Massachusetts Institute
of Technology

TECH TALK

February 5, 1986
Volume 30, Number 20

World watching

An experimental MIT system that provides electronic searching of the full text of the New York Times and the Associated Press is now being offered to the MIT Community at no charge by the Laboratory for Computer Science and Project Athena. The system operates by delivering information to IBM personal computers via a digital packet radio system, and provides up-to-the-minute information on world news, local events, financial reports, business news, editorials, commentaries, and features on the arts. If you have an IBM PC at your home or office and would like to use a system that can help you find news items of interest, call Professor David Gifford's office at x3-6014.

No Tech Talk

Because of the Washington's Birthday holiday observation February 17, Tech Talk will not be published February 19. The Institute Calendar in next week's paper will cover the period from February 12-March 2. The deadline for listings will be Friday, Feb. 7, at noon.

Gray hours

President Gray will begin the second term with open office hours Thursday, Feb. 13, 3-5pm. The time is set aside so that any member of the community may visit his office to discuss matters of interest to the community. Appointments may be made only on February 13 by stopping by the reception area in Rm 3-208 or calling x3-4665.

AARP resumes

Following its winter hiatus, the MIT Cambridge Chapter of the American Association of Retired Persons will resume regular meetings on Tuesday, Feb. 25, with a luncheon in the Mezzanine Lounge. The luncheon (at $5/person) will feature a hot buffet with Southern fried chicken, cole slaw, potato salad, desert and beverages.

Speakers at the luncheon will be Larry and Ruth Beckley who will describe their joint hobby of bird-carving, in which Larry does the carving and Ruth the painting of the life-like creatures. Mr. Beckley is the retired executive officer of the Center for Space Research.

At the March 25 meeting, Jeri and Bernard Whitman will make a slide presentation of their recent trip to Africa, Egypt and London.

Fitness tests

The popular physical fitness assessment tests will be given again beginning Monday, Feb. 10, 3:30-6pm (on a half-hour appointment basis) in the coed sports medicine training room in duPont Athletic Center. The program is offered cooperatively by the Department of Athletics and the Medical Department.

The assessment will consist of a cycle ergomenter test to assess aerobic fitness, muscular strength tests (push-ups and sit-ups) body composition and flexibility.

Each participant will receive a report indicating his or her results compared to established norms. Follow-up tests for improvement comparison also will be offered.

To schedule an appointment, call x3-4908, 3:30-6:30pm Monday through Thursday. All participants must have a valid MIT athletic card. Those over 35 must obtain medical clearance from the Medical Department.

MacVicar on the undergraduate program

As MIT's new dean for undergraduate education, Professor Margaret L.A. MacVicar is a key figure in the ongoing reassessment of the Institute's undergraduate educational program announced by Provost John M. Deutch last spring. Dean MacVicar is Cecil and Ida Green Professor of Education, professor of physical science, director of the Undergraduate Research Opportunities Program and vice president of the Carnegie Institution of Washington, D.C.

This Question-and-Answer interview is derived from remarks she made to the MIT Corporation in December.

Q: Where is MIT as an undergraduate institution, and where might it go?

A: Since no one has been Dean for Undergraduate Education before, let me take a moment to comment on the significance of the occasion.

The establishment of my office is an unambiguous statement by the administration that MIT must have at its heart commitment to a world-class undergraduate educational program. The administration's statement—articulated first by President Paul Gray, and then fulfilled in John Deutch's reorganization of the Provost's Office—paralleled a widely held view by the faculty that such an office had to be established. The faculty—in a surprisingly swift process last winter and spring—dissolved its longstanding Committee on Educational Policy and established a new faculty governance structure including the Committee on the Undergraduate Program, which is headed by this new Dean, at faculty request.

So, I stand here representing a new partnership of the administration and the faculty, centered on our undergraduate education program.

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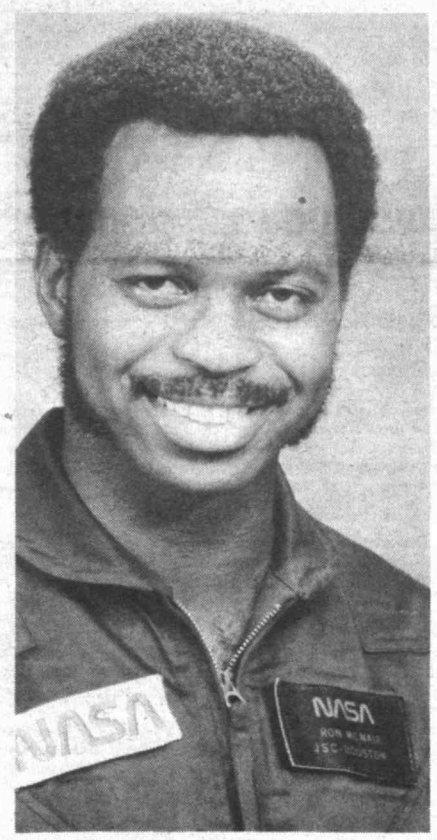

MIT will conduct a memorial service at 2pm Wednesday, Feb. 12, in Kresge Auditorium for its alumnus Dr. Ronald E. McNair, one of the seven people killed when the Space Shuttle Challenger exploded January 28. Dr. McNair, 35, who received the PhD in physics in 1977, had maintained close contact with MIT. On page 8 is an essay by Dr. McNair, published originally in How To Get There From Here, in which he gave his thoughts on setting and achieving personal goals.

