3-136, x3-4869 for further information.

chitects Graduate Fellowship in Health Facility Design. One or more fellowships not exceeding \$6,000 available to citizens of the US and Canada who have received an accredited architectural degree, who are are in the final year of under graduate work leading to such a degree, or who are enrolled in a Master of Architecture program designed for those with previous architectural training. Fellowships available in three optional settings. Information and applications: Linda Peterson, Rm 3-134A. Deadline: March 15, 1986

Carroll L. Wilson Awards. Awards of \$5,000 given to one of more undergraduate and/or graduate student in any MIT department based on competitive evaluation of proposals. The aim of the Wilson awards is to provide opportunities for MIT students to pursue a challenging activity which would have excited the interest and enthusiasm of Carroll Wilson. Applications for for the Wilson award can be obtained Linda Peterson, Office of the Dean of Graduate School, Rm 3-134A. Deadline:

financial aid who are pursuing a course of study at an accredited college or university, not limited to a particular field of study. Applicant must be a legal resident of the Greater Boston area (registered voter), or have grown up in the area and attended Boston schools. Applications available from Linda Peterson, Rm 3-134A. Deadline: April 1, 1986.

International Opportunities

The following is a list of opportunities available to foreign nationals. For more information on these, please see the International Jobs notebook in the Office of Career Services, Rm 12-170.

Petroleos de Venezuela (USA) Corporation will be interviewing students from Venezuela and the Netherlands Antilles who will

Prominent Dancers teach at workshop

Three prominent Boston dancers are teaching classes in MIT's Dance Workshop this spring while Workshop director Beth Soll is on leave in Paris.

Amy Ellsworth of the Concert Dance Company teaches the class in beginning technique, Monday and Wednesday, 3-5pm in the T-Club Lounge on the first floor of the Dupont Gymnasium Building. Ms. Ellsworth is most widely known as head of the Zellsworth Dancers in the early 1980's.

Susan Rose, head of Danceworks, is teaching the intermediate class Tuesday and Thursday, 5:30-7pm in Walker 201.

Dawn Dramer of the Boston Dance Collective teaches the advanced class in composition and improvisation Thursdays 1-3pm in Walker

These classes are sponsored by MIT Dance

The following is the list of internships received this week. For in the Office of Career Services, Rm 12-170.

NOTE: The Office of Career Services has added a new directory

to their Career Library: Getting Work Experience, the College Students Directory of Summer Internship Programs that Lead to Careers. It can be found in the Reference section of the Career

Workshop and can be taken either for credit or non-credit. For more information leave a

Dance Workshop will present a major concert May 9 and 10, which not only serves as a final project for the students but also to present a new work commissioned from the Workshop from professional dancer Arawana Hyashi. She is co-founder of Jo-Ha-Kyu of Cambridge, a dance/theatre company devoted to work arising from combinations of traditional Japanese art forms and contemplative practice with contemporary dance/theatre expression.

Dance Workshop president Nicole Chuang '85, has sent out a call for students to help with lighting, costume and stagement management for the May concerts. Other workshop officers this year are: Jean Lee '87, secretary, graduate student Susan Scott and Chris Paskoff'87, publicity.

design files; "X" facility; access to the Rotch Visual Collection image library. Faculty supervisor: Prof Ferreira, x3-7410. Contact James Anderson, x3-0782/0779. Cable Television Schedule

MIT Cable Television serves the MIT campus. For connection and programming information, call x3-7431.

Wednesday, March 5

9-10:30am - 12.524 High-Frequency Seismology. 12-1pm - Live Coverage of the MIT Oceanography Sack Lunch

2-3:30pm - 13.862 Ocean and Seabed Acoustics II. Channel 10:

Thursday, March 6

Channel 9: 9-10:30am - 12.524 High-Frequency Seismology.

Channel 11: 10:30am-12noon -Live from WHOI. - 12.762 Experimental Physical Oceanography

10:30am-12noon - 12.806 Instability and Turbulence in Geophysical Systems

Sunday, March 9

Monday, March 10

2-3:30pm - 13.862 Ocean and Seabed Acoustics II. Live from WHOI.

Tuesday, March 11 Channel 8:

8.02 Help Session #5. Program will repeat until 4pm. 4:30-6pm — Live coverage of the MIT Biology Colloquium.

4-5:30pm - Live coverage of the MIT VLSI Seminar.

Geophysical Systems. Live from WHOI.

Wednesday, March 12

9-10:30am - 12.524 High-Frequency Seismology. 12-1pm - Live Coverage of the MIT Oceanography Sack Lunch

Electronics Seminar

6pm - 8.02 Help Session #6. Program will repeat until 9am, 3/19.

Channel 11:

Live from WHOI

10:30am-12noon - 12.806 Instability and Turbulence in

Saturday, March 15

Channel 8: 8.02 Help Session #6. Program will repeat until 9am, 3/19.

Sunday, March 16

8.02 Help Session #6. Program will repeat until 9am, 3/19.



March 5, 1986 Volume 30 Number 23

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Mail subscriptions are \$18 per year by first class

mail. Checks should be made payable to MIT and mailed to Business Manager, Room 5-113, MIT, Cambridge, MA 02139.

MIT Aikido Club** - meets Mon-Fri, 5:30pm, DuPont exercise

message at x3-2877.

Tues, 8pm, Chaplaincy Library. Chaplaincy Office: x3-2981.

MIT Hillel Shabbat Services* - March 7: Conservative-

Baptist Chapel* - Baptist Student Fellowship Services, Suns,

MIT Islamic Society* - Daily prayers, Ashdown House (basement), 5 times a day. Call x5-9749 dorm, for schedule. Friday

5:15pm, MIT Chapel.

different times. For more info, call Chiu-Oan, x5-6123 dorm. MIT Graduate Christian Fellowship* - Come meet other Christian faculty, staff and grad students: weekly lunch gatherings, Weds, 11:55-12:55, Student Ctr Twenty Chimneys; info:

MIT Seekers Christian Fellowship* - Park Street Church

Campus Crusade for Christ** - Family time, 7:15pm, Fri,

oratory Noon Bible Studies* - Tues & Thurs,

Ralph Burgess, x3-2422. (Since 1965).

American Hospital Association/American Institute of Ar-

Boston Chapter of Links, Inc. Awards for Black Graduate Students in Need of Financial Aid. Awards averaging approx-imately \$1,000 for Black graduate degree candidates in need of

be graduating in 1986, at the Boston Colonnade Hotel, March 17-18. They are particularly interested in students graduating in computer science, business administration, economics, geology, geophysics, international law and all fields of

Internship Program, Boston; The Urban League of Eastern Massachusetts Inc., Boston (Black Families and Children Network); sachusetts Inc., Boston Glack Families and Unitaren Network; IEEE Spectrum Magazine, New York (technical journalism); Joe Kennedy Campaign for Congress, Cambridge; Berkshire Theatre Festival, Stockbridge, Mass; Project for American-Israeli Research, Inc. Boston; American Jewish Congress, New York; Museum for Design, Boston

Internships Offering a Stipend:

Internships

The Center for Blood Research in Boston is accepting applications for their summer internship program. The program offers undergraduates and graduate level students concentrating in biology and/or chemistry, the opportunity to develop research skills. The stipends are \$150/wk for undergrads and \$250/wk for graduates or medical students. Application deadline: April 1

Marlowe & Company, a governmental affairs consulting firm in

Washington, DC is accepting resumes for a full-time, paid summer internship. They are interested in juniors, seniors or graduate students who are concentrating in political science, economics or history. The New York State Assembly, Albany, announces their 1986 Session Intern and Graduate Scholars Program and the 1986

erger Well Services in Houston invites stud ticipate in their Summer Intern Program. They have oppor-tunities in Houston, Austin, Sugar Land, and Rosharon, Texas and also at their research lab in Ridgefield, Conn. They seek students in EE, MechE, physics, or computer science. Students should have completed their sophomore year and have a B average or better.

Summer Intern Program. Application deadline: April 1.

Student Jobs

There are more job listings available at the Student Employment Office, Rm 5-119.

Part-time customer service rep for delivery service needed to take orders over the phone. Hours: flexible. Wage: \$5.50/hr. Contact Ann Dillon, 595 Mass Ave, Cambridge, 787-2020. Lifeguard and water safety instructor needed. Qualifications: Advanced Lifesaving, CPR, First Aid recommended. Hours: varied shifts available. Wages; \$4.82-6.27/hr. Contact: Judith Wine, Cambridge, MA 02139, 491-6050.

mications hacker wanted - student who is a computer hacker and is excellent with telecommunications. H quire within. Wage: \$20/hr. Contact: Ms. B, 232-2341.

UROP

MIT and Wellesley undergraduates are invited to join with faculty members in pursuit of research projects of mutual fascina-tion. Undergraduates are also urged to check the Undergraduate Research Opportunities Program's bulletin boards located in the main corridor of the Institute and in the UROP Office. Faculty supervisors wishing to have projects listed should send project descriptions to the UROP Office Questions? Contact us, x3-5049,

Elorants Summer Fellowship Program. Several \$4,000 research fellowships for MIT undergraduates will be awarded this spring for work to be done during the summer. Areas of study may be in any field: science, engineering, humanities.

Travel is encouraged Originality is rewarded. Deadline is March 31, 1986. Contact the UROP Office for more details. Nuclear Engineering UROP Awards. Several awards are given to encourage research with faculty in the Nuclear Engineer-ing Dept. Freshmen are encouraged to apply. Contact: Prof Ronald Ballinger, x3-5110, Rm 24-215 for more details.

Electronic Delivery Systems for Large Image Files. Position available for student to work on a pilot project to research elec tronic delivery of visual images and text from video sources or scanning digitizers to remote display systems. Programming experience and familiarity with the relevant communications techology are needed. Contact: Merrill Smith, Rotch Visual Collection, x3-7098. Faculty supervisor: Prof Patrick Purcell, x3-5105.

Designing Interactive Video Systems. UROPer with knowledge of database management and an interest in urban design issues to work designing a database structure for movies about urban growth and change. Project uses database manager Infor-mix on an IBM AT running DOX 3.0. Contact: Glorianna, Media Lab, x3-1607. Faculty supervisor: Prof Patrick Purcell, x3-5105.

Multi-Media Large Screen Projection System. Design a

multi-media audio/visual system for the Computer Resource Laboratory. The systems will function as teaching and

demonstration facility for ongoing research program in comput-er graphics and video. Contact: Leova Wolf, Computer Resource

Laboratory, x3-0779. Faculty supervisor: Prof Patrick Purcell, Interactive Analysis Using Geographic Information Systems (GIS). Computer Resource Laboratory, School of Architecture and Planning, Athena Project, to work on GIS Curriculum Software Development. UROP candidates with programming experience (6.001, 2.10 and 1.00) can apply. Familiarity with C desired. Faculty supervisor: Prof Joe Ferreira, x3.7410. Contact Bizhan Azad, x3.7694, Rm 9-534.

Laser Research. Research in laser pumped lasers, studying coherent multiphoton processes. Run lasers and diagnostic equipment; aid in data taking. No lab experience required; electronics experience desirable. Faculty supervisor: Dr. Temkin, x3-5528. Contact: Stephen Evangelides, x3-5437. Model for Breast Cancer Risk. Two students needed for

Dr. Sidney Klawansky, x3-8018/5285, Rm E25-147D. The Computer Resource Lab, School of Architecture and Planning. Positions available for projects in four areas: local monochrome raster hard copy; network services for analysis, translation, and transformation of AutoCAD and CRL format

research on breast cancer. A goal is to assess whether perimenopausal women with breast cancer require less surgery. Students with combined interests in applied mathematics, com-

ming, medicine and biolo

11am-12noon – Live coverage of the MIT Optics and Quantum Electronics Seminar. 6pm - 8.02 Help Session #5. Program will repeat until 4pm, 3/11.

Friday, March 7 8.02 Help Session #5. Program will repeat until 4pm, 3/11.

Saturday, March 8 8.02 Help Session #5. Program will repeat until 4pm, 3/11.

8.02 Help Session #5. Program will repeat until 4pm, 3/11.

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10:30am-12noon - 12.806 Instability and Turbulence in

2-3:30pm - 13.862 Ocean and Seabed Acoustics II.

11am-12noon - Live coverage of the MIT Optics and Quantum Thursday, March 13

Channel 9: 9-10:30am - 12.524 High-Frequency Seismology.

Friday, March 14 8.02 Help Session #6. Program will repeat until 9am, 3/19.

10:30am-12noon - 12.762 Experimental Physical Oceanography.

Geophysical Systems.

TECH TALK

Classified Ads, Institute Notices).

Address news and editorial comment to MIT News

Page 2, Tech Talk, March 5, 1986



Several shanties, built to protest the fact that MIT holds stock in companies doing business in South Africa, were put up Sunday, March 2, on Kresge Oval. The MIT Coalition Against Apartheid organized the activity. -Photo by Calvin Campbell

Keil Fellowships established

The MIT School of Engineering has established the Alfred Keil Fellowships for the Wiser Uses of Science and Technology, to honor Dr. Keil, Ford Professor of Engineeering,

Professor Keil served as dean of the School of Engineering from 1971 to 1977, after having been head of the Department of Ocean Engineering. Throughout his career at MIT, he has stressed the importance of research and study on the societal and policy implications of science and technology. In particular he was a driving force behind the establishment of the Technology and Policy Program.

The awards will cover full tuition for an academic year, starting in September. They will be awarded annually either to a continuing or an entering graduate student in the School of Engineering.

The awards will be based on three general criteria: academic excellence; the relevance of a student's intended work to the spirit of the

fellowship; and creativity, construed as the potential for enabling the student to do something that might not otherwise be

A faculty committee set up to oversee the awards is encouraging students to apply and asking faculty to call attention of potential applicants to the fellowship. The committee is chaired by Professor Daniel Roos, Japan Steel Professor and Director of the Center for Technology, Policy and Industrial Development. The other members are Professors Richard de Neufville and Richard Lester.

Each application should be limited to two pages, explaining the student's proposed research or study, and how it would contribute to the wiser use of science and technology. The names of two references should be provided, at least one of whom is an MIT faculty

Applications should be submitted by March 21 to Professor Roos in Rm. E40-209. Awards will be made by early April.

Photo exhibit opens at Museum

"Three Photographers," a collection of photographs by Linda R. Cuccurullo, cataloguer, and Gordon A. Thomas, senior library assistant at the MIT Libraries, and Carolina S. Salguero, formerly of the Department of Architecture, will be on view at the MIT Museum through April 19.

Ms. Cuccurullo of Braintree took her first photography course at MIT in 1974. She has exhibited her prints over the past eight years at Wheaton College, 1984; Alliance Francaise, 1984; MIT Faculty Club, 1978, 1980, 1982, 1984; Artists Representative Art Gallery, 1982; and Rotch Visual Collections, MIT, 1978-79.

A 1985 MIT Admissions Office Photo Contest Winner, Ms. Cuccurullo holds a BA degree from Wheaton College and an MLS degree from Simmons College.

Mr. Thomas of Jamaica Plain has had oneman shows at Paul Mellon Art Center, Wallingford, Conn., 1984, and Rotch Visual Collections, 1983. He has also participated in a group exhibition at the Harbour Gallery,

Born in Detroit, Mr. Thomas attended Ohio State University, Columbus, from 1966-1968, and was graduated from Kansas City Art Institute, Mo., with a BFA in 1971 and Boston University with a MFA in 1974.

Ms. Salguero of Brookline has exhibited at the Yale Gallery of Art and Architecture.

She took her first photography class four years ago in order to meet academic requirements at Yale College. She majored in studio art and American Studies and graduated magna cum laude in 1984.

Chaim Weizmann Conference is set

The latest advances and research in science, technology and medicine in Israel will be presented at the eighth annual Chaim Weizmann Conference on Israeli Science, Technology and Medicine Sunday, March 9, from 12:30-5:30pm in the Mezzanine Lounge, Student Center.

ne symposium is sponsored by the MIT

Dr. Sami S. Ofri, coordinator of Industrial Research and Development in the Israeli Ministry of Industry and Commerce, will deliver the keynote address, "Industrial Research and Development in Israel". Dr. Ofriis a visiting scholar at the Sloan School of Management.

Dr. Dror Sadeh, visiting professor in biomedical engineering, will address "Space Research in Israel." He is coordinator of the Israeli Space Agency and professor of physics and astronomy at Tel Aviv University.

Dr. Shmuel Enav from Tel Aviv University and a visiting professor in mechanical engineering will review "Biotechnology in Israel." Other participating Israeli scientists and the topics they will discuss include: Dr. Myron Mellman of the Weizmann Institute, "Performance of Distributed Systems"; Dr. Zeva Reuveni, formerly of Hebrew University Medical School, "Science Related Careers in Israel: A Personal Perspective' Bentwich, an Israeli physician affiliated with the Hadassah-Hebrew University Medical Center and Weizmann Institute who is conducting research at Harvard Medical Center, 'Studies in Cancer and AIDS Research in

A bagel brunch will be served at 11:30pm for \$2. Validine will be accepted.