Ecology is spring seminar focus

A spring term seminar on the scientific, technological and public policy aspects of environmental quality and human health, especially as related to industrial development, will begin at 4pm on Friday, Feb. 7, in Rm E25-401.

The inaugural speaker will be Dr. William G. Thilly, professor of genetic toxicology in the Department of Applied Biological Sciences. He will discuss "Towards Measuring Human Risks from Chemicals."

The seminar sponsors are the Center for Technology, Policy and Industrial Development of the School of Engineering and the Program in Health Policy of the Whitaker College of Health Sciences, Technology and Management.

At 4pm on Feb. 13, Dr. Samuel J. Keyser, associate provost for educational policy and programs, will discuss "An MIT Education for the 21st Century." He will speak in Rm E25-401. Dr. Keyser is a member of the Department of Linguistics and Philosophy.

Subsequent seminar speakers are: Feb. 19—Professor Lawrence E. Susskind, Department of Urban Studies and Planning, "Mediating Science-Intensive Policy Disputes," 4pm, Rm E25-401; Feb. 25—Professor David H. Marks, head, Department of Civil Engineering, "Technology and Policy Aspects of Hazardous Waste Management," 4pm, Rm 4-149; March 3—Professor Sallie W. Chisholm, Department of Civil Engineering, "Ecology: Reductionism and Holism in Research and Education," 4pm, Rm E25-401.

Speakers for the subsequent lectures in the seminar will be announced later. Refreshments will be served at 3:30.

The seminar grew out of an informal luncheon meeting in December hosted by the Center for Technology, Policy and Industrial Development. The luncheon brought together faculty from many departments, research staff members and students. Their common interest: the scientific, technological and public policy aspects of environmental quality and human health, particularly as related to industrial development.

An ad hoc steering committee was formed to coordinate future activities. Members are Professors Michael B. Bever, Sallie W. Chisholm, Stephan L. Chorover, James A. Fay, David H. Marks and Lawrence E. Susskind, and principal research associate Dale B. Hattis and industrial liaison officer W. Larry Ritchie.

Black history month is observed

By SHARON DAVIS
Staff Writer

"There is a void in America with regard to the history of black Americans. Most history books barely touch on this subject, consequently, there is an ignorance of black culture as a whole, said Janice R. Cooper, former associate dean for student affairs."

"February—Black History Month—gives America the opportunity to create awareness and to highlight aspects of the black experience," Ms. Cooper, co-chairman of MIT's tribute, added.

To celebrate black America, the following series of lectures, concerts, films and other events will take place this month at MIT:

—"The Black Religious Experience," a panel discussion featuring several local theologians, including Dr. Michael Haynes, pastor of Twelfth Baptist Church, Roxbury, and Rev. Michael Walker, pastor of Messiah Baptist Church, Brockton. Addressed will be the history and development of the black church and its role in the black community Thursday, Feb. 6, 7-9pm in the Bush Room, (Rm 10-105).

—*American Pictures*. This multimedia experience focusing on the American underclass will be showed Tuesday, Feb. 11, at 5:30pm in Rm 26-100.

—Dr. Helen G. Edmonds, a former visiting scholar in the MIT Writing Program, will talk about her book, *The American Black Woman in the Political Process Since 1900*, at noon

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Alumni named to panel

Professor Eugene E. Covert and three other MIT alumni are among the 12 people appointed by President Reagan to investigate the cause of the explosion of the space shuttle Challenger. The President appointed the independent commission on Monday, Feb. 3.

Professor Covert, head of the Department of Aeronautics and Astronautics, has been a NASA consultant on rocket engines and formerly was chief scientist for the Air Force. He received the PhD in 1958 from MIT.

Other alumni on the commission are Richard P. Feynman, professor of theoretical physics at the California Institute of Technology, who received the PhD in physics in 1939; Air Force Maj. Gen. Donald J. Kutyna, director of space systems and command control and communications, who received the SM degree in aeronautics in 1965, and Albert D. Wheelon, senior vice president of Hughes Aircraft Co. and also a member of the President's Foreign Intelligence Advisory Board, who received the PhD in physics in 1952.

Search opens for new food service

MIT has announced plans to begin a search for a food service management company to operate all food service facilities on the campus, according to Senior Vice President William R. Dickson.

A search committee is now being formed with representatives from various segments of the community to solicit bids from a number of food service companies. Mr. Dickson said the committee is expected to complete its search and evaluation process by June so that if a management company is selected, it could begin operations in July.

The Institute itself now operates all the food services on the campus except for the vending machines (Seilers) and the Faculty Club (a division of Marriott). If an outside company is selected, it would be expected to operate all the food service except for vending machines.

"Food service management companies have become very innovative and responsive in providing for the dining needs of institutional clients," Mr. Dickson said. "The experience they have gained by serving a number of clients, particularly in the college and university market, can be used to provide this community with a broader range of services, responding to changing needs effectively and expeditiously.

"Although our present food service operation has served the community well," Mr. Dickson said, "it has not been able to capitalize on the resources and support that today's management companies offer. They have skilled specialists in human resources and training, marketing and merchandising, facility design and financial and control systems from which we might benefit."

Comments and suggestions from members of the community—most of whom are food service clients—are invited. Please send them to the Food Services Search Committee, Rm 7-206.

INSTITUTE NOTICES

*** – Open to public**
**** – Open to MIT Community only**
***** – Open to members only**

Announcements

Course VI-A Orientation Lecture – All Course VI and Undesignated Sophomores interested in applying for the EECS Dept VI-A Internship Program, Wed, Feb 6, 3pm, Rm 34-101.

School of Engineering Sophomores – Engineering Internship Program (EIP) Orientation Lecture** – Learn to apply academic program with off-campus work experience in industry/government while earning joint SB/SM in Engineering, Thurs, Feb 6, 4-5pm, Rm 10-250. Info: John Martuccelli, x3-8051.

Memorial Service in Honor of Prof Thomas B. King, Dept of Materials Science and Engineering* – Mon, Feb 10, 11am, MIT Chapel

Course VI-A Student Open House – Wed, Feb 12, 2:30-4pm, Rm 34-401. All student affair, informal. Meet current VI-A students; inside information on VI-A companies; learn about housing, transportation, locale, etc; help in deciding in which VI-A companies to interview. Refreshments served.

February Degree Candidates – Prepaid postcards enclosed with February Degree Notice must be returned. Please indicate whether diplomas are to be mailed, called for in person, or if attendance at Commencement is planned (Mon, June 2).

Graduate Students – Graduate Student Council Activities Committee now accepting requests for financial support of graduate student activities. Call GSC Office, x3-2195 for information. Final date for receipt of requests by the GSC is Tues, Feb 18.

Career Planning and Placement Company Recruitment Presentations* – General Computer Corporation, Feb 5, 7-9pm, Rm 4-153. **Gillette,** Feb 6, 5-7pm, Rm 1-135. **Chemical Bank,** Feb 6, 7-9pm, Rm 4-149. **Procter and Gamble,** Feb 10, 7-9pm, Rm 1-132. **Digital Equipment Corporation,** Feb 10, 7-9pm, Rm 4-370. **Teradyne,** Feb 11, 5-7pm, Rm 2-146. **General Dynamics,** Feb 12, 5-7pm, Rm 4-153. **First Investors Corporation,** Feb 12, 6-8pm, Rm 4-149. **RCA/Sharp Electronics,** Feb 12, 7:30-9:30pm, Rm 1-132.

Students Interested in Study or Travel in Israel – Can obtain information, Thurs, Feb 6 & Wed, Feb 19, 10am-1pm, Lobby 10.

Children's Dental Health Month Bulletin Board – MIT Dental Service/Pediatric Clinic board in reception area of Pediatric Clinic, Medical Bldg first floor. The bulletin board expresses the role that diet, home care, fluoride, sealants and regular checkups have in prevention.

Serials in the MIT Libraries, 26th Ed – Microfiche listing published, three times a year, of approximately 22,000 titles includes information on holdings, dates, call numbers, and title changes. The 26th edition contains over 300 new titles and is published in two section: 1)an alphabetical list (8 fiche) and 2)a keyword index (8 fiche). *Prepayment required.* Price: $20; $5/MIT staff and students. Send check payable to MIT to Office of the Director, Rm 14S-216.

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 admission to special exhibits.

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 desk.

Rune – The magazine of arts and literature at MIT is now accepting submissions of prose, poetry and graphics for its 11th anniversary issue. Three copies of written submission may be sent to *Rune,* Rm 14E-310. Special arrangements for pick-up of graphics submissions may be made with Don (247-2740) or Olga (x5-6563 dorm). All work will be returned if requested. Deadline: Feb 23, 1986.

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

Nightline – 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 technical 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.

MIT Radio Society/UHF Repeater Association* – Ham radio election meeting, Tues, Feb 11, 7pm, Rm 66-160. Special videotape presentation: *Slow-Scan Amateur Television on Space Shuttle Mission 51F.*

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.

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, 6pm, Student Center Rm 349. ACBL masterpoints awarded; come with or without partner, newcomers always welcome. Special tournaments monthly. Info call Gary Schwartz, x8-2459 Draper, or Mark Dulcey, 272-8428. Admission: $.75/students, $1.50/non-students.

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 woodworking 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, M-Th, 5:10-6pm, outside Burton Dining Hall. Beginners welcome. Info: Fred Martin or Jeff Tollaksen, 247-0506 or x3-3157.

MIT Aikido Club** – meets Mon-Fri, 5:30pm, DuPont exercise room. Aikido is a non-competitive Japanese martial discipline. Beginners welcome.

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 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 dorm.

MIT Tae Kwon Do Club** – Tae Kwon Do is a Korean martial art. Meetings Sundays, 4pm, T-Club Lounge; Mon-Wed, 6pm, Burton Dining Hall; Fri, 6pm, T-Club Lounge. For info call In Ho Kim, 266-2827.

MIT Masters Swim Club** – Structured, coached workouts for graduate students and other members of the community who are not eligible for varsity swimming. Practices W/F, 8:30-10pm; Sun, 4-5:30pm. $100/9 weeks starting Jan 22.

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.

Religious Activities

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; Weekdays: T/Th: 5:50pm & Fri 12:05pm. All Masses in MIT Chapel. Morning Prayer: M-F, 8:15am, Chapel Basement. Bible Study: Wed, 8pm, Chaplaincy Library. Chaplaincy Office:, x3-2981.

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 x3-2325/2983.

MIT Hillel Jewish Shabbat Services* – Conservative-Reform, Feb 7, 5:30pm, Hillel (W2a); Shabbat dinner, 6:45pm, Kosher Kitchin (50-007).

Baptist Chapel* – Baptist Student Fellowship Services, Suns, 7pm, MIT Chapel.