An information fair, featuring films and literature on work, study and travel opportunities in Israel, will be held at 2:45pm. Representatives from various agencies and programs will be present.

For further information, call the MIT Hillel

at x3-2982.

Charles Fuery to be featured

The MIT Symphony Orchestra's spring concert will present Chopin's Piano Concerto No. 1, with guest pianist Charles Fuery this Saturday (March 8) at 8:30 pm.

Guest conductor will be Alan Yamamoto, who is in residence at MIT this spring.

The program will also include Brahms' Symphony No. 3. in F Major and Beethoven's Rondino in Eb Major for 2 Oboes, 2 Clarinets, 2 Horns and 2 Bassoons, Op. Posth.

Mr. Fuery, a member of the piano faculty at the University of California, Berkeley, has received numerous peformance awards including the Eisner prize for Musical Excellence. In his recital debut in the Paramount theatre of the Arts, Fuery was described by the San Francisco Chronicle as a musician who 'communicates the heart and soul of music with often astonishing results.'

Mr. Yamamoto is a member of the conducting faculty at New England Conservatory and is the Assistant Conductor of the Boston

Philharmonic.

Tickets are \$1 or free for the MIT/Wellesley community. They can be reserved by calling x3-2826 between 1 and 5 pm.

-Here & There→

An MIT alumnus and former faculty member, Professor Arthur C. Ruge (pronounced like ruby, with a hard g) has been honored as the Boston Museum of Science's 1986 New England Inventor of the Year. Dr. Ruge, 80, a Lexington resident, holds at least 56 US patents and many more foreign patents, mainly related to his bestknown invention, the SR-4 Strain Gage.

Since its invention in 1938, when Professor Ruge was still a doctoral candidate at MIT, millions of Strain Gages have been produced and used worldwide. Virtually all commercial weighing scales employ the Strain Gage as the weight-sensing element. It also helped the allies achieve military superiority in World War II by providing inexpensive, accurate measurement of stresses on military aircraft and weapons.

Dr. Ruge invented the Strain Gage in an MIT laboratory while trying to create a device to measure stresses on the bottoms of scale models of municipal water tanks. He recalls that the invention just "popped into my mind, whole." Its basic elements were glue, an extremely fine wire and a piece of paper. He knew that strain would change the resistance of the wire, so that when he applied the wire in a rigid base (the glue) to the surface of the tank (using the paper for insulation), he could measure the change in resistance in the wire as stress was applied-thus giving him an accurate measurement of the stress.

The invention was so modest-appearingabout the size of a fingernail-that some engineers told him it was too obvious to be patented. To which he would reply, "Sure it's obvious, now that I've invented it." Even the MIT Patent Committee was unimpressed, granting Professor Ruge all rights to the invention in a 1939 letter because "while ... interesting ... the committee does not feel that the commercial use is likely to be of major importance."

The rest, as they say, is history. In 1939 he and another MIT professor, A. V. DeForest, formed a company to manufacture and market several of Dr. Ruge's inventions. Dr. Ruge served as president and chairman until 1955, when the company was sold.

Dr. Ruge, a graduate of the Carnegie Institute of Technology, received the SM from MIT in civil engineering in 1933 and the ScD in engineering seismology in 1939. He taught at MIT in civil engineering until

—Phi Beta Kappa has selected Institute Professor Mildred S. Dresselhaus as one of 13 Visting Scholars for 1986-87. Members of the panel travel to universities and colleges that have Phi Beta Kappa chapters to meet undergraduates, lead classroom discussion and give lectures. The program's purpose is to enrich the intellectual atmosphere of the institutions and encourage the pursuit of scholarship.

-And now in fiction comes Brendan Barnes, a young computer science professor at MIT who has been recruited by a clandestine offshoot of the Pentagon to insert "software bombs" into the central Soviet computer network. Barnes is the protagonist of the spy thriller, Software, a best-seller in France just released in an English edition. And just what adventures does this imaginary faculty member get caught up in? Here's a sampling, from the review of the book in The Washington Post: "...Little does Brendan know that the top tomato of the Soviet Union's computeri is none other than his former graduateexchange student and lover...now married to an upwardly mobile KGB type named Sergei. Little does Sergei know that their daughter...is in fact Brendan's child from the Cambridge tryst..." It may not sound like much but the reviewer seems to conclude that Software, all in all, isn't a bad read.

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-Dr. T. David Burleigh has received an Alexander von Humboldt Research Fellowship to work in West Berlin for one year and will be going to West Berlin in March to start a two-month language course. Dr. Burleigh, a postdoctoral associate in the Department of Materials Science and Engineering, received the SM and PhD from the Department in 1980 and 1985.

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-Dr. Martin C. Jischke, who received the SM in 1964 and PhD in 1968 in aeronautics and astronautics at MIT, has been appointed chancellor of the University of Missouri's Rolla campus. A well-known engineering educator, he has been dean of the University of Oklahoma's college of engineering since 1981 and he also served as interim president of the university for eight months in 1985.

-Two persons now at MIT and two graduates are among 29 PhD recipients who have been offered \$60,000 fellowship awards designed to contribute to the future

vitality of the nation's scientific effort. The awards are made under the National Science Foundation's Mathematical Sciences Postdoctoral Research Fellowship program. The recipients now at MIT are Ravi B. Boppana, who will receive the PhD in electrical engineering and computer science this year, and Eric A. Carlen, an instructor in mathematics who received his PhD from Princeton University in 1984. Boppana plans to do his fellowship work at MIT, and Carlen at Princeton. MIT graduates offered fellowships were Ethan S. Devinatz, PhD '85, and Joseph F. Johnson, PhD '83.

-Two graduate students in the Center for Real Estate Development's Master of Science Program-Dominic J. Adducci and Daniel E. Elder-are among 36 students nationwide who have received \$300 academic scholarships from the Real Estate Educators Association.

PRESS CLIPPINGS:

-Dr. Gary T. Marx, professor of sociology in the Department of Urban Studies and Planning, has expressed his views on timely topics in three op-ed articles. In one, written for the Los Angeles Times and distributed nationally, he warns that sophisticated surveillance methods threaten individual liberty and privacy. Another, co-authored by Chuck Wexler, a recent PhD from Dr. Marx's department, was published in the Christian Science Monitor and was taken from a longer study that will appear in the journal Crime and Delinquency. It makes the point that swift police action, using provisions of federal and state civil rights laws, can help deter racial harassment and violence directed against minorities. The most recent, in The New York Times, criticizes those who advocate the indiscriminate and widespread use of drug tests and "lie detectors," warning that this, too, "poses disturbing problems for civil liberties."

-Economist Lester C. Thurow, in a New York Times op-ed article, says he isn't so sure anymore that the financial panics of the 1920s and the Great Depression of the 1930s couldn't happen again. Pointing to "stagnation, farm bankruptcies, financial speculation, nonperforming loans, large potential defaults and falling real estate values, he comments that "the echoes of the Great Depression sound louder and louder." He adds: "To pretend it (financial disaster) cannot happen again and that governments do not have to protect the integrity of the system is to guarantee that it will happen again.'

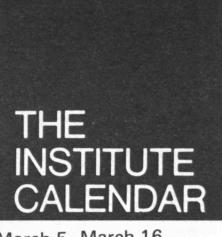
-USA Today reports that two recent MIT graduates, Brian L. Hinman and Jeffrey G. Bernstein, have developed a "picture telephone" for their company, PictTel Corp., working 14 hours, six to seven days a week to beat a deadline set by the lead underwriter in their 1984 public stock offering. Their success, the newspaper reports, has earned them company stock worth \$21.3 million. The two grew up together in Wheaton, Md., sharing an interest in ham radios, according to the newspaper, and got the idea for PicTel while graduate students in electrical engineering at MIT. Both received SMs in 1984.

MIT economist and oil expert Morris A. Adelman told The New York Times that falling oil prices aren't likely to reverse the energy conservation habits developed by American business and consumers. 'Even if the price of oil dropped to where it was in 1973, we'll never go back to where we were in terms of the amount of oil consumed relative to the gross national product," he said. "Part of the change is irreversible.

-A Washington Post profile on Richard Berendzen, the energetic president of American University who promotes his school by making himself highly visible, carries this disclaimer from Berendzen: "I don't really like parties...I don't smoke. I don't drink. I was a physics major at MIT...Does that sound like someone who enjoys parties?" Berendzen received the SB in physics in 1961.

-The Wall Street Journal reports that Sloan professor William F. Pounds, formerly dean of the school, has been named chairman of a trust company formed to manage the Rockefeller family's 170 trusts. The article describes Professor Pounds, who will work part-time in the post, as a senior advisor to the Rockefellers.

-Dr. Richard K. Lester, ARCO Associate Professor of Nuclear Engineering, is the author of the lead article in the March issue of Scientific American. In Rethinking Nuclear Power, he suggests a possible strategy for freeing nuclear power from its current impasse—based on a new generation of lower-power, centrally fabricated nuclear reactors designed for inherent



March 5 - March 16

Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about profession department and field.

MISS THE TECH TALK DEADLINE?

Put your announcement on the MIT Cable System. "To-day at the Institute" runs 24 hours a day and can be viewed in Lobby 7, Lobby 10 and anywhere the cable is

Simply submit announcement in writing to Rm 9-030. We day's warning, but faster action may be possible Useful also for correcting errors, notifying about cancellations, and dealing with emergencies.

Note: If you have met the Tech Talk deadline, your announcement is automatically put on cable (except for exhibits and some multimeetings programs).

Special Interest Events

MIT Colloquium on AIDS: Panel Presentation and Discussion* - Sandra Panem, Brookings Institute; Alan Brandt, Harvard Medical School; Dr. George Grady, State Biological Laboratory; Larry Kessler, AIDS Action Committee, Boston, The Technology and Culture Seminar at MIT and The MIT Colloquium, March 10, 4pm, Rm 10-250. Continued discussion in living groups at 7pm: Senior House, Next House, East Campus, Delta Psi (#6), New House, McCormick,

Seminars and Lectures Wednesday, March 5

Picosecond Pulse Shape Manipulation** - A.M. Weiner, Bell Communications Research, Inc, EECS/RLE Seminar on Optics and Quantum Electronics, 11am-12noon, Rm 36-428.

Building Portfolio Monitoring Using Lotus 1-2-3** Rodrigo Brana, recent SM.ArchS grad and SM (CRED) degree candidate, MIT Joint Program for Energy Efficient Buildings & Systems/Laboratory of Architecture & Planning Seminar on Building Performance, 12-1pm, Rm 1-134. Bag

Boston Water Circulation in the Angola Basin* - Richard Schopp, WHOI, Oceanography Sack Lunch Seminar, 12:10pm Rm 54-915.

A Systematic Treatment of Earlier Nodal Methods Using the Analytic Nodal Method** – Winston H.G. Francis, Dept of Nuclear Engineering Seminar, 3-4pm, Rm 24-213.

Hydrodynamics of Ship Wake Radar Images* - Prof J.H. Milgram, MIT Dept of Ocean Engineering, Depts of Ocean Engineering/Civil Engineering Informal Hydrodynamic Seminar, 3-4:30pm, Rm 5-314.

Semicrystalline Polymers: Molecular Structure, Morphology and Properties (second of three lectures)* - Prof Leo Mandelkern, Florida State University, Institute of Mol-cular Biophysics, Program in Polymer Science and Technology Polymer Seminar, 4-5pm, Rm E25-202. Refreshments served, 3:30pm

A Thermodynamic Theory for Micellar Growth** – Tsang Lin, PhD candidate, Nuclear Engineering Dept RST Seminar, 4pm, Rm 24-121. Refreshments served, 3:45pm.

Toxicological Facilities at MIT** - Andrew Braun, MIT Dept of Applied Biological Sciences, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Some Aspects of Bio-Technology in Japan** thony Sinsky, MIT Dept of Applied Biological Sciences, MIT Japan Science and Technology Forum talk, 5:30pm, Stu-dent Ctr Mezzanine Lounge.

Thursday, March 6

Getting Started: What to Do Now, Goal Setting; Project Planning** - Barbara Chuck, staff associate, Campus Activities Office, MIT Leadership Education and Development (LEAD) Program, 3pm, Student Ctr Center Lounge, or 6:30pm,

Semicrystalline Polymers: Molecular Structure, Morphology and Properties (last of three lectures)* - Prof Leo Mandelkern, Florida State University, Institute of Molecular Biophysics, Program in Polymer Science and Techno ogy Polymer Seminar, 4-5pm, Rm E25-202. Refreshments

What Crystals do for Neutrons** - Prof C.G. Shull, MIT, Physics Colloquium, 4pm, Rm 10-250. Refreshments ser 3:30pm, Rm 10-250 Lobby.

An Immobilized Enzyme System for Heparin Removal* – A. Reese, Dept of Applied Biological Sciences Seminar, 4pm, Rm E25-202

Construction in Space* - Wendel R. Wendel, president, Space Structures International Corporation, Construction Engineering and Management Richard L. Mullin Memorial Lecture, 4pm, Rm 1-190.

Patterns of Integration of Turkish Migrants in Europe* Prof Riva Kastoryano, Harvard University, MIT-Harvard Research Seminar on Migration and Development, 4-6pm, Harvard Ctr for Population Studies, 9 Bow St, Harvard Sq.

Modeling of Respiratory Control in Infants* - Tom Waggener, PhD, associate professor of pediatrics, New England Medical Ctr, Harvard-MIT Division of Health Sciences and Technology Seminar, 4:10-5pm, Rm E25-117.

Writing More Effective Sentences** - Writing and Communication Center ESL Writing American English Workshop, 4:15pm, Rm 14N-317.

Let's Get Corporate America Going** - T. Boone Pickens, Jr. chairman and president, Mesa Petroleum Company, oan School of Management's Distinguished Speakers Series, 4:30pm, Rm E51-329.

Friday, March 7

Domestic Politics, Party Realignment, and the Evolution of US Security** - Dr. Peter Trubowitz, research fellow, Har-vard Ctr for International Affairs, MIT Defense and Arms

Statistical Dynamics of Polymer Solutions** - Y. Oono. University of Illinois, Ctr for Materials Science & Engineeric Colloquium, 12:15pm, Rm 9-150. Lunch provided, 12noon.

Adsorption, Diffusion and Reaction on Catalytic Metal Surfaces: Laser-Induced Desorption Studies** – Edmund G. Seebauer, University of Minnesota, Chemical Engineering eminar, 2pm, Rm 66-110. Viscous Flow in Microscopic Regions** - Prof John

Higdon, Dept of Chemical Engineering, University of Illinois, Chemical Engineering Seminar, 3pm, Rm 66-110 The Acid Rain Problem** - Prof James A. Fay, MIT Dept of Mechanical Engineering, Center for Technology, Policy and Industrial Development/Whitaker College of Health Sciences,

Technology and Management Program in Health Policy Seminar, 4pm, Rm E25-401. Refreshments served, 3:30pm. Kant's Philosophy of Mathematics* - Prof Michael Hallett, McGill University, Dept of Philosophy Seminar, 4pm, Rm

Transport in TEXT* - Dr. Alan J. Wootton, Institute for Fusion Studies, University of Texas-Austin, Plasma Fusion Seminar, 4pm, Rm NW17-218.

An Experiment on Boundary Mixing in Stratified Fluids** Dr. Owen Phillips, Dept of Earth and Planetary Sciences. The Johns Hopkins University, Center for Meteorology and Physical Oceanography Seminar, 4pm, Rm

Sunday, March 9

The Eighth Annual Chaim Weizmann Conference on Israeli Science Technology and Medicine* – Hillel Symposium, 11:30am-5:30pm, Student Ctr Mezzanine Lounge.
Welcome – Consul Arthur Avnon, Israeli Consulate, 12pm: Keynote: Industrial Research and Development in Israel – Dr. Sami S. Ofri, Israel Ministry of Industry and Commerce Space Research in Israel - Dr. Dror Sadeh, Tel Aviv Univers ity and Israeli Space Agency, 1:30pm; Biotechnology in Israel - Dr. Shmuel Enav, Tel Aviv University, 2pm; Information Fair & Films - 2:45pm: Studies in Cancer and AIDS in Israel – Dr. Zvi Bentwich, Hadassah-Hebrew University Medical Center and Weizmann Inst, 3:45pm; Performance of Distributed Systems — Dr. Myron Melman, Weizmann Inst, 4:15pm; Science Related Careers in Israel: A Personal Perspective — Dr. Zeva Reuveni, formerly Hebrew University Medical School. Info: x3-2982.

Monday, March 10

The Economics of Automation** - Sarah Kuhn, Dept of Urban Studies and Planning grad student; Economic Literacy Project for Women, Women's Forum, 12-1pm, Rm

Video Bandwidth Compression Techniques* - Prof David H. Staelin, MIT, Electrical Engineering and Computer Science Colloquium, 4pm, Rm 34-101. Refreshments served, 3:30pm.