MIT Islamic Society* – Daily prayers, Ashdown House (basement), 5 times a day. Call x5-9749 dorm, for schedule. Friday 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, 5:15pm, MIT Chapel.

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 different times. For more info, call Chiu-Oan, x5-6123 dorm.

MIT Graduate Christian Fellowship* – Come meet other Christian faculty, staff and grad students, Tech Sq Prayer Meeting, Tues, 1:30-2pm, Rm NE43-368; weekly lunch gatherings, Weds, 11:55-12:55, Student Ctr Twenty Chimneys. For information contact Burt Kaliski, x3-5866 or Roz Wright, x3-8926. A fellowship group also meets Weds, 7:30am, Rm E51-307.

MIT Seekers Christian Fellowship* – Park Street Church 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.

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

Lincoln Laboratory Noon Bible Studies* – Tues & Thurs, 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. Ralph Burgess, x3-2422. (Since 1965).

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.

Howard Heinz Endowment Office Research Grants on Latin American Issues. To interdisciplinary teams with at least one political scientist and/or economist. Also, one team member must be based at an institution located within the Commonweatlh of Pennsylvania. Information and applications: Marty Muetzel, Howard Heinz Endowment, 301 Fifth Ave, Pittsburgh, Penn 15222, 412-391-5120. All applications must be submitted no later than February 14, 1986; awards announced by July 1, 1986.

Armenian General Benevolent Union (AGBU) Hirair & Anna Hovnanian Fellowships – two fellowships, each in the amount of $3,000 given annually to assist Armenian-American students specializing in government, international affairs, or international law. Applicants must be graduate students with high academic standing. Written requests for application forms must be submitted to the Armenian General Benevolent Union, 585 Saddle River Rd, Saddle Brook, NJ 07662 (tel: 201-797-7600) by February 15. Decisions will be communicated to the applicants during July.

Other Opportunities

Summer Programs for Minority Students Interested in Health Professions – 6-10 week summer sessions offer room, board, stipend, and training for gaining entrance to medical school and to other health-related professional programs. Deadlines begin mid-February. For further information, contact Preprofessional Advising, Rm 12-170, x3-4737.

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.

ARAMCO, the major oil and gas products company operating in Saudi Arabia, sponsors a summer employment program for Saudi Arabian students who have completed their junior year. They are interested in engineering/technical majors (petroleum, mechanical, chemical, electrical, computer systems engineering, computer science, and petroleum geology). Deadline for applications: April 16, 1986.

NJS Corporation offers employment to American or Japanese Electrical Engineers who would like to join the NJS team in Japan upon graduation in June. Fluency in Japanese is not required.

Internships

The following is the list of internships received this week. For more information please see the Internship Information notebook 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 Services Office.

Volunteer internships: Inc. Magazine (Boston); Massachusetts Senate Legislative Education Office (Boston); Commonwealth of Massachusetts, Executive Office of Consumer Affairs and Business Regulation (Boston); and the National Trust Chesterwood Student Intern Program (Stockbridge, Mass).

Internships Offering a Stipend:

The Cetacean Research Unit of the Gloucester Fishermen's Museum, Inc seeks 4-6 research interns for the summer of 1986. Interns will be responsible for collecting, organizing, and transcribing data dealing with the behavior or humback whales. Interns get room, board, and a small stipend. Deadline for applications: March 1.

Colgate-Palmolive Company has announced their 1986 Summer Student Program for chemistry and chemical engineering majors who have completed their junior year. Deadline for applications: March 31.

Grenadier Realty Corporation in Brooklyn, NY seeks sophomores and juniors with career interests in management, community relations, mechanical engineering, computer science, personnel management/labor relations, insurance, and journalism. Deadline for applications: March 30.

The Massachusetts Senate Legislative Education Office offers the Summer Internship Program which involves placement in the office of a Senator. Stipend is $200/wk. Deadline: April 4.

The Metropolitan Museum of Art offers a 10 week internship for students interested in museum careers. Interns receive a stipend of $1,600. Deadline: Feb. 7.

The National Trust for Historic Preservation, Yankee Intern Program offers part or full time internships during the school year and full time internships during the summer. Deadline to apply for summer is Feb. 15 and April 15 for the academic year internships.

Owens/Corning Fiberglas in Granville, Ohio offers an internship for the summer. They seek students in chemical, mechanical and electrical engineering, and chemistry. These openings are for students interested in pursuing a career in R&D.

WCVB-TV in Boston has announced the Leo T. Beranek Fellowship for students interested in broadcast journalism. Deadline for applications: March 31.

Student Jobs

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

Athena-funded project for faculty/student curriculum development project. Software development of computer-aided thermodynamics tool. Unix environment, FORTRAN 77, or C language. May be done for credit or pay. Hours are part-time and salary is negotiable, depending on experience. Contact: Gilberto, x3-2420/2296.

Person needed to do small errands such as shopping and transportation. A few hours/wk at $6/hr. Contact: Elsa Lichtman, 923-9662.

Part-time editorial assistant for help in preparing papers, class notes, and text material (including equations), using augmented WordStar text processing. Also Basic programming for bibliographic searching. Hours and pay are negotiable. Leave resume with Prof Frank A. McClintock, x3-2219, Rm 1-304.

Programmer needed in DBase II for architects at an architectural firm. Proficiency in DBase is necessary. Make your own hours, and pay is negotiable. Contact: Alice Hackman, Dean, Tucker, Shaw, 201 South St, Boston, MA 02111 (on red line at South Station), 338-4029.

Campus representative wanted for postering and promotion. Work throughout the school year, on your most convenient times. No selling. 1-2 hours each week, at a monthly service fee, plus a bonus. Contact: Mr. Houk, Associated Financial Services, 1720 Paulson St, South Bend, Ind 46624. 1-800-348-2739.

UROP

MIT and Wellesley undergraduates are invited to join with faculty members in pursuit of research projects of mutual fascination. 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, Rm 20B-141.

Sea Grant UROP Award. *Awards of $750 will be given for undergraduate research in any area related to the study and management of ocean resources. Proposals may come from departments throughout MIT (Wellesley students may also apply). A letter of recommendation should accompany the proposals and be sent to the UROP Office by February 10, 1986.*

Eloranta 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.*

Civil Engineering UROP Traineeships. *The Dept of Civil Engineering offers several traineeships of $750 which are awarded on the basis of a UROP proposal competition. Deadline is February 10, 1986. For more information, call the Civil Engineering Undergraduate Center or Prof Sallie Chisholm, x3-1771.*

Nuclear Engineering UROP Awards. *Several awards are given to encourage research with faculty in the Nuclear Engineering Dept. Freshmen are encouraged to apply. Contact: Prof Ronald Ballinger, x3-5110, Rm 24-215 for more details.*

Walpiri Dictionary Project. A number of large dictionary text files on a Dec-20 system (Speech) in various customized formats compatible with the R20 text formatter need converting to the TeX formatter. The job involves gaining familiarity with R20 and TeX and the Emacs editor (if the applicant does not already have this experience); discussion with the project linguists about the current dictionary formats, and about desired additional features. Potentially an open-ended consultancy. Faculty supervisor: Prof K.L. Hale, Rm 20E-225. Contact: David Nash, x3-7456 or Beth Levin, x3-7336.

Needlework notes

Nancy Hollomon and Priscilla K. Gray will offer needlework classes for the next two months under sponsorship of the MIT Women's League.

Mrs. Hollomon will teach needlepoint (11:30am) and hemstitching and drawn thread (12:35pm) on Thursdays for eight weeks, Feb. 13-Apr. 10. Needlepoint will be done in multi-colored wool yarn to a design furnished by Mrs. Hollomon. Hemstitching and drawn thread will be done with white linen thread on even-weave linen. There is a $24 teaching fee and materials will vary between $15-25.

Advanced registration is required. Call Mrs. Hollomon, 734-4763, to sign up.

Mrs. Gray will continue her classes in crewel embroidery on Tuesdays, beginning February 18, for eight weeks. Advanced crewel will be held 11:15am-12:30pm, and Crewel II 12:30-1:30pm. There will be no beginners' class this term.

Advanced registration is required and may be made by calling x3-2829.

All needlework classes will be held in the Emma Rogers Room (10-340).

Athena Language Learning Project. Competent LISP programmer needed to work with linguistics graduate student to write the grammar rules for a natural language system. Knowledge of Spanish helpful. PAY or credit. Janet Murray, Rm 20B-231, x3-2094.

Dept of Mechanical Engineering. Modify a flow-visualization rig, or build a new one, and help run tests on gas-turbine nozzle-blade interactions. PAY or BS thesis opportunity. Faculty supervisor: Dave G. Wilson, x3-5121. Contact: Theo Korakianitis, x3-2334.

Ethics and Values in Science and Technology Program and the National Science Foundation. Project aimed at improving health care through improving medical information systems. The project team is working with designers of such systems at the Beth Israel Hospital. UPOPer needed to help investigate and analyze the electronic mail that flows on the Beth Israel System. Over 9000 messages a week are transmitted and received. Content analysis will be performed by sampling some of these messages and developing categories for the content of the messages. Student should be interested in "communications process" and enjoy understanding the purposes behind the messages that are exchanged. A general interest in improving how technology is used for people's well-being is also desirable. Contact: Dr. Priest, x3-6469.

School of Engineering. 1)Need student to help develop traditional computer game, "Animal Game," into a tool for the construction of more rational taxonomies. PAY or credit. 2)How adequate is Boston's underground network of natural gas delivery pipeworks? How does one determine when local mains and feeders ought to be replaced. Suitable for Class of '70 award. Contact L.L. Bucciarelli, Rm E51-201B, x3-4061.

Efficiency/Productivity Analysis. Student needed to work at Carney Hospital, Boston. Industrial or manufacturing engineering or business administration major preferred. Student will be involved in the study of all activities, systems, policies and procedures associated with the entry and registration process in the Emergency Room area of the hospital. Specific analysis will be conducted focusing on the establishment of productivity standards where applicable; also to review current systems, procedure, and practice in the area with an eye toward increasing efficiency. Student (or team of students) will work closely with the off campus advisor in establishing an effective approach, as well as developing and presenting analysis and recommendations. Contact: Margaret Mubiru-Musoke, UROP office, x3-4849.

High Temperature Testing of Materials. UROPer needed to participate in a project concerning high temperature testing of ceramics as well as concrete and fiber reinforced materials at various strain rates, and adverse environments. Functions include: assembly and preparation of newly arrived testing systems, testing materials in a 110 kips loading frame, 2800 degree F furnace, and specimen preparation. Spring 1986 with possible continuation into summer. Contact: Prof Oral Buyukozturk, x3-7187, Rm 1-280 or Fuad Tamer/Jim Klaiber, x3-3084, Rm 1-053.