-Way Wave Equations and Absorbing Boundary - Prof Nicholas Trefethen, MIT Dept of Mathematics, Applied Mathematics Colloquium, 4pm, Rm 2-338. Refreshments served, 3:30pm, Rm 2-349

The Time Dependent Dynamics of a Salt Wedge Estuary** Rocky Geyer, Ocean Engineering, Woods Hole Oceanographic Institute, Dept of Civil Engineering Division of Water Resources and Environmental Engineering Seminar,

Models and Mirrors* - Prof Richard Senett, sociology and the humanities, New York University; author of The Uses of Disorder, Authority; The Fall of Public Man and Palais Royal, School of Architecture and Planning Lecture on Design Communication, 6pm, Rm 9-150.

Tuesday, March 11

Shelved Atoms and Quantum Jumps** - Richard G. Brewer, IBM Research Laboratory, San Jose, Laser Research Ctr/George R. Harrison Spectroscopy Laboratory/Research Laboratory of Electronics/School of Engineering Seminar on Modern Optics and Spectroscopy, 11-12noon, Rm 37-252. Refreshments served following seminar.

Integrated Solid-State Sensors: Interfacing Electronics to a Non-Electronic World** - Ken Wise, University of Michigan, Ann Arbor, VLSI Seminar, 4pm, Rm 34-101. Refreshments served, 3:30pm.

Obesity: Definition, Implications and Con-Prof Vernon R. Young, associate director, CRC; MIT Dept of Applied Biological Sciences, Clinical Research Center minar Series on Battling the Bulge: Science and Obesity, 4-5pm. Rm E25-401.

Multistage Compressor Design** — Dr. A.K. Sehra, Allison Gas Turbine Division, GM Corp, Dept of Aeronautics and Astronautics Gas Turbine Laboratory Seminar, 4:15pm, Rm 35-520. Refreshments served, 4pm.

RNA Splicing in Yeast** - Dr. John Abelson, Dept of Biology, Cal-Tech, Biology Colloquium, 4:30pm, Rm 10-250. Coffee served, 4pm, Bldg 56 fifth fir vestibule

Violins, Computers, and Physicists: A Three-Sided Interaction* - Gabriel Weinreich, Dept of Physics Musical Acoustics Group, Dept of Michigan, Experimental Music Studio Music and Technology Forum, 4:30pm, Wiesner Bldg Bartos

Wednesday, March 12

Femtosecond Excitation of Non-Thermal Electron Hole Pair Distributions in GaAs Multiple Quantum Wells** – W.P. Knox, AT&T Bell Laboratories, EECS/RLE Seminar on Optics and Quantum Electronics, 11-12noon, Rm 36-428.

Building Evaluation: the IBM Project** - Cynthia LaCasse, research associate, Building Diagnostics Inc, and MCP degree student, MIT Joint Program for Energy Efficient Buildings & Systems/Laboratory of Architecture & Planning Seminar on Building Performance, 12-1pm, Rm 1-134. Bag

Bottom Water Circulation in the Angola Basin* - Kevin Speer, WHOI/MIT, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

An Unsteady Lifting-Line Theory* - Prof Paul D. Sclavounos, MIT Dept of Ocean Engineering, Depts of Ocean Engineering/Civil Engineering Informal Hydrodynamic Seminar, 3-4:30pm, Rm 5-314.

Dielectric Properties of Water** - Jon Anderson, PhD candidate, Dept of Nuclear Engineering RST Seminar, 4pm, Rm 24-121. Refreshments served, 3:45pm

Ventilation of the Upper Ocean* - Dr. William Jenkins, Woods Hole Oceanographic Institution, Dept of Earth, At-mospheric, and Planetary Sciences Colloquium, 4-5pm, Rm

Using Regulation of Stimulate Innovation for Environmental Control** - Nick Ashford, MIT, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Neurons with Multiple Messengers** - Dr. Tomas Hokfelt, professor of histology-cell biology, Karolinska Institute, Stockholm, Sweden, Whitaker College of Health Sciences, Technology and Management Distinguished Lecture in the Brain Sciences, 4:30-6pm, Rm 10-250.

Humanizing the Environment through Development* – Raymond Nasher, president, The Nasher Company, Dallas Texas, MIT Ctr for Real Estate Development 1986 Hahn Lecture, 6pm, Rm 9-150.

Thursday, March 13

Chemical Studies of "Surface" Functionalized Polyethylene Prepared by Entrapment Functionalization* - Dr. David E. Bergbreiter, Dept of Chemistry, Texas A&M, Program in Polymer Science and Technology Polymer Seminar, 11-12noon,

Active End-Effector Technology for Industrial Robots** – Prof Frank W. Paul, McQueen Quattlebaum Professor, Clemson University, Laboratory for Manufacturing and Productivity Seminar, 3-5pm, Rm 35-250. Refreshments served

The Aspartame Story** - Prof Richard J. Wurtman, Clinical Research Center, Center for Technology, Policy and Industrial Development/Whitaker College of Health Sciences, Technology and Management Program in Health Policy Seminar, 4pm, Rm E25-401. Refreshments served, 3:30pm

Status of Superstring Theories** - Prof Edward Witten, Princeton University, Physics Colloquium, 4pm, Rm 10-250. Refreshments served, 3:30pm, Rm 10-250 lobby.

Fiber Optics vs Satellites* – Anthony Rutkowski, Federal Communications Commission; Jack M. Sipress, AT&T Bell Laboratories; Walter R. Hinchman, INTELSAT, MIT Communications Forum Seminar, 4-6pm, Bartos Theatre, Rm

Remittances and Inequality* – Oded Stark, Harvard University; J. Edward Taylor, Urban Institute, Harvard-MIT Research Seminar on Migration and Development, 4-6pm, Harvard Ctr for Population Studies, 9 Bow St. Prof Myron Weiner,

What to do about Common Writing Problems** – Writing and Communication Center ESL Writing American English Workshop, 4:15pm, Rm 14N-317.

Shaping the Information Age: Technology and Values** -Charles L. Brown, chairman of the board, AT&T, Sloan School of Management Distinguished Speakers Series, 4:30pm,

Friday, March 14

Plastic Instability and Fracture in Steels** - Prof J.P. Hirth, Ohio State University, Ctr for Materials Science and Engineering Colloquium, 12:15pm, Rm 9-150. Lunch provided,

An Immobilized Enzyme System for Heparin Removal: Stability and Design** - Ann E. Reese, Chemical Engineering Seminar, 2pm, Rm 66-110.

Geothermal Reservoir Information from Reactive Tracers** - James H. Ferguson, Chemical Engineering minar, 3pm, Rm 66-110.

The Jewishness of Woody Allen* - Allan Gould, journalist and humorist, Hillel Lecture, 8:30pm, Ashdown House

Readings

Writer's Series* - Gloria Navlor author The Women of Brewster Place (winner, 1983 American Book Award for First Fiction), and Linden Hills, MIT Writing Program minar, March 11, 7:30pm, Rm 10-250.

An Introduction to Objectivism, by Leonard Peikoff, and Individualism: The Moral Basis for Freedom, by Harry Binswanger* – The Objectivist Study Group videos, Sat, March 8, 1-3pm, Student Ctr Rm 400.

Community Meetings

Alcoholics Anonymous (AA)** - Meetings every Tues, 12-1pm, Rm E23-364. For info call Ann, x3-4911.

Al-Anon** - Meetings every Fri, noon-1pm, Health Education Conference Rm E23-297. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Ann, x3-4911.

Alcohol Support Group** - Meetings every Wednesday, 7:30-9am, sponsored by MIT Social Work Service. For info call Ann, x3-4911.

Narcotics Anonymous* - Meetings at MIT, every Mon, 1-2pm, Rm E23-364 (MIT Medical Dept). Call 569-8792.

Overeaters Anonymous* - Meetings every Mon, 12-1pm, Rm E23-297. This is not a lunch time meeting, so please bring any food. For info call Judy, x3-2481.

MIT Faculty Club** - The Club is open Mon-Fri. Luncheon hours: noon-2pm; dinner hours: 5:30-8pm. For dinner and private party reservations, call x3-4896 9am-5pm daily.

Commodore Users Group** - meets monthly at noon time. For more info, call Gil, x8-3186 Draper.

How to Talk So Your Kids Will Listen* - Joan Friebely, Cambridge Parents' Collaborative, MIT Child Care Office Meeting, Fri, March 7, 12-1pm, Rm 4-144. Bring your lunch; beverages provided.

Are You Considering MIT Summer Day Camp for You Child?* - Walter Alessi, director, MIT Day Camp, MIT Child Care Office Meeting, Tues, March 11, 12-1pm, Rm 4-144. Bring your lunch; beverages provided.

Wives' Group** - Morning Group: March 5, Museum of Fine Arts - "Monet to Matisse" Exhibit; info - Lynda Merican, 577-9515; March 12, Trip to Museum of Science; info — Mireille Chabaud, 776-7533. Meet at 9:15am, Eastgate. Children welcome. Afternoon Group: March 5, Economy & Society in the USSR & China: Some Current Issues - Prof Joseph Berliner, Economics Dept, Brandeis; March 12, Understand Opposing Views on Abortion - Prof Judith W. Decew, MIT Literature Faculty. All meetings 3-5pm, Student Ctr Rm 491. Babysitting provided in Student Ctr Rm 407.

Craft Group** - sponsored by Wives' Group, meets every Thurs, 2-4pm, Student Ctr Center Lounge or Student Ctr Rm 407. Please call x3-1614 to check on location of meetings.

The Language Conversation Exchange** - sponsored by the Wives Group, seeks persons interested in practicing languages with a partner. Many international students and spouses wish to practice English with a native speaker. If you are willing to help an international visitor practice English and/or interested in practicing or learning a foreign language with a native speaker, call the secretary to the Wives' Group, x3-1614.

MIT Women's League Informal Needlework Group** Wednesday lunchtime gatherings, 9:30am:1:30pm, Rm 10-340. Bring sack lunch, projects, swap ideas. Coffee & tea served. Meeting dates: March 12, 26, April 9, 23, May 14, 28. For more info, call Lillian Alberty (491-3689), Nancy Whitman (x3-6040) or Beth Harling (749-4055).

Alumni Activities

The Puzzling Issues Raised by the Strategic Defense Initiative (Star Wars)** - Prof Jack Ruina, MIT Ctr for Inter-The Puzzing issues intentional Studies, MIT Club of Boston luncheon and talk, March 20, 11:45pm, MIT Faculty Club. Cost: \$12/Club members & guests; \$15/non-members. Reservations: call x3-2000 before

MIT Activities Committee

MITAC, the MIT Activities Committee offers discount movi tickets for General Cinema, Showcase and Sack (USA Cinemas Theaters (\$3 ea). Tickets are good 7 days a week, an

performance.

Tickets may be purchased at MITAC Office, Rm 20A-023 (x3-7990), 10am-3pm. Mon through Fri and Lobbies 10 and E18 on Fri, 12-1pm. Lincoln Lab employees may purchase tickets in Rm A-270 from 1-2pm, Tuesday through Friday only. Check out our table of discounts for camping, dining, musical and cultural events available to you through MITAC and MARES (Mass Assoc of Recreation and Employee Services).

All American Dance. Fri, April 4, 8pm, Wang Center. A trio of thrilling performances by the Boston Ballet: Agnes DeMille's Fall River Legend, a suspenseful adaptation of the tale of Lizzie Borden; Balanchine's Square Dance; and Pipe Dreams, choreographed by Boston Ballet's new Artistic Director Bruce Marks. Tickets: \$21.50 (reg \$23.50) available in Rm 20A-023.

Little Shop of Horrors. Thurs, April 10, 8pm, Charles Playhouse. The place: a skid row flower shop. The main character: a man-eating plant named "Audrey II" and the young man who takes care of it and other assorted greenery. The plot: bizarre. The spoof: a satire on horror movies. Don't miss this zany triple award-winning musical. Tickets: \$16 (reg \$19.50), available in Rm 20A-023

Mandala Folk Dance Ensemble. Sat, April 12, 8pm, John Hancock Hall. Kick up your heels to life, dance, culture and music from around the world. Celebrate a Serbian village wedding, a Brazilian carnival, a frantic Rumanian men's dan palachian fiddling and clogging and more. Tickets: \$13.25 (reg \$15) available in Rm 20A-023.

Montreal Weekend. Sat-Mon, April 19-21. Transportation, room and me. That's it, and nothing more. You're on your own for 3 days and 2 nights. Accommodations at the fabulous Le Sherbourg Hotel. Depart from West Garage, Sat, April 19, 7am, return Mon, April 20, 6pm. Real cheap. \$75/pp/dbl occupancy only. Limit two tickets/pp — MIT card required to purchase tickets. Make your reservations now in Rm 20A-023.

Juilliard String Quartet. Fri, April 25, 8pm, Jordan Hall. The "first family of chamber music" perform their fifth concert devoted to the quartets of Beethoven: D Major, Op. 18, No. 3; F Minor, Op. 95, Serioso; and B Flat Major, Op. 130. Tickets: \$15 (reg \$16.50) available in Rm 20A-023.

White Water Rafting Weekend. Fri-Sun, June 20-22. Spend 2 days rafting and camping on the Rouge River, 81 miles north of Montreal in the Laurentian Mts. Price includes round trip transportation, campsite, 2 days of rafting, 2 full breakfasts, 2 barbecue dinners, and 2 high-energy snacks on the river. All for the river-bottom price of \$128/pp. Leave MIT, Fri, June 20, 12:30pm, return Mon, June 23, 12am. Important: In order to get this great deal we must have all reservations by April 18. Make reservations in Rm 20A-023.

Council for the Arts Museum Passes. On campus, there are 10 passes employees may borrow for free admission to the Museum of Fine Arts. To check on availability, call x3-5651. At Lincoln Lab, passes are available in the Lincoln Lab Library,

Museum of Science Tickets. Available for only \$1. Pay another \$1 at the door, for a total savings of \$3/pp/adult; \$1/pp/child (reg \$5/pp/adult; \$3/pp/child).

City Books are here! Only \$.75 (reg \$7.50).

Ski-Key Books. Containing valuable discount lift ticket for the greater New England area are here! Only \$9 ea

New! The Greater Boston '86 Books are here! 2-volume, 820-page discount coupon book offer discounts on fine and casual dining, theatre, comedy shows, opera, ballet, museums, hotels, car washes, cleaners, and more...for the greater Boston area and beyond (inc areas in the Metro West, South Shore, North Shore & north of Boston). A limited supply now available for only \$20 ea (reg \$30 ea).

Important! To avoid disappointment, purchase tickets and make reservations early as we are limited by ticket availability and transportation. All MITAC events and ticket purchases are nonrefundable due to the non-profit nature of our organization.

Social Activities

International Women's Day Celebration - Women's Studies/Office of the Dean of Student Affairs party, March 7, 4-5:30pm, Women's Studies area, 14E-316. Refreshments,

Gays at MIT Spring Dance* - Fri, March 7, 9pm-1am, MIT Student Ctr 2nd floor. Admission: \$3; \$2/student ID. Info: x3-5440

GAMIT Sunday Discussion Meeting* - Gays at MIT, Suns, 5pm, GAMIT Lounge, Walker Memorial Rm 50-306. Dinner

GAMIT Study Break* – Gays at MIT, Thurs, 9pm, GAMIT Lounge, Walker Memorial Rm 50-306.

Movies

Wellesley ID.

Stairway to Heaven** - LSC Classic Movie, March 7, 7:30pm, Rm 54-100. \$1/MITWellesley ID.

erald Forest** - LSC Movie, March 7, 7&10, Rm 26-100. \$1/MIT-Wellesley ID. Prizzi's Honor** - LSC Movie, March 8, 7&10, Rm 26-100.

\$1/MITWellesley ID Hair** - LSC Movie, March 9, 6:30&9:30, Rm 26-100. \$1/MIT-

The Sea Hawk** - LSC Classic Movie, March 14, 7:30pm, Rm 10-250. \$1/MIT-Wellesley ID.

Trading Places** - LSC Movie, March 14, 7&10, Rm 26-100.

\$1/MIT-Wellesley ID. A View to a Kill** - LSC Movie, March 15, 7&10, Kresge orium. \$1/MIT-Wellesley ID.

Psycho** - LSC Movie, March 16, 6:30&9:30, Rm 26-100. \$1/MIT-Wellesley ID.

Music

Noon Hour Chapel Series* – Louise Treitman, gamba; Sonja Ludblad, recorder, Gisela Krause, harpsichord, Thurs, March 6, 12:05pm, MIT Chapel. Free.

Marlboro Trio* - Music Cognition Group Bosendorfer Series Concert of piano trios by Mozart and Beethoven, March 6, 5:30pm, NE43 AI-LCS Reading Rm.

MIT Faculty Series* - Prof Stephen Erdely, and Beatrice Erdely, piano, Fri, March 7, 8:30pm, Kresge Auditorium. Free

Log Jam Concert* - MIT Logarhythms a cappella concert with Tufts-Jackson Jills and the Binghampton Crosbys, Sat, March 8, 7:30pm, Rm 10-250. Free. MIT Symphony Orchestra* - David Epstein, music director.

Sat, March 8, 8:30pm, Kresge Auditorium. Admission \$1. MIT Brass Ensemble* - Richard Given, director, Sun, March

Noon Hour Chapel Series* - Alan Goldspiel of Connecticut, guitar, Thurs, March 13, 12:05pm, MIT Chapel. Free.

9, 3:30pm, Kresge Auditorium.

MIT Concert and Festival Jazz Bands* - Everett

Longstreth, director, with guest bands, Fri, March 14, 8pm, Kresge Auditorium. Admission \$1.

Piano Concert** – Emily Corbato, International Students Program/MIT Women's League concert of Mussorgsky (Pictures at an Exhibition), Roy Harris, Ginastera and Villa-Lobos, Sun, March 16, 3pm, Kresge Little Theatre.

MIT Affiliated Artist Series* – Sheila Waxman, piano, Sun, March 16, 8pm, Kresge Auditorium. Free.

MIT Gospel Choir** – Meets every Sat, 11am. Welcomes new members, visitors – if you feel shy about singing, we can use help with managing the spring concert. Rehearsals: March 8, Kresge Rehearsal Rm A; March 22, Student Ctr Rm 491; March 29, Student Ctr Center Lounge. Info: x5-8645 dorm, x5-7531

Chinese Intercollegiate Choral Society* - Meets Suns, 3-5pm, Rm W20-491. Currently rehearsing Chinese folk songs. voice lessons and music theory class, 1pm.

Theater

An Evening of One_Act Plays* - MIT Dramashop student-directed plays, March 13-15, 8pm, Kresge Little Theatre. Free. Critique and coffee hour follow performances.

Dance

Tenth Annual Israel Folk Dance Festival* – Hillel Presenta-tion, Sun, March 16, 3pm, Kresge Auditorium. Tickets available at Hillel: \$4, \$6, \$7

MIT Ballroom Dance Club Workshops* - March 9: Begin-MIT Bailroom Dance Club Workshops* - March 9: Beginning Waltz, 12:30-1pm; Intermediate Rumba, 1:30-2:30pm; Advanced Quickstep, 4-5pm. March 16: Beginning Swing, 12:30-1pm; Intermediate Waltz, 1:30-2:30pm; Advanced Rumba, 4-5pm. All classes at Student Ctr Sala de Puerto Rico. Admission. Beginning. 4-5pm. All classes at Sudent Ct. Saia de Teero Acc. Admission: Beginning - \$.25/members, \$.50/non-members; Intermediate - \$.50/members, \$1/non-members; Advanced -\$2/members, \$3/non-members. Info: x5-9171 dorm

Western Square Dancing* - Tech Squares Club Level danc ing and rounds, Tues, 8-11pm, Student Ctr 2nd Floor. Dennis Marsh, club caller & instructor; Veronica McClure, club cuer. Recorded info: x5-9126 dorm.

MIT Dance Workshop Classes** – Beginning Modern Dance Technique, M/W, 3-5pm, DuPont Tclub Lounge; In-termediate Modern Dance, T/Th, 5:30-7pm, Walker 201; Im-provisation, Th, 1-3pm, Walker 201.

MIT Contemporary Dance Club* - Cynthia Mallick, instruc MIT Contemporary Dance Club* — Cynthia Malinck, instruc-tor, Aerobix, M/W, 6:30-7:30pm; Jazz I/II, M, 7:30-8:30pm; Stretch, W, 7:30-8:30pm; Rep, M/W, 9-10pm. Classes at: M, 6:30-8:30pm, McCormick Gym; W, 6:30-8:30pm, W31; M/W, 9-10, T-Club Lounge. Fee: \$3/single class, \$4/non-MIT. Info: call

Children's Dance Classes** - Pamela Day, instructo Creative Movement/Modern Dance classes for children ages 3-8, Fri: Ages 3-4, 2:30-3:15pm; Ages 5-8, 3:30-4:30pm, West Campus location. Great for boys girls; excellent opportunity for non-English speaking children. For info & registration, call Pamela, x3-5791, T/Th mornings or 648-4834 eves/wkends.

MIT Folk Dance Club* - weekly dancing Sundays, International Dancing, 7:30pm, Student Center Sala de Puerto Rico; Tuesdays, Balkan and Western European Dancing, 7:30pm, Rm 407 Student Center; Wednesday, Israeli Dancing, 7:30pm Sala

Rhythmic Gymnastics Classes for Women** – MIT Women's League classes, Fri, 12-1pm, Rm 10-340. Info: Helena, 596-2396.

Yoga* - ongoing classes in traditional Hatha and Iyengar style. Beginners: Mon, 7:20pm; Intermediates: Mon, 5:45pm. For information call Ei Turchinetz, 862-2613.

Exhibits

COMMITTEE ON THE VISUAL ARTS Albert and Vera List Visual Arts Center Jerome & Laya Wiesner Building

Hayden Gallery - Alvar Aalto: Furniture and Glass. The 40 pieces of furniture, 25 glass objects and 35 drawings on view demonstrate Aalto's sensitivity to individual materials, respect for regional traditions and simple timeless forms in an integra-tion of architecture and design. Through April 13.

David and Sandra Bakalar Sculpture Gallery - Alexander Calder: Artist and Engineer, through April 13.

The Reference Gallery - Alternatives to Modernism. Exhibition surveys the work of Portuguese architect Alvaro Siza who works outside of mainstream postmodernist trends. Through April 6.

THE MIT MUSEUM

MIT Museum Bldg – A Continental Eye: The Art and Architecture of Arthur Rotch, 166 watercolors in which the 19th-century Boston architect recorded his impressions of Europe and the Near East between 1871 and 1892, through April 5. Sculpture by Beverly Benson Seamans, through July 26. Three Photographers, photos by Linda Cuccurullo and Gordon Thomas (MIT Libraries staff), and Carolina Salguero (formerly of MIT Dept of Architecture), through April Salguero (formerly of MIT Dept of Architecture), through April 19. Minor White: Photographs, 102 prints dating from the 1930s to 1968, through March. Gjon Mili 27t. A Tribute, Born in Rumania, world famous photographer Gjon Mili studied electrical engineering at MIT and pioneered in the use of electronic flash and multiple exposure photographs. In 1938 he began doing stories for Life magazine, ongoing. Of Aerostatic Machines: Early Ballooning in France and Britain, Prints from MIT's Vail Collection illustrate the development of ballooning as a science and sport including fanciful inventions for steering balloons, and aerial views of Paris and other cities, ongoing. Light Sculptures by Bill Parker '74, A synthesis of scientific knowledge and artistic composition gives expression to these knowledge and artistic composition gives expression to these changeable, touchable plasma sculptures, ongoing. Hours: Weekdays 9am-5pm, Saturdays 10am-4pm.

Compton Gallery – Images of Infinity: Photomontages by Yulla Lipchitz, 50-60 photographs and photomontages reflect-ing the artist's personal vision, through March 8. Hours: Weekdays 9am-5pm, Saturdays 10am-4pm.

Hart Nautical Gallery

Ongoing exhibits: Currier & Ives Prints From the Hart Nautical Collections — Colored lithographs of sailboats, steamboats, clipper ships and whalers. George Owen '94: Yacht Designer — Line drawings and half-models designed by one of the early professors of naval architecture at MIT. MIT Seagrant — A review of MIT ocean research; Collection of Ship Models — Half-models and drawings. Historical view of the design and

biography Black Apollo of Science: The Life

of Ernest Everett Just, which won the 1984

Pfizer Award of the History of Science Society.

The Kaiser Family Foundation indicated that

it was the strength of both the proposal and

the Just biography which led them to fund

this research. The foundation noted in parti-

cular that the Just biography is "not only an

excellent history but also a book which could

serve as a source of inspiration to young black

students contemplating a career in biology and medicine." The Macy Foundation expressed similar views.

"Blacks in American Medicine" is envisioned

by Professor Manning as a project to assemble

a comprehensive body of data on the role and

experience of blacks as professionals in the

field of medicine. The data bank created will

be an important information resource for a

variety of researchers: those interested in

undertaking biographical studies, historical

analyses, and health policy studies. In addition, Professor Manning plans to produce

Edgerton's Strobe Alley - Exhibits of high speed photography. Main corridor, 4th floor.

Corridor Exhibits: Building 1 & 5, 2nd floor: John Ripley Freeman Lobby, Building 4: Norbert Wiener, Karl Taylor Compton. Community Service Fund, Ellen Swallow Richards. Women at MIT. An overview of the admission of women at MIT. Five photographic panels with text documenting the circumstances that increased the number of women in the classroom since Ellen Swallow Richards. Building 6: Laboratory for Physical Chemistry. Building 8:

OTHER EXHIBITS

Institute Archives and Special Collections - Planning the New Technology. Part Two: Constant Desire Despradelle. Part two of a three-part series about the relocation of MIT from Copley Square to Cambridge portrays the impressive design of architect and teacher Despradelle. Though he died before the project began, several of his ideas were incorporated into the ultimate plan by his successor, William Welles Bosworth. Hall exhibit case across from 14N-118. exhibit case across from 14N-118.

People of Monhegan – through March. Architecture & Planning Computer Resource Laboratory sequential exhibit of photographs by S. Leland Smith, teacher of filmmaking and photographic darkroom skills at the MIT Student Art Association. Hours: M-F, 9am-5pm, Rm 9-514.

Jerome B. Wiesner Student Art Gallery – for 1986 scheduling, any MIT student or student group interested in showing or performing art in the Gallery, call Andy Eisenmann, x3-7019 in Rm W20-429, M-F, 9-5.

Sports

HOME EVENTS: March 8: M's Volleyball vs Brown, 12noon. March 10: MIT M's Swimming Invitational, 7pm. March 18: M's Volleyball vs Wentworth, 7pm

Wellesley Events

Jewett Arts Center* - African Art of the Dogon, Selections from the Hans Gugenheim Collection symbolizing the comentary duality of natural and social order in Dogon culture plementary duality of natural and social order in Dogon culture, through March 23. Nic Nicosia: Recent Photographs, In-cludes selections from his most recent series, *The Cast*, through March 23. Clay, Paper, Fabric and Glass Workshop Ex-periments, Examination of selected works produced in contemporary workshops by leading artists, through March 23. Contemporary Arts: An Expanding View, Selected works by contemporary artists which transcend the historical concept of craft, through March 23. Contemporary Prints from the Perent Collection, continuing

The Graceful and the Grotesque: Martin Brothers Pottery*
– Prof Peter J. Fergusson, Art Break, March 5, 12:30pm &
4:15pm, Jewett Main Corridor Gallery.

The Medieval and Renaissance Era** - Prof Glending Olson, Cleveland State University, Medieval and Renaissance Symposium sponsored by the Moffett Endowment, March 5, 4:15pm, Library Lecture Rm.

Charles L. Brown, chairman of the board of the American Telephone & Telegraph Company, will speak at MIT on Thursday, March 13, on "Shaping the Information Age." He will give his talk, part of the Sloan School's 1985-86 Distinguished Speakers Series, at 4:30pm in the Bowen Room (E51-329). Mr. Brown has been chairman of AT&T since 1979, when it was the world's largest company. From 1980 to 1984 he led AT&T through the largest corporate reorganization in history. He is due to retire in August.

Erdely Duo to perform

Professor Stephen Erdely, violin, and his wife, Beatrice Erdely, piano, will be presented in a performance of the MIT Faculty Series Friday, March 7, at 8:30 in Kresge Auditorium.

Known professionally as the Erdely Duo, the two will perform a program of works by Schubert, Brahms and Beethoven. Students, members of the community and of the public are invited, without charge.

David Bristow to speak

David Bristow, a pianist known as one of the world's leading researchers into music synthesizers, will discuss its fundamental principles in a lecture/demonstration today. March 5 at 4:30pm in the Film/Video Screening Room of the Wiesner Building. This colloquium. presented by the Media Laboratory, is open to all students and members of the community. It marks the beginning of Mr. Bristow's two weeks residency at the Media Laboratory.

Sanctuary Movement Aiding Central American Refugees*
- Prof Renny Golden, Northeastern Illinois University and co-author, Sanctuary: The New Underground Railroad, Wellesley College Sanctuary Committee Lecture, March 5, 7:30pm, Science Ctr Rm 277.

Understanding Black Single Parent Families: Stress and Strengths* – Michelene R. Malson, Bunting Institute, Stone Ctr Women's Psychological Development: Theory and Application Colloquium, March 5, 8pm, Science Ctr Rm 377.

Continuing Education Information Meeting* — For women beyond traditional college age who wish to work toward a BA, March 6, 10-11am, Continuing Education House.

Employed English Majors* - March 6, 8pm, Shakespeare

Medieval Anatomy, Renaissance Art, and Modern Science*
- Sam Edgerton Lecture and Slide Presentation, Medieval and Renaissance Symposium sponsored by the Moffett Endow ment, March 7, 4:15pm, Jewett Auditorium

A New Experience in Contemporary Music for Symphonic Bands* - MIT Concert Band directed by John Corley, March 7, 7:30pm, Houghton Memorial Chapel.

Dober Memorial Concert* - Wellesley College Choir and the University of Virginia Glee Club, orchestra and soloists, directed by William Herrman perform Mozart Requiem, March 11, 8pm. Houghton Memorial Chapel.

A Poetic Apprenticeship: Clayton Eshelmann's Work on the Poetry of Cesar Vallejo* – Clayton Eshelmann, poet, translator and editor, March 12, 4pm, Slater.

Right Action and Relationships* – Larry Blum, associate professor, philosophy, University of Massachusetts-Boston, March 12, 4:15pm, Library Lecture Rm.

Women in Education* - Ctr for Women's Careers Women in Action: The Realities of Working Series, March 12, 7-9pm, Library Lecture Rm. Cost: \$5/those with no College affiliation.

The Historical Resonance of Issues in Contemporary China; Ku Yen Wu's Response to "The Demise of Human Society"* - Thomas Darlett, Princeton University, Chinese Dept lecture, March 13, 7:30pm, Pendelton Est Rm 6

Mis-Remembering Richardon: Gender, Language, and Class Formation in 19th Century America* – Prof Carroll Smith Rosenberg, University of Pennsylvania, Women's Studies Program/American Studies Program/Depts of English, History and Education Lecture, March 13, 7:30pm, Pendelton West Rm 105

The Fifth of July* — Wellesley College Theatre production, March 14-16, 8pm, Alumnae Hall. Tickets \$5; \$3/Wellesley personnel; free/Wellesley-MIT students w/ID.

*Open to the public
**Open to the MIT community only

***Open to members only

Send notices for Wednesday, March 12 through Sunday, March 23, to Calendar Editor Rm 5-111, before noon, Friday, March 7.

'Battle of the Bulge' series begins March 11

The MIT Clinical Research Center (CRC) will present a seminar series on "Battling the Bluge: Science and Obesity," starting Tuesday, March 11, at 4pm in Rm E25-401. Professor Vernon R. Young, associate direc-

tor of the CRC, will present the first lecture: "Obesity: Definition, Implications and Consequences." Dr. Young is professor of nutritional biochemistry in the Department of Applied Biological Sciences.

Subsequent lectures in the series will be presented on March 18, March 25, April 1, April 8, April 22 and April 29, all from 4-5pm. The April 29 lecture is in Rm 66-144, the others are in E25-401.

Topics and speakers are: March 18, "Carbohydrate and Mood: When Willpower Doesn't Work," Dr. Judith Wurtman, research scientist, Department of Applied Biological Sciences; March 25, "Obesity in Pediatrics," William H. Dietz, MD, assistant director of the CRC and assistant professor in pediatrics, Tufts University, April 1, "Treating the Seriously Overweight Patient," Robert A. Hoerr, MD, assistant director, CRC; April 8, "Metabolic Changes in Obesity: The Role of Amino Acids and Neurotransmitters," Benjamin Caballero, MD, assistant CRC director; April 22, "The 'Fat Mind:' Overcoming Psychological Barriers During Weight Loss," Dr. Hoerr, Leslie Weiser and Karen Boles; April 29, "Why Do Diets Fail?" Dr. Wurtman.

Marlborough Trio

The Music Cognition Group of the Artificial Intelligence Lab will present the Marlborough Trio Thursday, March 6 at 5:30pm in a concert of piano trios by Mozart and Beethoven.

The concert will be held in the AI-LCS reading room on the first floor of Building NE 43,545 Tech Square, as part of the Bosendorfer Concert series. The concert is open without charge to students, all members of the MIT community and to the public. Information:

Music competition

The Music Section has opened the 1986 competition for the William L. Hsu Prize in Music, which awards \$225 for a recent musical composition written by an MIT student.

Deadline for submission of entries is April Guidelines are available from the Music Section office, 14N-434.

Ruth Perry to lecture

Dr. Ruth Perry, senior lecturer and director of the Women's Studies Program, will discuss "Some Methodological Implications of the Study of Women's Writing' Wednesday, March 19 at 4:30pm in the Houghton Library at Harvard University.