Behavior of Cemetitious Materials. UROPer needed to participate in a project concerning modeling of the behavior of cemetitious materials, with respect to temperature, strain rate, environment, and microstructure. Work will involve literature review of existing models, analytical, and computer work. Spring 1986 with possible continuation into summer. Contact: Prof Oral Buyukozturk, x3-7187, Rm 1-280 or Fuad Tamer/Jim Klaiber, x3-3084, Rm 1-053.

Computer Data Acquisition and Computer Aided Data Analysis. UROPer needed for computer data acquisition and control as well as computer data analysis for a high temperature test system. Spring 1986 with possible continuation into summer. Contact: Prof Oral Buyukozturk, x3-7187, Rm 1-280 or Fuad Tamer/Jim Klaiber, x3-3084, Rm 1-053.

Chemical Background Needed. Sophomore or junior with chemical background needed to synthesize novel materials which will mediate the growth of conducting polymers. Work performed jointly at Center for Materials Science and Engineering and the National Magnet Laboratory at MIT. Prof Wnek and Charles Rosenblatt co-sponsor the program. Contact: Gary Wnek, x3-5291.

Intraparticle Diffusion. The student will learn how to construct lab apparatus, make mechanical shop. He/she will use and understand UV-VIS spectophotometrery, statistical data analysis, and computer graphics. Project involves intraparticle diffusion. Student will be responsible for implementation of diffusion studies including construction of apparatus and development of operating criterion. No previous experience necessary. Chemical engineering or chemistry major preferrred. Possible summer continuation. Contact: Dirk Limback, x3-6447 or faculty supervisor Prof James Wei.

TECH TALK

February 5, 1986
Volume 30 Number 20

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Internship orientation is set

An orientation lecture for School of Engineering sophomores interested in the Engineering Internship Program (EIP) will be held at 4pm, Thursday, Feb. 6, in Rm 10-250.

The EIP combines traditional on-campus academic programs with off-campus work experience in industry and government. Students normally enter the program in the summer following their sophomore year.

The EIP consists of three work assignments at the same firm or government agency. There are two undergraduate work assignments of three months each—one after the second year at MIT and one after the third year. During the first term of their fourth year, students apply to the department for admission into the graduate program. If accepted, there is one additional seven-month work assignment after the fourth year.

Second-year students in good standing in the School of Engineering are eligible to apply. Students selected by participating companies during on-campus interviews will participate by registering in the appropriate departmental program.

For the summer of 1985, 58 sophomores were placed in the program, compared with 53 for the previous year, and 41 for summer 1983. Total enrollment is now 127 students, with 28 companies actively participating in the program. John R. Martuccelli, EIP director, expects that new internship positions will be available for 55 to 60 sophomores for summer 1986.

Companies currently participating in the program are:

The Aerospace Corporation, Los Angeles; Avco Systems Division, Wilmington, Mass.; Boeing Military Airplane Co., Wichita, Kan.; Boston Edison Co., Boston; Brookhaven National Laboratory, Upton, N.Y.; Commonwealth Edison, Chicago; Digital Equipment Corp., Colorado Springs, Colo., and in Shrewsbury, Mass.; C.S. Draper Laboratory, Cambridge; EG&G Idaho, Idaho Falls, Idaho; General Electric Co., Aerospace Control Systems, Binghamton, N.Y.; General Electric Co., Aircraft and Engine Business Group, Lynn, Mass; General Electric Co., Research and Development Center, Schenectady, N.Y.; General Electric Co., Space Division, Valley Forge, Penn.; Hughes Aircraft Co., Los Angeles; Lincoln Laboratories, Lexington, Mass.; Los Alamos National Laboratory, Los Alamos, N.M.; Martin Marietta Aerospace, Electrical Systems Division, Denver; Martin Marietta Aerospace, Michoud Assembly Facility, New Orleans, La.; Northrop Corp., Electro Mechanical Division, Anaheim, Calif.; Northrop Corp., Precision Products Division, Norwood, Mass.; Philips Laboratory, Briarcliff Manor, N.Y.; Stone and Webster Engineering Corp., Boston; Teradyne, Inc., Boston; Texaco, Inc., Houston; The Timken Co., Canton, Ohio; Westvaco Co., Covington, Va., and Weyerhauser Co., Tacoma, Wash.