Dr. Manning awarded two grants Professor Manning, a member of the faculty By CHARLES HENRY FULLER since 1974, is the author of the acclaimed Writing Program Administrative Officer

Dr. Kenneth R. Manning, professor of the

history of science in the Program in Science, Technology and Society and head of the Writing Program, has been awarded a three-year research grant totalling \$262,593 from the Henry J. Kaiser Family and the Josiah

Macy Jr. foundations. Both foundations will jointly fund Professor Manning's research project, "Blacks in American Medicine, 1860-1980," Ann F. Fried-

laender, dean of the School of Humanities and Social Science, announced. The Macy and Alfred P. Stone foundations have been supporting the beginning phase of the research with current grants of \$10,000 and \$20,000, respectively.

J.A. Fay to discuss acid rain problem

The seminar on "Environmental Health and Industrial Development: Current Research and Educational Perspectives," will continue at 4pm on Friday, March 7, when Professor James A. Fay of the Department of Mechanical Engineering discusses "The Acid Rain Problem." He will speak in Rm E25-401.

The seminar is sponsored by the Center for Technology, Policy and Industrial Development and the Program in Health Policy of the Whitaker College of Health Sciences, Tech-

nology and Management.

Other speakers in March will be Professor Richard J. Wurtman, director of the Clinical Research Center, "The Aspartame Story," at 4pm on Thursday, March 13, in Rm E25-401, and Professor Nicholas A. Ashford of the School of Engineering, "Using Regulation to Stimulate Market Innovation." at 4pm on Wednesday, March 19, in Rm E25-401. The seminar will continue through May.

a major study from the data collected.

MIT junior selected

Martha Beverage, a junior from Pittsfield, Maine, has been selected to the first-team GTE Women's Basketball District Academic All-America squad by the College Sports Information Directors of America.

District 1 includes New England, New York state and parts of Canada.

Ms. Beverage, a 5'6" forward, was the leading vote-getter in the College Division. She was MIT's most versatile performer this season averaging 11.9 points, 5.4 rebounds, 3.6 steals and 3.1 assists. In the classroom, Ms. Beverage has a cumulative grade-point average of 4.5 (on a 5.0 scale) in chemical engineering.

MIT wins N.E. indoor track title

(continued from page 1)

Brandeis' time was 3:24.82.

"This was a very satisfying win for our team," Kelly noted. "We kept pegging away and it worked to our advantage. We had 24 athletes in the meet and 18 of them scored

MIT had five second-place finishes: junior Gordon Holterman in the 1500-meter run (4:00.59); sophomore Sean Garrett in the 55meter hurdles (7.82); sophomore Marc Light in the 500-meter run (1:06.44); freshman Sean Walker in the 800-meter run (1:57.21), and the Distance Medley Relay team of sophomore Anton Briefer, junior Mike Donohue, sophomore Rod Hinman and Lin.

"Holterman's performance in the 1500 really got us going," Kelly said. "That kid is competitive. Sean also performed well in the hurdles. Both he and Holterman have had nagging injuries all season, but they came through for us in a big way.

This was MIT's fourth New England Division III indoor title in the seven-year history

The Engineers finished the regular season with a 9-1 record for its third straight winning season, Since 1980, MIT is 51-9. In 13 years as head coach, Kelly's indoor teams are 81-26 for an impressive 75.7 winning percentage. MIT was host to the 18th annual New

England Intercollegiate Amateur Athletic Association (NEIAA) Collegiate Championships Friday, Feb. 28, and Saturday, March 1, in the Athletics Center. The meet featured defending champion Boston University, Northeastern and Boston College, among other Division I, II and III teams.

Tech Talk, March 5, 1986, Page 5

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INSTRUCTIONS: Ads are limited to one (of approximately 30 words) per person per issue and may not be repeated in successive issues. All must be accom-panied by full name and extension. Persons who have no extensions or who wish to list only their home telephones, must come in person to Rm 5-111 to present Institute identification. Ads using exten sions may be sent via Institute mail. Ads are not accepted over the telephone.

Deadline is noon Friday before

For Sale

Orchid Ms Chaus drss, sz 7, \$25; pink "Maire Clair" drss, sz 7, \$25, bth exc cond; pink-stripd Jordache sundrss, sz sM, \$15; wh w/flowrs strplss sundrss, sz M, \$20; ivry blazr, lt, \$10; 2 haltr tops, \$5 ea, all gd cond. Kim, x3-1740 or 242-0804.

Upr piano, paintd wh, w/bench, \$250; Nor dika ski boots, 2-buckl, gr, sz 7½N, \$22. Call 547-5357.

Hondo II acoustc steel strng guitr w/rosewd bck & nck, exc cond, inc sft case, \$100. Call 546-1356.

Grt stdnt dsk w/chr, \$50 or bst. Barbara/Bob, 646-8682.

Modm 2400/1200/300, DEC Scholar, nw, reg \$750, yours for \$420. Giovanni, x3-8932.

Blck lthr briefcase, in gd cond, askg \$20, willing to dickr. Waldemar, x3-6921 or 577-9765.

ADS-10 time delay sys w/spkrs, \$650. Call

Tckts: Bruins-LA, 3/20; Toronto, 4/3, \$26/pr; Bostn Symphny, 4/22, \$26/pr. John, x8-2001 Draper.

Vivitar Tek 35 35mm auto focus camra 1985, inc auto spd, film load, advance, rewind, bst offr. Earl, x3-2776.

2 nrly nw Lee all-wthr rad trs, sz P205-75-R15, 5K, \$25 ea. Jack, x3-4498 or

Virtually nw DR set w/4 chrs; nw twn pltfrm bed w/nw Serta mttrss & cvr; RCA 25" Colortrak tv; functnl dsk. Call

J-36 sailboat sails: Ulmer mainsail '81; orth Sails Kevlar #3 main 30835, nw; Ulmer light #1 Genoa, '81; Ulmer hvy #1-Genda, '81; Ulmer Daisy staysail, '81; Ulmer lapper, '81; sails not usd since '83, bst offr. will divide. Eric, x5-7368 dorm.

2 tckts, Hasty Pudding Show Between the Sheiks, Sun, 3/16, 8pm, \$12.50 ea; parts car, '75 Datsun B210. Kathy, x3-5136.

Lap cmptr, DG-1, cmplt w/ext drv & prntr, case, like nw, \$1,850; Epson Hx20 notebook cmptr, w/couplr, cbls, etc, \$340; TI hm cmptr, 99/4A, w/all cbls, \$84. Call 354-0657 12-1pm or lv mssg.

Stereo spkrs, AR18, stll perf acousticly, cases damagd, askg \$100/pr. Sharon,

Baby grnd piano, Henry F. Miller, 5'6", gd sound, \$2,870. Harvey, x8-2467 Draper or 275-8706.

Prtbl Commodore 64, keybrd, 5" hi-res colr screen, 1 dsk drv, joy stcks, tons of sftwr, orig \$1,000, askg \$300. Call

1-878-4538 eves. 25" Sony XBR colr stereo tv. 400 ines resltn, stereo spkrs, cmptr input audio & video input/output, warr, mch more, 3 mo old, mst sell, nw \$1,199, askg \$799. Steve.

Lrg elegnt DR tbl w/6 chrs, \$550; Sealy Posturpedic mttrss, bx & frm, full-sz, \$170. Call 969-9106.

Smith-Coronoa 210 elec typwrtr, exc cond,

Sanyo MBC550 16 bit pressr, 2 160K drvs, 256K RAM, IBM comptbl MS-DOS, Word-star, Calcstar, Infostar, NEC mntr, Seikosha prntr, \$750; lrg metl dsk, \$45; drssr, \$45. Anna, x3-6539 or x5-6506

Stereo tunr, old mdl, gd shape, \$25 or bst. Steve, x3-4248.

42" round wh ktchn tbl & 4 mtchng chrs. \$60; twn sz firm Sears-O-Pedic mttrss & bx spr, \$50; solid state effee tbl, \$60; 2 tile end tbls. \$20 ea. Call x3-1660.

W's ski boots, sz 8 med, wrn 1X, \$25. Ann, x3-0008

Triumph TR6 for parts, \$500 as is, or ask for ind parts; Heathkit H8 & 2 flppy dsc drys, mch sftwr, \$250. Al, x2973 Linc.

Vehicles

Suzuki 185, lo mi, gd cond, \$350. Inna, x3-1661 or pref 933-6422 aftr 6pm.

'75 VW bug, 10K on rblt eng (have recpt), bdy rstd but salvagbl, nw batt & alt, stereo, rfrck, solid trnsprt, \$600. Rick, x3-5494 or 623-0962 aftrnoons.

75 Chevy Malibu Clssc wgn, brn, auto, V8, prsntly rgstrd, gd mech cond & dpndbl. Call x4005 Line or 263-7446.

'76 Dodge Aspen, 6 cyl, auto, AM/FM, 85K, nw trans & brks, rns exc, dnts, \$450. Ishii, x3-5019 or 641-0692.

Page 6, Tech Talk, March 5, 1986

bst. Gene, x2926 Linc or 667-6081 eves. 78 Datsun B210, 4-dr, a/c, Z-Bart, 52K, \$1,995 or bst. Call 629-2169 '79 Olds Cutlass Cruisr, 49K, auto, ps, pb,

\$2,000. Call x3546 Linc or pref 369-1127 aftr 5pm. '80 Subaru GLF, 5-spd, AM/FM/cass, nw

'77 Ford E150 van, 300 cu in, 6 cyl, 3-spd,

custmzd in/out, too mch to list, rns & looks grt, appraisd \$6,500, askg \$3,995 or

cltch & brks, always rns, \$2,150. Beverly, x3-7106 or 489-3282 eves.

'80 Dodge Colt htchbck, 56K, AM/FM, metallc bl, 5 gear std trans, \$1,250 or bst. Ralf, 734-9625.

'80 AMC Spirit DL, 4-spd, 2-dr, 80K, pb, ps, exc mech cond, AM/FM stereo, all opts, int v nice, bdy fair, \$995. Karem,

'81 Buick Skylark, 2.5 litr, std shft, looks & rns perf, \$2,450, will talk. Tom, x8-2191 Draper.

'84 Renault Alliance DL, 5-spd, 4-dr, no radio, nvy w/gray int, askg \$4,500. Call x3-6597 or 596-0487.

'84 Olds Cutlass Supreme Brougham 34 Olds Cutlass Supreme Brougham, 18K, pw & dr lcks, cruise cntrl, tlt whl, intrmttnt wiprs, AMFM/cass, a/c, rear defog, bl ext w/royl bl velour int, \$9,800. Deborah, x3-6162 or 938-1447.

'85 Ford Escort, 2-dr, AM/FM/cass stereo, rear defog, Rusty Jones, like nw, askg \$5,200. Bob, x8-1826 Draper or 372-8049.

Housing

Wesport, MA, charming his w/guest hise, lrg grdn, v priv, ideal for 1.2 cpls, \$400/wk, avlbl Aug, part of June or July. Call 491-2921 eves.

N Conway area twnhse, sleeps 8, 2BR & loft, 2b, 2 mi to Attitash Mt ski area, rnt now wks, wkends, grt for hiking in spring, rsnbl rates. Eileen, x8-2806 Draper

Ski 93, fully accommdtd twnhse, sleeps 6-8, 2 full baths, mins to Waterville Valley, Loon & Cannon Mts, rec facilits & more. Joanne, x8-2608 Draper or 599-0463

Lrg summr hm on lake in Belknap Mts, nr Lake Winnipesaukee, NH, fully eqppd, 4BR, dck ovrlookng lake, canoe, exc fishng & swimmng, mo rntl, \$2,000, July only. Call 263-5568. Easter in Paris, charmng artst's studio,

2BR, 2b, LR, DR, ktchn, sm grdn, 14th, avlbl 3/24-4/27. Isar, x3-1403.

Bass River, Cape Cod, 4BR mod hm, 3 blcks to beach on Nantucket Sound, avlbl 6/21-8/16, \$625/wk. Stanely, x3-4288 or 643-0771

Animals

Gd hm wntd for blck Labrador Retryr, M. 1 yr, shots, gd w/kids, nds rm to run. Jim, x8-3067 Draper or 263-2817 eves.

Wanted

Stationry exercs bike, apt-sz. Therese,

Spanish-spkng F grad stdnt sks rm w/American fmly, nr public trnsprtn. Call 247-3167.

Vistng prof nds furn apt/hse for fmly of 5, mo of Aug. Amnon, x3-1580.

Apt/hse wntd, 6/20-8/15, for vistng wegn prof & spouse. Call x3-6809.

Lost and Found

Found: photos in in Quick Photo pack. Bldg 9, 4th flr. Call x3-3895

Lost: bag containing blck knttd hat & pr of blck lthr glvs, on sidwlk betwn Main St & Kendall Sta, \$2 reward for retrn. Sophie, x3-2750.

Calling all Fall-trm 6.014 stdnts: did 1 of you leave a scarf in Rm 26-341? C. Smith x3-2561.

Lost: gold chrm bracelt, 12 sm round chrms, reward offrd. Jane, x3-4971 or 273-4394.

Surplus Property

The Property Office has the following ex-cess MIT equipment for transfer within MIT. Unless noted, items are at the Equipment Exchange, 224 Albany St, open Tues & Thurs, 11am-3pm. After 30 days, items are sold to individuals. Where noted, bids and offers go to Tom Donnelly, Property Disposal Officer, E19-429, x3-2779, with envelope so marked. Always reference case number on envelope. MIT reserves the right to reject any and all bids.

Case 1639 - For sale by sealed bid. Bids to be received by 4pm, EST, 3/14/86. To inspect, call Lois Malone, x3-4867: NEC Spinwriter printer, mdl 3550, w/cut sheet paper feeder, dual bin adapter, Gates coustic hood, security anchor pad & tbl.

Case 1602 - For sale by sealed bid. Bids to be received by 4pm, EST, 3/14/86. To inspect, call Patrick Kearney, x3-6866: IBM computer, mdl 1801; IBM disk storage, mdl 1810; IBM data adapter, mdl 1826; IBM printer, mdl 1816-1; IBM sorter, mdl

Case 1656: (30) misc swivel arm chrs.

Case 1657: (4) secretarial chrs; (4)

Case 1658: Gandalf modem; Racal-Vadio modem; Pitney-Bowes scale; Omnited modem; Fasco fan; (3) adding machines; 35x12" metal shelves.

Case 1611: Flex-Vac lab chamber

Case 1667: Freq. Eng Lab synchronizer; Curry & McLaughlin synchronizer; Weinschiel power supply; rack adapter; E-C Apparatus fractionater; (3) Buchler evaporators; Cary spectrophotometers; Zeiss spectrophotometer; Neslab medical bath; Zeiss slit; Leeds & Northrope

Case 1659: DeWalt tbl saw; Norton surface grinder; Beaver pipe & bolt threading machine; O'Neil-Irwin metal bender; South Bend lathe.

Case 1660: Shaw Walker fire proof 4-drwr

Case 1663: marble coffee tbl; Mobile chalk

Case 1665: 20-drwr tab card file cab.

Case 1666: C.I. Hayes electric furnace, nds

Case 1668: JVC VCR recorder; Hewlett-Packard chromatograph; Sanborn dual channel amplifier; Honeywell recorder; Sanborn recorder; Sanborn DC amplifier; Sanborn DC preamp; (2) Mechrolab osmo meters; Hickok tube tester; Microcore recorder; Heathkit oscilloscope; Heathkit recorder; Hewlett Packard oscilloscope; recorder; Hewiett Facaard oscilloscope; Telequipment Co oscilloscope; Branson Inst ultra-sonic generator; disc recorder & FM system; Mks Baratron pressure meter.

Case 1669: ISCO ultraviolet analyzer; Sears freezer; Amsco sterilizer; Beckman microzone scanning attachment; International centrifuge.

Case 1670: Hendrix optical character

Case 1671: electric letter opener; Remington typwrtr

Case 1673: 20-drwr tab card file; lrg green chalkboard

Case 1675: (2) metal bookcases.

Case 1676: Moletron 50 watt carbon diox-

Case 1681: Xerox electronic typing system, mdl B.

POSITIONS AVAILABLE

It is Institute policy not to discriminate against individuals on the basis of race, color, sex, sexual orientation, religion, handicap, age, or national or ethnic origin in the administration of its programs and activities.

This list includes all nonacademic jobs currently available on the MIT campus. Duplicate lists are posted outside the offices of the Special Asstant (10-215) and in the Personnel Office (E19-239).

Information on openings at Lincoln Laboratory (Lexington, MA) is available in the Personnel Office.

as who are NOT MIT employe should call the Personnel Office on extension 3-4251.

Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

3-4267

Ken Hewitt

Dick Higham	3-4278
Virginia Bishop	3-1591
Appointments:	
Therese McConnell	3-4274
Oveta Perry	3-1594
Kenneth W. Chin	3-4269
Sally Hansen	3-4275
Appointments:	3-4268
Maureen Howard	3-4268
Kim Bonfiglioli	3-4076
Annointments:	

Administrative and Academic Staff

Nancy Collins

Journals Advertising and Exhibits Manager, MIT Press Journals, to manage advertising campaigns for 11 scholarly journals in a variety of disciplines. Will plan and execute advertising solicitations (rate cards, media kits, specific issue mailings), including writing copy and handling production and mailing. Will also maintain advertiser lists, produce space ads, negotiate and fulfill exchange ad agreements, and handle invoicing for each issue. Some supervision of production and promotion assistants, designers, typesetters and printers will be required. Duties will also include planning journals' exhibit program; handling arrangements and logistics for 40 exhibits per year throughout the U.S. and abroad, ding booth and accessories reservations; preparing arrangements with combined exhibit services; preparing and mailing of materials and manning the booth. College degree required; second language preferred; liberal arts degree preferred. Three years in advertising field, publishing magazines, books or journals required. Must be skilled with word processor, be accurate typist, have good telephone skills, be willing to travel, and be well organized. Should be able to handle a variety of tasks, have budgeting experience, and adhere to deadlines. Must be able to represent the Press at exhibits and professional meetings. A86-684

ment/Leadership Gifts, will be concern with the identification, qualification, cultivation and solicitation of individual donors for significant gifts to the Institute. Will become acquainted with existing alumni volunteers and recruit additional volunteers, involving them in all phases of the solicitation of gifts from alumni and non-alumni. Will work in support of senior leaders and volunteers for MIT; provide background information on prospective donors; evolve solicitation strategies; accompany volunteers on solicitation calls as necessary; and arrange for proposals, acknowledgements, campus visits and meetings related to develop-ment objectives. Bachelor's degree or higher, and three or more years experience in development work with individual donors for MIT or another institution are required. Must be poised and articulate, have the initiative and creativity to inspire and motivate volunteers, and be able to work alone and at a distance from

District Director, Resource Develop

MIT for extended periods of time. A86-682, A86-683

Postdoctoral Associate, Applied Bio logical Sciences, to work on developing an enzymatic system for removing low dens-ity lipoprotein (LDL) for potential treatment of hypercholesterolemia. Must le PhD or MD degree and have experie nia. Must have in biochemistry or enzymology. C86-173

Sr. Analyst Programmer, Administrative Systems, to analyze user in-formation requirements and design infor-mation handling systems to satisfy remation handling systems to satisfy re-quirements. Requires overall knowledge and experience with all phases of infor-mation system development and concepts. Duties will include performing feasibility studies for major new or revised systems; defining client/user system objectives and requirements; preparing systems external design specifications; developing program and date specifications; analyzing personnel and resource requirements for new and modified systems/programs; ensuring adequate system documentation; interpreting system to users; directing preparation of user manuals; providing functional supervision and direction to assigned systems analysts; maintaining e liaison with client/user personnel and performing tasks as necessary to facilitate the project A Bachelor's degree or equivalent combination of education and experience is required. At least five years experience in systems analysis and computer-related activities is necessary. Should have experience with Digital computer equipment including VAX 11/785, VMS operating system, RMS file struc-tures and TDMS. Technical supervision of programming and/or systems personnel in a business application environment necessary. Knowledge of general accounting applications preferred. A86-676

Assistant to the Department Head, Ap plied Biological Sciences, to provide ad-ministrative support to the Department Head with major responsibility for coor-dinating faculty recruiting and promotions, various annual reports, and meet ings. Duties will include coordinating schedule for Department Head; scheduling and organizing faculty meetings; organizing and supervising production of faculty research summaries; coordinating preparation of 5-year plan updates, including future-year budget request; monitoring monthly statements and maintaining current balances for appropriate departmental accounts; and perform other administrative and financial duties as required. Will also have various supervisory, coordinating, and liaison responsibilities. Requires a B.A. or B.S. degree and a minimum of 3 years of direct/related experience. Should have excellent organizational, written, and oral communication skills. Must have ability to work independently and be able to su vise junior support staff members. A86-675

Editor/Production Manager, Campus Information Services, to assist Com-munications Manager in editorial and production assignments related to the publishing of course catalogues, direc-tories, fiscal year reports, and additional publications for the Institute. Will be responsible for duties at all stages of production: editing copy for consistency and style, detailed production scheduling of publications, manuscript preparation and typesetting specification, accurate proofreading of galleys and page proofs, preparing dummy layouts and in some cases executing final camera-ready mechanicals, selecting and sizing of photographs, maintaining and updating photo file, con-tacting typesetting and printing firms for prices, handling distribution of publications. Will also be responsible for administrative and budgetary duties associated with publication production. Excellent editing, organizational, and in-terpersonal skills necessary. Attention to detail is essential. Word processing and university-related experience helpful. Some physical work involved in moving cartons and distributing publications on campus. Bachelor's degree in English Communications, or closely related field required, with a minimum of 3 to 4 years experience in related publishing or graphic arts field desired. NON-SMOKING OFFICE A86-673

Sponsored Research Staff

Technical Assistant, Applied Biological Sciences, to work on a project involving chemical and biochemical studies of enzymes, and hematological and immuno logical studies in whole blood and animal experiments. Project will be a combined effort between MIT and Boston's Children's Hospital to test and develop an immobilized enzyme system to remove toxic substances from the blood of human patients. Requires SB degree and prior research experience preferred. R86-925

Research Staff, Haystack Observatory to carry out processing of data collected by Very Long Baseline radio telescope arrays on HP 1000 and Ridge 32C computers. Will operate and program computers for analysis and export of results to ex-ternal users in geophysical and astronomical fields. Requires knowledge and interest in FORTRAN; operating systems on site include HP RTE-6VM and UNIX. BS degree in Computer Science or related field required and 2-5 years experience desirable. Will consider recent graduate if individual has had software and scientific computing experience in school. R86-924

Research Technical Staff, Francis Bitter National Magnet Laboratory, to operate a Low-field Magnetic Lab and maintain equipment. Will perform measurements of the magnetic fields produced by the human brain, and digitally process the data. Brain measurements will be made of normal subjects and of epilepsy patients. (Must be available for occasional evening and weekend work when the lab is "electrically quiet.") Must have a BA degree in electrical engineering, bioengineering, or physics. Must also have electronics experience ogue) and some computer experience

Research Scientist, Research Laboratory of Electronics, to work under the direction of a faculty member and with the Speech and Auditory Physiology Groups. This is a new position and will be based primarily at the Eaton Peabody Laboratory of the Mass. Eye and Ear Infirmary. Primary research activity will be to generate a physiologically realistic model of human speech processing and to test this model by conducting appropriate physiological and psychophysical experi-ments. Will also be some involvement in physiological experiments using electric stimulation of the auditory nerve in animals. Requires a Ph.D. degree in a relevant discipline (i.e., Physiology, Psychology or Electrical Engineering and Computer Science) and three to five years of postdoctoral experience. Strong background in speech is required as is some experience in auditory psychophysics. R86-922

Sciences, to participate in a basic research program in microbial pathogenesis. The primary responsibility of this individual will be to work with a senior investigator a research problem involving DNA cloning and sequencing, protein secretion studies, and mutagenesis. The assistant will also be responsible for maintenance of bacterial stocks, routine maintenance of equipment, and minor laboratory duties. A BA degree in biology or related field and a MA degree in biology or related field is preferred. Laboratory experience in molecular biology and/or genetics required. R86-921 Technical Assistant, Center for Cancer

Technical Assistant, Applied Biological

Research, will make preparation of tissue culture and specialized media for group of four to five laboratories: preparation, sterilization, and testing of solutions to specification with stringent quality con-trol. Bachelor's degree in chemistry or biology, with previous laboratory experience is preferred. Must be able to work independently. R86-920

Research Specialist (Process Develop ment), Electrical Engineering and Computer Science, Microsystems Technology Laboratories, will be involved in develop ment and maintenance of VLSI processes for the Integrated Circuits Laboratory of the Microsystems Technology Labora-tories. Duties include process development, characterization, and maintenance photolithography, etching, oxidation diffusion, ion-implantation, chemical vapor deposition, and metalization. In-dividual will program and operate auto-matic testing equipment and analyze re-sulting data. Will be responsible for docu-mentation including process flow charts and yield trend charts. Must possess a technical undergraduate degree and two years of related experience. Ability to operate semiconductor process me ent equipment is essential. R86-919

Research Associate, Materials Science and Engineering, to work in the H. H. Uhlig Corrosion Laboratory at MIT. Will Oning Corrosion Laboratory at M11. Will be expected to work in the areas of photo-electrochemistry and a.c. impedance studies of passive films on pure metals and amorphous alloys. A Ph.D. in Materials Science and Engineering or related subject and research experience in electrochemistry and photoelectrochemistry is required. At least two years of experience is preferred as well as publication and proposal writing experience. Will be expected to work with graduate research students as well as with research staff from other groups in the department of Materials Science and Engineering.

Technical Assistant, Spectrometry Lab, Chemistry, to operate Chemistry Department Mass Spectrometers. Position entails running service operation for low and high resolution samples. Techniques include GC/MS, FAB and CI. Will also be responsible for routine upkeep of expend ables for the instrument. Good interpersonal skills are important as person deal directly with research personnel. A bachelor's degree in Chemistry is required and experience with analytical instrumentation is preferred. R86-916

Library Support Staff

Library Assistant III, MIT Libraries. Catalogue Department, Database Maintenance Section, will input catalogue ecords on the OCLC terminal from work forms prepared by cataloguers. Will edit online contributed and Library of Congress catalogue records based on catalog uer's written instructions; participate in maintenance of the Libraries database. including holdings and heading changes and type charge cards and book pockets Will also perform auxiliary aspects of cataloguing based on cataloguer's written instructions, i.e., removal and correction of cards in the Institute Libraries Cata-logue. Will type authority reference cards and files, and perform other auxiliary as signments as required. High school grad-uate or equivalent is necessary. Minimum of direct/related ex quired. Accurate typing and attention to detail essential. Experience using CRT terminal desirable. L86-266

Library Assistant IV. MIT Libraries.

Catalogue Department (temporary), will participate in a project funded by a U.S. Office of Education Title II-C grant that provides for the original cataloguing and online conversion of 11,250 scientific and technological publications issued by MIT from 1861 to 1974. Converts the bibliographic records of MIT publications (technical reports) to machine-readable form directly online, according to AACR2 catalogue code, OCLC bibliographic input standards, and MIT cataloguing policies. Assigns OCLC field and subfield codes and indicators Barcodes publications. Verifies personal names and series in MIT and online authority files, and creates new authority records on the OCLC terminal from work forms pre-pared by cataloguers. Edits online contributed and Library of Congress catalogue records based on cataloguer's written instructions. Assists in retrieval of items for cataloguing for Divisional/ Branch Libraries and the Retrospective Collection facility. Maintains statistics of items converted and input. High school graduate or equivalent is necessary; some college study preferred. Minimum of 2.5 years direct/related experience required. Working knowledge of the MARC format, preferably in the OCLC cataloguing Subsystem, and experience with CRT tions desired. Experience using AACR2 catalogue code is desirable. Accurate typ ing and attention to detail essential L86-229

Secretary/Staff Assistant

Administrative Secretary, Center for Real Estate Development, to type and proofread reports, correspondence, manuscripts and similar material from rough draft and dictaphone. Duties will also include editing and limited rewriting composing routine correspondence, and maintaining files. Will involve considerable and complex telephone contact, in-cluding setting up of appointments, making complex travel arrangements, obtain ing travel advances, and preparing travel reimbursement vouchers. Will also coordinate and schedule complex appointments meetings, seminars, and events, including large groups. Will serve as a source of in-formation about the Center and its programs, including dissemination of pub-lished material. Will arrange for reproduction and printing of reports and manu scripts; oversee inventory and reprinting of Center's publications; oversee inventory of office supplies; maintain journal sub scriptions file; and may direct work of other support staff. Will work under the supervision of the Administrative Officer and coordinate and direct flow of information between Center's Director, Associate Director for Education, senior faculty and other professionals within the Center High school graduate with some college or secretarial school experience and/or 3.5 years direct/related experience required. Minimum typing speed of 50-55 wpm necessary. Must have ability to speak and essary. Must nave admity to speak and write grammatically. Knowledge of or ability to learn word processing neces-sary. Ability to prioritize work and desire to work with diverse groups in an active office preferred. B86-264

Administrative Secretary, Chemistry Department, to provide administrative secretarial support to Department Head. Will perform varied duties related to the administration of an academic department; arrange department faculty meet-ings; compile data for statistical reports; prepare necessary documents for faculty cruitment and appointment process Make travel arrangements. Teach and help secretaries use of word processor. Excellent typing and word processing skills required. A knowledge of MIT helpful, 4.5 years direct/related experience required.

Administrative Secretary, Office of the Dean for Student Affairs, will provide a variety of secretarial and administrative support services. Will have considerable interaction with students, parents, faculty and staff. Excellent secretarial, communication and organizational skills nec-essary; knowledge of word processors highly desirable. Ability to work both independently and as part of a team impor-tant. Position requires good judgment, pa tience, tact and understanding. The abil ity to deal with confidential information ary. Thorough knowledge of MIT desirable. Some overtime work may be sary. Minimum 4.5 years direct/re lated experience required. NON-SMOKING OFFICE B86-193

Sr. Secretary, Urban Studies & Plann ing, will type correspondence, reports and manuscripts, and all class-related mate-rial. Will set up appointments for faculty and make travel arrangements; and will reproduce and distribute class handouts to students. May be asked to help out in general departmental typing if so needed and the time is available. Will be as signed to three faculty members. Should have excellent typing abilities. Should have word processing experience and/or be willing to learn. Minimum 2.5 years direct/related experience required with prior secretarial experience preferred. NON-SMOKING OFFICE B86-267

Sr. Secretary, Materials Science and Engineering, to provide support to a senior faculty member by typing technical reports, manuscripts, correspondence, and tables and charts from handwritten text or dictaphone: Will also compile re information from a variety of library sources, schedule travel (domestic and in-ternational), respond to reprint requests prepare a variety of classroom material, and monitor research accounts. Requires 2.5 years direct/related experience. Excellent typing required. Familiarity with IBM PC helpful as well as with MIT pro-

cedures. B86-234

Sr. Secretary, Educational Council, to handle various duties in alumni-related section of Admissions Office. Will provide secretarial support for Director; maintain office files and records (including data enhandle correspondence and photo calls from alumni interviewers, applicants, parents, etc., and respond to re-quests for information; assist with other office responsibilities as needed, including some supervision of student employees Excellent secretarial and organizationa skills required. Strong interpersonal skills and initiative necessary. Ability to dea with sensitive situations with tact, under standing, and good judgement important Willingness to learn DECII word pro-cessor preferred. Familiarity with MIT is perience required. NON-SMOKING OF-FICE B86-263 helpful and 2.5 years of direct/related ex

Sr. Secretary, Biology (part-time, 17.5 hours/week), to serve as secretary to facul-ty member. Primary responsibility will be in the administration of research funds which involves day-to-day bookkeeping and record-keeping, order processing, and short- and long-term forecasting. Other duties include typing and editing manu-scripts, composing and typing correspondence; preparing grant applications, i.e., computing salary and supply requirements and typing; making travel arrange ments; answering telephones; filing; typing and coordinating course materials and general coordination of laboratory of about ten people. Must have experience with IBM PC. Excellent typing skills, in terpersonal skills, and strong organiza tional skills necessary. Ability to transcribe from dictaphone preferred. Minimum 2.5 years direct/related experi ence required. B86-261

Sr. Staff Assistant, Center for Advanced Engineering Study, to work in Course Program. Duties will include ex-tensive telephone coverage; screening and forwarding calls both in primary and backup position (includes taking phone orders). Will initiate calls to customers on order and research related information. Will be responsible for accurate and time-ly order processing and will organize all

aspects of pre-order entry. Will work with Data Entry Marketing Assistant on order entry. Other duties will include preparing correspondence, filing, typing, and all correspondence, thing, typing, and an other client-related duties. Requires excellent telephone presentation, and superior organizational and interpersonal skills. Accurate typing of 40 to 50 wpm necessary. Minimum 2.5 years direct/related experience required. B86-259

Sr. Secretary, Center for Materials Research in Archaeology and Ethnology (part-time), to work in and essentially re the office of the Director of CMRAE. Mo of work is generated by the Director and by several faculty members who are staff members at the Center and who administer the graduate courses taught by CMRAE. Duties will include keeping track of the various programs of the Center and assisting in their administra-Center and assisting in their administra-tion. Will type correspondence, course syllabi and reading lists, and research proposals. Will have primary responsibil-ity for reserve book material for all courses, including ordering of books and xeroxing of articles; arranging meetings of CMRAE staff; helping to run the Sum-mer Institute course; and general coor-dination of all CMRAE activities through the Director's office. Position requires a highly skilled and very well organized and experienced person. Prior experience and experienced person. Prior experience in managing an office helpful. Excellent typing, interpersonal, organizational, and telephone skills necessary. Minimum 2 years experience required. Will work from 8:00 am to 12:00 noon. B86-257

Sr. Secretary, Electrical Engineering and Computer Science (part-time, 20 hours/week, flexible), to assist faculty member, Principal Research Scientist, and the students and staff of the Submicron Structures Laboratory. Duties will include arranging appointments and scheduling meetings, and responding to routine correspondence and memos. Will involve extensive multiple revisions, coor dination of graphics with text, typing of course material, research reports, pro-posals and publications using a Xerox 820-11 word processor system. Familiarity with use of a Xerox 820-11 word processor system would be desirable. Minimum 2.5 ears direct/related experience necessary

Sr. Secretary, Alumni Association, to provide secretarial and clerical support to Administrative Officer. Duties will include preparing reports and correspon-dence; scheduling meetings and appoint-ments; answering telephones; receiving visitors; sorting and distributing incoming mail; and maintaining files and records. Will also oversee inventory of all office and mailing supplies and operate of fice machines and equipment. Will prepare Institute forms, such as requisitions vouchers, and receipts; and prepare sup-port staff and student payrolls and related reports for Administrative Officer's nature. Ability to handle confidential information with discretion a must. MIT experience helpful but not necessary; word processing experience a plus B86-251

Secretary/Receptionist, Office of the Dean for Student Affairs, in the Student Assistance Services Section of the Office of the Dean for Student Affairs, to assist walk-in visitors to office; answer ques-tions and give directions to students; maintain calendars for the counseling deans and International Student Advisor screen potential appointments; sort office mail and student mail; and type basic visa documents for students, such as certificates and letters for scholarship ago cies. Will also assist in correspondence for Deans; file, pull files, and update student records. Will assist students in preparing forms for Immigration Service at MIT; assign lockers in the Cheney Room; and perform special projects as required, such as participation in the orientation of new students to MIT. Good typing and clerical skills necessary. Must be flexible, adaptable, and enjoy working with people, especially students, in a very busy office. B86-268

Secretary, Mechanical Engineering, to provide secretarial support to the director of the Innovation Center. Will type and maintain correspondence, manuscripts, proposals and reports; maintain files; answer phones, and assist with general office coverage. Excellent secretarial and typing skills required. Ability to proof-read essential. Minimum of 1 year direct/ related experience required. B86-265

Staff Assistant, Personnel-Benefits Office, will assist Benefits Office Staff members in the completion of a variety of special projects including the development and conversion of office records to an automated database. Will provide editorial assistance and support in the redesigning of various benefit summary plan descriptions. Will utilize DECII word processors to generate various correspondence and for letters pertaining to MIT's retirement plans. Fully developed DECII word processing skills highly desirable The ability to organize work, set priorities and work independently toward deadlines is essential. NON-SMOKING OFFICE

Staff Assistant, Personnel-Benefits Office, will assist in redesigning current pro cedures as appropriate in order to effi-ciently process a variety of benefits forms. Will utilize the DECII word processor to generate a variety of correspondence and for letters pertaining to MIT's retirement plans. Will assist in the development and conversion of office records to an auto mated database. Will maintain records thereafter via direct entry on a computer terminal. Other duties will involve cor-responding with Institute employees on a variety of benefits related issues and comating with other Institute offices on a regular basis. Experience in the use of automated office equipment is desired. Familiarity with word processing is important. The ability to organize work, set priorities and work independently toward deadlines is essential. Accuracy and attention to detail is also necessary. NON-SMOKING OFFICE B85-113

Technical Support

Reactor Operator, Nuclear Reactor Laboratory, to serve as shift operator on MIT Research Reactor after passing N.R.C. Operator's Examination. Will be required to work day, evening and night shifts as needed on a rotating basis. Will also be required to work in areas containing radioactive material, and strict adherence to appropriate radiation protection procedures will be required. Two years of technical college education or equivalent is required so that the person can readily learn the necessary physics, nuclear engineering and details of the MIT Reactor and its operation in order to pass the Operator's Licensing Examination administered by the Nuclear Regula-tory Commission. Absolute reliability, even disposition, and ability to remain steady and calm during emergencies required. A knowledge of electronic circuits would be helpful. Must be 18 years or older, T86-273

Technical Assistant, Civil Engineering to be responsible for collecting data of various research experiments in soil me chanics, rock mechanics, and construction materials in the REMERGENCE Labora tory (a joint Civil/Mechanical Engineering facility), utilizing different Data Acquisition Systems. Will pre-process data for a-nalysis by faculty and graduate students. Individual will assist the Director in the administration of the Laboratory concerning financial, personnel utilization and the effective use of space. Must be able to keep records of operating costs such as purchases of supplies, maintenance contracts, etc., determine when and how to effectively utilize UROP students and where and how to dispose of testing mate-rials, coordinate use of equipment with diverse needs by faculty and graduate students, and insure safety regulations are observed and space changes are im are observed and space changes are implemented according to a plan accommodating new equipment. Applicant must be understanding of testing principles, calibration procedures, and behavior of materials. Laboratory testing experience highly desired. Knowledge of MIT administrative procedures for Accounting, Purchasing, Personnel and Safety preferred. High school degree required with ferred. High school degree required with post high school training/schooling preferred. T86-258

Dental Assistant, Medical Department (temporary), will work in the MIT Dental Service and report to the Head Dental Assistant. Duties will include assisting the dentists with dental procedures preparing required dental solutions. sterilizing instruments, maintaining ex amining rooms as well as assisting with record keeping. High school and graduate of approved Dental Assistant program and previous work experience desirable. Must be pleasant, mature and able to work effectively and as a team member in a busy setting. T86-245

Office Assistant

Administrative Assistant, Alumni Association, to coordinate Cambridge-based projects and other administrative s of the national MIT Enterprise Forum of Cambridge. Will be response for processing all program materials in cluding serving as editorial and produc-tion coordinator for monthly newsletter. Will interact with alumni leaders, Forum Executive Committee, corporate sponsors and the general community. Will oversee the daily operations of the national office, including supervision of part-time clerical assistance. Requires five years direct/related small business experience or the equivalent combination of education and

Administrative Assistant, Resource Development, to compile and summarize background information on foundations, ns, and individuals for faculty deans and Resource Development staff Will maintain, in conjunction with senior research assistant, a donor relations tickler system for notifying faculty, staff, and others when reports are due to donors. Duties will include a close review of files and references, including electronic databases, of foundations, corporations, and individuals for faculty and staff; summarizing and interpreting information in files for written reports; review of giving information, prepared by senior research assistant: and computation of individuals known wealth. Will research MIT's interaction with foundations, corporations, and individuals as background for clearance decisions concerning appropriateness of fundraising approaches. Will respond to nuests for information from faculty and staff about foundations, corporations, and individuals by consulting files, reference books, electronic databases, and alumni database. Will oversee, with staff, the maintenance of files in all areas; and will supervise senior research assistants in file maintenance. High school graduate with a minimum of 4.5 years direct/related ex-perience required. Post high school education will count toward experience. Strong writing skills, organizational skills, and interpersonal skills necessary. Should have a thorough understanding of grammar and punctuation. Ability to analyze and correctly interpret information from files and reference books necessary Should also have ability to meet dead-lines, work with a group, get along well with others, and be able to supervise. Familiarity with computers and databases, or an interest in learning, helpful

Sr. Office Assistant, Foreign Language and Literatures Section, to staff the front offices of Section Headquarters and provide office support services to the faculty. Duties will include answering telephones handling mail, providing xerox services. ordering supplies and maintaining office equipment, with additional responsibility for classroom and event scheduling, pro ssing of book orders, maintenance of of fice records and preparation of specialized mailings. Good typing, excellent organiza tional skills, flexibility and attention to detail essential. Will train on DEC word processing system. Familiarity with another language helpful. Minimum 2.5 years experience in an office setting pre ferred. S86-274

Sr. Office Assistant, Resource Develop ment, to assist in the compilation and maintenance of background information on gift prospects and donors. Also requires maintenance of Development Office reference materials. Duties will in clude composing written reports as needed, compiling information from print-outs and data base, and other related duties. Will respond to miscellaneous written and telephone requests from enior officers about corporations, founda tions and individuals through various means. Will also organize and maintain

reference materials used by the Develop-ment Office staff including proxy state-ments, annual reports, and standard ref-erence sources. In addition, will implement mailings for reorder of reference materials and file new materials as received. High school graduate with a minimum of 2.5 years direct/related expe rience required. Post high school educa-tion will count toward experience. Strong organizational and analytical skills, good typing skills (40 wpm), and an interest in word processing and other computer skills necessary. Knowledge of grammar and spelling also important. Requires re-sourcefulness and an ability to manage time in order to meet deadlines as well as a pleasant telephone manner and an abil-ity to get along well with others. S86-270

Office Assistant, Physical Plant, to work in the Mechanical Section of Physical Plant. Primary duties will consist of routine typing, checking work orders for accuracy, batch and check labor/time card, answer telephone calls, and set up appointments for supervisors. Will also be uired to perform miscellaneous tasks as dictated by operational needs. Busine training or one year of experience re-quired. Must have good typing skills (45-55 wpm), be service oriented, and per-sonable in dealing with department and Institute personnel. Must be willing to learn to operate word processor. S86-272

Office Assistant, Office of the Registrar, will assist the supervisor of the Registra tion Section in the registration of stu-dents, verification of student status, preparation of registration data for entry into the CRT visual input terminals, and assisting in Registration Day Activities. Familiarity with word processing ma-chine helpful. Good typing skills, an inter-est in detailed work and willingness to work with students and faculty is neces College experience is desirable.

Office Assistant, MIT Libraries

ible, along with other unit members, for following a detailed schedule in process-ing incoming/outgoing domestic, internanal, and interdepartmental mail pack ages for the MIT Libraries. By means of a van and truck will deliver to and pick up mail from Libraries at various Institute locations. Will answer inquiries regarding current mail and shipping procedures and will request and maintain inventory of supplies. Responsible for knowledge and proper use of building facilities and li brary equipment, and adherence to all safety/security procedures. Will also maintain files and records and compile daily/monthly statistics. Should have knowledge of current postal rates; main tain adequate postage and when neces-sary replenish supply of postage. Will also perform special assignments as requested by supervisor. High school graduate or ssary. A minimum of 1 equivalent is neces year direct/related experience required Willingness and capacity for physical ex-ertion and ability to lift 50 lb+ mail bags/boxes and push heavily loaded trucks and 2-wheelers. Should have 3 years driving experience, valid Mass. Driver's license and an excellent driving record (current registry clearance). Ability to operate a delivery van is required. Some out-of-state and off-campus driving may be required. Requires good math ap titude and a good command of the English language. Ability to follow a schedule and adjust to variable flow of material essential. Mechanical ability desirable. Some knowledge of automobile/van maintenance required. NON **SMOKING OFFICE S86-244**

Office Assistant, Office of the Registrar (this is a dual full-time position working in both the Registration Section and Com-mencement Section). The Registration Section involves the preparation and registration of students; verification of ident status; input into the CRT terminals; and assistance in the preparation of student requests for transcripts. This will normally be from late June through December. The Commencement Section involves processing of Advanced Degree applications; checking the completion of degree requirements for graduate students; preparation of degree booklet; in-putting into the CRT terminals; and assisting the supervisor in maintaining the inventory on diplomas, doctorate hoods, and other stock. Good typing skills and interest in detailed work required. Willingness to meet and work with stu-dents and faculty. College experience is desirable. S86-242

Office Assistant, Cell Culture Center. will include filing and processing all incoming and outgoing mail. Will handle reprint requests and other general office work. Will also assist supervisor in processing shipping materials and invoicing. Minimal accounting procedures.
Ability to type 45 wpm with accuracy and Ability to type 45 wpm with accuracy and neatness essential. Working independently and a good telephone messary. Minimum one year dir experience preferred. NON-SMOKING **OFFICE S86-195**

Office Assistant, Personnel - Faculty and Staff Information Services, to process and maintain employment information concerning Faculty and Staff, under the supervision of the Assistant Manager. Will use word processing equipment or will type notification letters, update computer files daily, respond to telephone and written inquiries, assist in salary verification and review processes, and assist in the preparation of various reports and projects. Work will include contact with other parts of the Institute and with outside agencies on a daily basis. High school degree or its equivalent and a min-imum of 1 year direct/related experience is required. Attention to detail and basic office skills/experience preferred. Good typing and proficiency with computer terminals and/or word processing as well as absolute discretion in handling confidential material desirable. S86-190

Receptionist, Alumni Association, to serve as office receptionist for a busy office, providing information regarding the services of the Alumni Association Duties will include receiving, screening and assisting visitors; answering tele phone calls; assisting in scheduling of the Bush Room; opening Compton Gallery updating a master calendar of events ordering supplies; providing secretarial backup; and handling special assignments as they arise. Must have excellent interpersonal skills and good typing and larged skills. Must have ability to take clerical skills. Must have ability to take

Spaulding named chairman; MacKellar director of CRED

has named Charles H. Spaulding as its first chairman and James McKellar to replace Mr. Spaulding as director.

In addition, the Center has appointed Jerold S. Kayden as the new associate director for education and director of the Master of Science Program in Real Estate Development, Professor Bernard J. Frieden will continue as director for research with responsibility for the Center's research agenda.

The appointments coincide with a series of changes at the Center in keeping with its continued growth and increasing membership. According to Mr. Spaulding, they signify a major effort to strengthen the Center's academic and research activities, and to secure endowment funding for the Center through a fund-raising campaign.

The Center was founded in 1984 by the School of Architecture and Planning, largely in response to the initiative of Mr. Spaulding, who served as its first director. He is best known as a leading figure in the real estate industry. He is the founder and past chairman of Spaulding and Slye, and currently the president of Spaulding Investment Company, both of Boston.

Mr. McKellar, visiting professor from the the University of Calgary, Alberta, is a practicing architect, home builder and developer who came to the Center in 1985 as associate director for education. He teaches several courses at the Center in addition to pursuing research interests both through the Center and the MIT-Harvard Joint Center for Housing Studies.

Mr. McKellar is a graduate of the University of Toronto with a degree in architecture, and of the University of Pennsylvania, where he

The Center for Real Estate Development completed graduate degrees both in architecture and in city planning, and where he subsequently taught for several years.

Much of his work now focuses on the organization and structure of the housing industry from an international perspective. He is completing a book on Japanese industrialized housing and is a consultant to Japan's largest industrialized housing company. He also is undertaking research on the impact of technological change on the home building industry in the United States and Canada.

Mr. Kayden, currently a Fellow at the Lincoln Institute of Land Policy will assume his responsibilities full time at the Center in July, 1986. Since 1981 he has been teaching courses at the Harvard Graduate School of Design in real estate development and finance, land-use law and urban policy.

Mr. Kayden holds a BA from Harvard University, a law degree from Harvard Law School and a Master of City Planning Degree from the Harvard Graduate School of Design.

He is a former law clerk to U.S. Supreme Court Justice William J. Brennan; co-founder and director of the Harvard International Training Project, which trains officials from less-developed countries in urban planning, land-use law and real estate analysis; president of MasterClass, Inc., a company that produces and distributes educational and entertainment videos and films in the fine arts; and cofounder of the "Learning From Performers' program at Harvard. He has worked with and consulted for numerous private developers and public agencies, and has written extensively in the field of urban development and land-use laws. His book, Incentive Zoning, will be published later this year.

Raymond Nasher to speak March 12

Raymond Nasher, a national developer and chairman of the board of The Nasher Company of Dallas, Texas, will lead off the Center for Real Estate Development's 1986 Hahn Lecture Series on Wednesday, March 12, with a talk on "Humanizing the Environment Through Development." He will speak at 6pm in Rm

In his talk, Mr. Nasher will draw on his experience as developer of NorthPark, a 200acre mixed-use site on the north side of Dallas. When it was opened 20 years ago, NorthPark was the largest shopping mall of its kind in the world and the first to adhere to a harmonious architectural plan.

The 1986 Hahn Lecture Series has been made possible by a gift from Ernest W. Hahn, chairman of the board of Ernest W. Hahn, Inc., of San Diego, Calif., and a founding member of the Center for Real Estate Develop-

Other lecturers in the series, which brings nationally known developers to MIT, will be Bernard Ghert, president and chief executive officer of The Cadillac Fairview Corporation Limited of Toronto, on April 1, and Kent



Colton, chief executive officer of the National Association of Home Builders in Washington, D.C., on May 6.

boom study Office building

(continued from page 1)

(Until the Economic Recovery and Tax Act of 1981, commercial real estate was not particularly favored in the U.S. tax code, according to the authors. After 1981, depreciable building lives were greatly shortened, and the value of this depreciation could be leveraged and spread over only a small amount of equity investment. The rapid proliferation of real estate "syndicated" partnerships during the first half of the decade attests to the importance of these tax benefits, they say.)