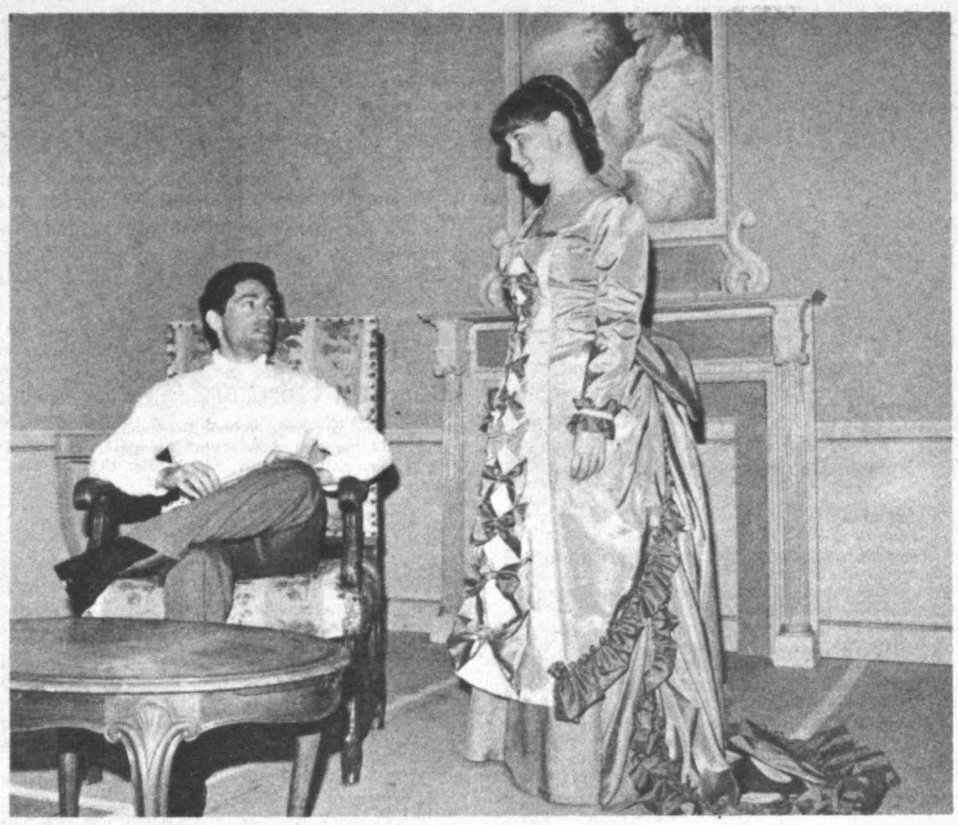
Two new companies joining the program for summer 1986 are: The Boeing Company, Seattle, Wash., and MBB-ERNO, Bremen, Germany; the latter being the first foreign company to participate in the program.

Boeing is recognized for its continuing leadership in the design and manufacture of the world's jet airliners. It is also involved in space systems, electronics, information systems, and is a major developer and producer of defense hardware.

MBB-ERNO, the Space Technology Division of MBB, works on orbital systems for low earth orbits and communication satellites and is the prime contractor for the system concept and project definition work for Columbus, the European contribution to the international space station planned by NASA. It is expected that students placed at MBB-ERNO will be involved with this ongoing project.

Mr. Martuccelli noted that companies continue to be attracted by the objectives of the Internship Program and they appreciate, in particular, the advantages of dealing with students from the different academic departments through a school-wide administered program.

It is expected that the program will grow to a steady-state level of about 200 students and 45-50 companies. Companies will be added to the program on a year-by-year basis, consistent with the distribution of students among the disciplines in the School of Engineering.



Wayne Heller of Mukilteo, Washington, a senior in physics, is "the author," while Kerry O'Neill of Canandaigua, N.Y., a senior in computer science, portrays "the countess," in *The Cavern,* Jean Anouilh's contemporary melodrama to be staged February 6-8 and 13-15, at 8pm, with a matinee performance February 9 at 2pm in Kresge Little Theatre.
—Photo by Calvin Campbell

Playwright Mamet to speak here

Pulitzer prizewinning playwright David Mamet will discuss, among other topics, the production history of his most celebrated plays, *Glengarry Glen Ross* and *American Buffalo,* at MIT Tuesday, Feb. 11, at 3pm in Kresge Little Theatre.

He will address MIT students from the stage of *The Cavern,* Jean Anouilh's 19th century melodrama that will be presented by the MIT Dramashop February 6-9, and 13-15.

One of America's most important dramatists, Mr. Mamet received the Pulitzer Prize, Drama Critics Circle Award and a Tony nomination for *Glengarry Glen Ross.* He won an Academy Award nomination for his screenplay for *The Verdict,* and a Jefferson Award, an Obie Award and a Drama Critics' Circle Award for *American Buffalo.*

The Boston opening of *Glengarry Glen Ross,* starring Peter Falk and Joe Mantegna, will be held at the Wilbur Theatre Wednesday, Feb. 12, at 7pm.

Beginning his career on an early-morning religious television program, Mr. Mamet worked on and off stage at a local community theater as a teenager. He received the BA degree in English from Goddard College, and continued his studies at the Neighborhood Playhouse in New York. Later, he returned to Goddard to teach, and founded a theater group for which he began writing his first plays. Several members followed him to Chicago and formed the St. Nicholas Theatre Company. He remained in Chicago for several years, leaving the theater for one year to work as an assistant office manager for a real estate company. This experience largely served as the basis for *Glengarry Glen Ross.*

Mr. Mamet resumed his acting career, and soon began writing plays, many about the life he knew in Chicago. His list of works include *Edmond, A Life in the Theatre, Sexual Perversity in Chicago, The Woods, The Water Engine, The Disappearance of the Jews, Lakeboat, Reunion* and *The Revenge of the Space Pandas.*

Mr. Mamet's appearance at MIT is sponsored by the MIT Council for the Arts and the Drama Program.

Honesty Guidelines are issued

(The following statement summarizes new Departmental Guidelines Relating to Academic Honesty issued to the faculty last week by the Office of the Provost. Associate Provost Samuel Jay Keyser urges faculty members to give particular thought to making clear at the beginning of the term what their expectations are concerning problem sets, take-home exams, etc.

Copies of the full text of the Guidelines are available in the Undergraduate Academic Support Office, Rm 7-104 and in the Office of the Dean of the Graduate School, Rm 3-138.)

Communicating Faculty Expectations. Faculty members are encouraged to make clear to the students in their classes, at the beginning of each term, their expectations regarding permissible academic conduct. It is important that this be done in the context of their specific subjects.