What has driven the boom even more than the tax advantages, the authors argue, are financial deregulation and changes in pension fund diversification rules that have greatly facilitated the flows of both debt and equity capital into real estate. These changes, which occurred during the early 1980s, resulted in 'too much money chasing development, according to the researchers, who say it is this factor that has largely stimulated today's boom.

The report also forecasts future market conditions to 1991 using econometric techniques, giving two scenarios-one in which there are no tax revisions affecting real estate and the other reflecting the elimination of favorable tax treatment.

In the first case, the report concludes:

-Office construction, even with record vacancy rates, will decline only gradually over the next few years because there is still too much money looking for development projects.

-The demand for office space, as measured by net absorption and new office employment growth, will taper off from current rates in the late 1980s.

-Vacancy rates will rise from 17 per cent at the end of 1985 to 21 per cent by 1991. -In the event favorable treatment is elimi-

nated, the study forecasts: -A decline in construction by 15-20 per cent

per year. -A national office vacancy rate around 17

per cent—current levels—through 1991. Copies of the report are available from the

Center for Real Estate Development, W31-310. Telephone: 3-4373.

initiative and be flexible. Applicants should be interested in automating some of the scheduling procedures either with a word processor or personal computer. Must be able to work well under pressure, deal tactfully and effectively with people, and have a good sense of humor. NON-SMOKING OFFICE S86-262

Receptionist, Center For Real Estate

Development, will greet visitors and students and direct them to appropriate individuals or offices; answer incoming calls; serve as source of information about Center and its services and policies; serve as source of general information about Center's M.S. Program in Real Estate Development to callers and visitors; schedule appointments and make complex travel arrangements; receive RSVP's; distribute incoming mail; maintain and replenish postage meter; post daily outgo ing mail; order and maintain inventory of office supplies, and other related duties. Ability to work autonomously and under occasional pressure required. Accurate typing and ability to learn word processing necessary. Should be able to relate well with diverse group of professionals, faculty, students and visitors. Minimum of one year experience in an office setting required. S86-249

Service Staff

Carpenter, Physical Plant, with a minimum of 7 years experience in the trade with particular emphasis on finish carpentry work. Applicant shall be able to read prints and do layouts on all types of cabinets. Must be qualified to perform door and partition installation and to lay tiles. A thorough knowledge of work ing characteristics of various types of materials and woodworking machinery is re quired. H86-350

Audiovisual Operator B, Graphic Arts Service, to set up, operate and maintain all types of slide and motion picture equipment, such as projectors, rewinders and splicing machines, etc. Clean, inspect and repair slides and films, and maintain department records of all equipment and films. Drive motor vehicle, deliver and pick up material and equipment, and perform other related duties as assigned Needs some instruction and supervision. Individual will be required to work overtime when applicable. A minimum of four years of applicable experience is required. Must have Massachusetts driver's license (unrestricted). H86-345

2nd Class Engineer, Day Crew Maintenance, Physical Plant. Operating Engineer with a Massachusetts 2nd Class Stationary License for regular Day Crew Maintenance shift (7 a.m.-3 p.m.). Must have operating and maintenance experience with high pressure oil/gas boilers, electric/steam-driven refrigeration equip-ment, and plant auxiliaries. Must also be willing to stand watch on any shift to cover for vacations, illness, etc. H86-348

MIT/Wellesley Upward Bound Program, SUMMER TEACHING AND RESIDENTIAL POSITIONS. Math, English, Science, Social Studies and Study Skills teachers and teacher assistants and residential assistants needed for a seven (7) week college prep program for seventy (70) disadvantaged high school students. Must live at Wellesley College during the week. Salary range \$1200-\$1800 (based on relevant experience and position) plus room and board. For more information and an application, contact: MIT/Wellesley Upward Bound Program, 18 Vassar Street, Cambridge, Ma. 02139, 253-5124

Tech Talk, March 5, 1986, Page 7



Slain Swedish leader Olof Palme talked with former MIT President Jerome B. Wiesner, with whom he worked on arms control matters, before giving a lecture here in 1980.

Hazardous wastes seen costly

New regulations on the disposal and cleanup of hazardous waste promise to have farreaching effects on the finances of American business and may even force individual householders to clean up their act.

The prediction is made by Gordon F. Bloom, a lawyer, real estate developer and senior lecturer at the Sloan School of Management. Writing in the February/March issue of "Technology Review," MIT's national magazine of technology and policy, Bloom said that the "fallout from ever more stringent regulations on the disposal of hazardous waste, and the costs of cleaning up the many wastes improperly disposed of in the past, will affect the lives of every US citizen and the future of every business."

"The prices of consumer goods will rise," he continues, "small firms may go out of business, the structure of industries may change, and companies will have to redesign their products to produce less waste."

One example of such "widespread ramifications of regulations on hazardous waste," he said, might occur when a savings bank grants a mortgage loan to a developer to build a shopping center. "The center operates successfully," he says, "until one day the owner receives a notice informing him that the center has been built on land with buried oil tanks that are now leaking and polluting a nearby water source. The state orders the owner to clean up the waste (and) since the owner cannot comply with the state order and also afford to pay interest and principal on his mortgage, he defaults. A good loan has suddenly become a bad loan."

Even now, Bloom said, some firms face enormous potential liabilities from leaking landfills even though they may have complied with all regulations in effect at the time when they disposed of the waste.

He notes in his article that the Environmental Protection Agency estimates there are 30,000 to 50,000 improper waste dumps in the nation, many of which are now leaking into wells and aquifers.

The Office of Technology Assessment, he adds, estimates that dealing with just the most critical 10,000 sites will cost \$100 billion.

"Some firms may decide to stop making products such as highly toxic chemicals, and other companies that depend on these materials may find that supplies have dried up," he comments. "Companies may also be reluctant to begin making new products that result in hazardous waste because the threat of liability is too severe. . Moreover, individuals may be reluctant to start up small firms that generate hazardous waste because some courts have held company officers personally liable for cleanup costs, especially if the officers are substantial stockholders."

Nor will the effects be limited to businesses, Bloom writes:

"Because of problems with municipal landfills, individuals may soon find that they have to take responsibility for the hazardous waste they discard. Householders dispose of enormous amounts of potentially hazardous products daily, including drain and oven cleaners, pesticides, used batteries, and spot removers and other solvents...

"Although disposal of these products by individuals is now unregulated, at least ten states are considering control measures. These include an excise tax on such items that the state can use to pay to clean up wastes. . . As concern about leaking landfills grows, states are also likely to require consumers to pay a hefty deposit when buying hazardous products. . ."

Bloom calls upon individuals, businesses and government to focus their attention on trying to deal more effectively with the problem.

"We can no longer afford to consider pollution from hazardous waste someone else's problem and avoid taking responsibility for the waste each of us generates," he concludes.

Pickens to speak

T. Boone Pickens Jr., president and chairman of Mesa Petroleum Company and a controversial corporate raider, will speak on the topic, "Let's Get Corporate America Going," Thursday, March 6, at 4:30pm in Bowen Hall (E51-329). The lecture is part of the Sloan School's Distinguished Speakers

Writing competition issues call for papers

The 1985-86 Writing Prize Competition, sponsored by the MIT Writing Program, is accepting manuscripts from undergraduate students through April 18, 1986. The 24 prizes, each of which carries a cash award, are presented to those students whose essays, plays, poetry, short stories, and technical papers are judged to be of the highest quality by a committee of faculty and staff members.

Ilona Karmel, senior lecturer in the writing program and this year's competition chairman, hopes all interested students will "take the plunge" and submit their best efforts to the competition. She is also encouraging faculty members who receive undergraduate papers of outstanding quality to have their students enter the competition.

The prizes are:

The Ellen King Prize for Freshman Writing—Writing by freshmen at MIT in all categories (fiction, short story, essay, drama), is eligible. Awards: \$150 first prize, \$75 second prize, \$25 honorable mention.

The Robert A. Boit Writing Prize—Writing by undergraduates at MIT in the categories of essay, poetry and short story, is eligible. Awards (in each category): \$200 first

prize, \$100 second prize, \$50 honorable mention.

The Boit Manuscript Prize—Works of substantial length (fiction, poetry, essays), completed or in progress, by MIT undergraduates, are eligible. Primarily this award is for longer works and collections, in any category, which give evidence of publishable quality. Awards: \$300 first prize, \$150 second prize, \$75 honorable mention.

The Writing Program Prize for Engineering Writing—Writing by undergraduates at MIT, on any topic of professional interest to engineers, is eligible. Awards: \$200 first prize, \$100 second prize, \$50 honorable mention.

The Writing Program Prize for Scientific Writing—Writing by undergraduates at MIT, on any topic of professional interest to scientists, is eligible. Awards: \$200 first prize, \$100 second prize, \$50 honorable mention.

De Witt Wallace Prize for Science Writing for the Public—Writing by undergraduates at MIT, addressed to lay audiences, on issues and developments in science, medicine, and engineering. Works of any length are eligible. Awards:\$300 first prize, \$150 second prize, \$75 honorable mention.

For more information, applications and prize guidelines are available in the Writing Program headquarters office, Rm14E-310.

"We live in the days of madness..." the late Prime Minister Olof Palme

Swedish Prime Minister Olof Palme, assassinated in Stockholm last week, came to MIT in December 1980 for a World Lecture Series talk on arms control, telling his MIT audience that "we live in the days of madness."

At the time, Mr. Palme was the opposition

At the time, Mr. Palme was the opposition leader in Sweden after having headed the government from 1969 to 1976; he became prime minister again in 1982 when his Social Democratic Party won an election that ended six years of non-socialist rule.

Mr. Palme, an ardent supporter of arms reduction, worked closely on the arms control issue and other international projects with former MIT President Jerome B. Wiesner. Dr. Wiesner said this week that Mr. Palme was one of the people he "most admired in the world."

In his MIT talk, Mr. Palme said, "It seems as if we are being driven towards nuclear war by the sheer momentum of military technology. I do not hesitate to say that we live in the days of madness. I firmly believe that unless something drastic can be done, the uncontrolled arms race will lead to a nuclear catastrophe."

Martin Buerger dies at 82

Martin J. Buerger, a retired professor renowned for his laboratory and pioneering work in the application of X-ray crystallography, died Tuesday, Feb. 25 of Alzheimer's Disease at his home in Lincoln. He was 82.

Dr. Buerger, Institute Professor, emeritus, and professor of mineralogy and crystallography, emeritus, had been associated with MIT as a student and faculty member for 55 years when he closed out his career in 1975.

Dr. Buerger created and directed an X-ray diffraction laboratory devoted to crystal structure analysis that was internationally known for its instruments, analytical methods, research publications and the young scientists trained under his direction.

The laboratory developed systematic methods for determining how individual atoms in crystals are arranged in space. His method of "image seeking functions" employed a mathematical device to sort distances between the atoms, so that they fall into proper places in a pattern.

Because the properties and behavior of matter depend on the spatial arrangement of atoms, his instruments and analytical methods had importance in fields as diverse as chemistry, physics, metallurgy and molecular bi-

In addition to inventing two dozen new instruments and accessories, he authored ten textbooks and more than 200 journal articles in which he discussed his inventions, new

methods and new ideas.

A former student, Dr. Bernhardt J. Wuensch, professor of ceramics, said: "Martin Buerger's impact on crystallography extended beyond his textbooks and important research contributions to instrumentation and theory. Many of his former students and postdoctoral associates fill key academic positions throughout the U.S. and worldwide. His long service as editor of the Zeitschrift Fuer Kristallographie and on the editorial committee of the International Tables for X-ray Crystallography continued to influence developments in his field until the time of his death. His guidance will be deeply missed. It is significant that his influence will continue to be recognized through the recent establishment of the Martin J. Buerger Award of the American Crystal-lographic Association."

Dr. Buerger was born in Detroit, Mich., but moved with his family to several locations in New York state before graduating from Morris High School in New York City. He began his undergraduate work at MIT in 1920 in chemistry, then transferred to chemical engineering and mining engineering before receiving the SB in 1925. He received the SM in geology in 1927 and the PhD in mineralogy in 1929

He began his long teaching career while still a graduate student, as a teaching assistant

John Babcock

John Brazer Babcock, 96, professor of railway engineering emeritus in the Department of Civil Engineering, died February 19 in Portland. Maine.

A member of the faculty since 1916, he was in charge of courses in railway engineering and transportation, construction engineering and other subjects until his retirement in 1954. For 25 years, he served as placement officer for what was then called the Department of Civil and Sanitary Engineering. He served as a lecturer at MIT from 1954-59.

During World War II, he served as railroad evacuation officer for the Massachusetts Committee on Public Safety.

Professor Babcock was born in Boston, and was the son of the late John Brazer and Harriet A. (Burditt) Babcock Jr. He graduated from the Mechanic Arts High School in 1906 and MIT where he received the SB in civil engineering in 1910.

Following graduation he worked for six years with the Canadian railroads and was a consulting engineer.

He served in a variety of offices, including president of the Boston Society of Civil Engineers, and as chairman of the Transportation Committee of the American Society of Civil Engineers. He was secretary of the Engineering Societies of New England. He held memberships in Tau Beta Pi and was the oldest living national honor member of Chi Epsilon, the national civil engineering fraternity.

In 1979, he received the MIT Bronze Beaver. He was married in 1913 to Mildred Willard of Boston who died in 1952.

He leaves a son, Willard F. of North Carolina, three grandchildren and a great-grandchild. in 1925-27, and instructor in 1927-29. He joined the faculty as an assistant professor in 1929, became an associate professor in 1935, professor in 1944 and Institute Professor, a rank of special distinction conferred by fellow faculty members, in 1956. From 1956 to 1963 he served as director of MIT's School of Advanced Study. At retirement in 1973, he became a senior research associate for an additional two years until 1975.

Dr. Buerger was elected to the National Academy of Sciences in 1958. He served as president of the American Crystallographic Society, the American Society for X-Ray and Electronic Diffraction and the Mineralogical Society of America; as vice president of the Geological Society of America; and as a councilor of the American Academy of Arts and Sciences.

He also served on numerous United States and international bodies, and he was made a foreign member of the Brazilian Academy of Sciences for his assistance in inaugurating a program of crystallography at the University of Rio de Janeiro.

His honors included the Arthur L. Day Medal for distinguished application of physics and chemistry to geology, presented by the Geology Society of America; the Roebling Award of the Mineralogical Society of America; and an honorary doctorate from the University of Berne in Switzerland.

He is survived by his wife, Lila (MacAskill); five daughters, Marla Friedrich of Rochester, N.Y.; Laura Sawyer of Mechanicsburg, Pa.; Janet Buerger of Rochester, N.Y., and Lincoln; Dorothy Buerger of Lincoln and Patricia Avery of West Springfield, N.H.; and three grandchildren, Julie Sawyer, Lisa Friedrich and Cylyn Avery.

Services will be private.

Donations may be sent to the Martin J. Buerger Student Aid Fund, Department of Earth, Atmospheric and Planetary Sciences, Rm 54-918.

Dr. Violet Haas

Dr. Violet B. Haas, 59, a former visiting professor in electrical engineering in 1983-1984, died January 21 in Lafayette, Ind. after a long illness.

Dr. Haas was a professor of electrical engineering at Purdue University where she had been on the faculty since January 1962. During her professorship at MIT she was active in many women groups.

Born in Brooklyn, N.Y., she received the AB degree from Brooklyn College in 1947, the SM degree in 1949 and PhD degree in 1951 from MIT

Dr. Haas was named a Vassie James Hill Fellow in 1951, a National Science Foundation Science Faculty Fellow in 1960, and was elected as one of five "Very Important Women" at Purdue by the Association of Women Students in 1976.

She received the D.D. Ewing Award in 1977, the Helen B. Schleman Gold Medallion Award in 1978, and was listed in Who's Who of American Women, and American Men and Women of Science.

She has had numerous articles published in research, scholarly and professional journals.

She was a member of the Society of Women

She was a member of the Society of Women Engineers; Society of Industrial and Applied Math; a board member of American Society of Electrical Engineering Constituent Committee on Women in Engineering, and was past editor of Women Engineering Students Newsletter. She was also a member of the League of Women Voters; YWCA and was on the board of directors at Lafayette Symphony.

She leaves her husband, Dr. Felix Haas, executive vice president and provost at Purdue, who received the SB degree in 1948, SM in 1949 and PhD in 1952 from MIT; a daughter, Elizabeth Ann of Cleveland who received the SM in 1977 and PhD in 1979 from MIT; and two sons, Richard Allan of Worcester, who received SB in 1973 from MIT and David Robert of Berkeley, Calif.

Anna Beaton

Anna Beaton, 55, of North Andover, an accounting assistant in the Comptroller's Accounting Office, died February 10 in the MIT infirmary. She had worked in the comptroller's office since she joined MIT in 1977. Mrs. Beaton leaves her husband, William, who works at the Charles Stark Draper Laboratory; two daughters, Deborah of Washington, D.C. and Linda, a student at the University of Maine; and a son, Steven, of Derry, N.H.

Page 8, Tech Talk, March 5, 1986