A particularly troublesome area for some students pertains to problem sets and other homework assignments. It is important that faculty members explain as precisely as possible to what extent they permit or encourage collaboration with other students or assistance from old materials.

Handling Violations. When a faculty member believes that a student has violated the expected standards of academic conduct, it is generally advisable to arrange to talk privately with the student as soon as possible. At this meeting, the faculty member will want to explain the reason for believing that a breach of academic honesty has occurred, and to give the student the opportunity to respond fully to all allegations. Appropriate care should be taken to protect the student's privacy and to avoid harrassment.

If, as a result of this meeting, the faculty member concludes that the student has behaved dishonestly, he or she may decide to bring the case to the Office of the Dean for Student Affairs (ODSA) or to the Committee on Discipline (COD) for resolution. For less serious violations, or when there is little dispute about the facts, the faculty member may wish to take a direct action, such as reducing the student's grade, writing a warning letter to the student, giving the student a make-up assignment, and so forth.

A copy of the warning letter may be sent to the ODSA. Deans in the ODSA (only) will be able to access this copy when helping another faculty member choose a course of action as a result of any future dishonest act by this student. If the student disputes any facts contained in the letter, he or she should be given the opportunity to append a statement to the ODSA copy.

If the student disagrees with the faculty member's disposition of the incident, he or she may request a review by the head of the faculty member's department.

Tamaribuchi joins Chairman's office

Dr. Kay Tamaribuchi, associate director of the Industrial Liaison Program, has been named special assistant for resource development in the office of Dr. David S. Saxon, Chairman of the Corporation. His appointment was announced today.

Dr. Saxon, together with the President and the Provost, is leading an intensive undertaking in planning the upcoming major capital campaign for the Institute. Dr. Tamaribuchi will assist the chairman in both the planning and the ultimate implementation of the campaign. He will also help in developing resources for the Advance Initiative, an effort already underway to increase the Institute's capital base.

"I am looking foward to having Dr. Tamaribuchi join our staff as we expand and step up the pace of our fund-raising within the office of the chairman," Dr. Saxon said. "Kay has already been very helpful to me in such matters while 'on loan' from the ILP, and I know he will give added strength to our growing activity."

In conjunction with Walter L. Milne, assistant to the chairman and the president, Dr. Tamaribuchi also will provide liaison between Dr. Saxon's office and both the Resource Development staff and the broad range of resource development activities elsewhere at MIT. In contacts outside the Institute, he will give particular attention to MIT's relations with industry.

Dr. Tamaribuchi has been at MIT since 1979 when he joined the Industrial Liaison Program as a liaison officer. He became assistant ILP director in 1980 and associate director in January 1985. Before coming to the Institute, Dr. Tamaribuchi was with Shell Oil Co. for 15 years in several research and management roles. His last position with Shell was manager for chemical exploratory and new business research in the company's Houston head office.

Dr. Tamaribuchi holds the AB from Harvard College (1959) and the PhD from Stanford University (1964).

SWE to hold conference Saturday

The MIT Section of the Society of Women Engineers is gearing up for a student/professional mini-conference planned for Saturday, February 8, at MIT. Entitled "Engineering Connections: Making the Most of What You Know and Who You Know," the conference is aimed at helping student engineers better understand the kinds and varieties of positions available today within the engineering disciplines.

Ellen J. Wallach, nationally known career development consultant and author of the *The Job Search Companion,* will be the keynote speaker. Her talk, "Ready, Set, Go: Opening Links to Job Connections," will deal with starting and cultivating the type of career contacts that can take you from the study hall to the R&D lab, flight deck or board room. The subject will be of equal interest to professionals since having the right connections can make a difference at any point in one's career. Ms. Wallach's style of audience involvement is guaranteed to start animated conversations that will carry on throughout the day.

In part two of the conference, attendees will participate in two panel discussions: job variety in seven engineering fields plus management. Each panel will comprise five professionals with the same educational degrees, yet the discussions of the applications will cover many different careers. For example, the civil engineering speakers will describe jobs that range from site planning to shipbuilding, from traffic engineering to environmental controls, and finally to structural design. The differences are fascinating.

The following areas will be covered: Biomedical Engineering, Chemical Engineering, Electrical Engineering, Civil Engineering, Computer Science, Management, Materials Science and Mechanical Engineering.

Each panel will feature professionals from the Boston area describing their job requirements, products, companies and opportunities. This will provide the chance to find out just what engineers really do on the job, and compare several fields or concentrations to one another.

Early morning refreshments and lunch are included in the 9am-2pm program. Of particular interest to SWE members, lunch will be organized around "topic tables," where sections from around the region can discuss ideas and people for publicity, plant visits, membership drives, high school visiting programs, etc.

Registration fees are $10 for SWE student members, $15 for non-SWE students and SWE professionals, and $20 for non-SWE professionals. MIT-SWE student members will receive a discount on the registration fee. Registration forms and more information can be obtained outside the MIT-SWE office, Rm W20-447, or by calling x3-2096.

Chapel Concerts set for February

The MIT Thursday Noon Hour Chapel Concert Series will open its 1986 season on February 6 with "Music of Wind and Water," a tradition of direct meditation and healing associated with Zen Buddhism. Featured artist Bob Seigetsu Avstreih will perform on the shakuhachi, a Japanese bamboo flute.

A music and senior special education therapist at the Albert Einstein College of Medicine, New York City, Mr. Avstreih will also read from traditional haiku poetry and will make references to ancient Far Eastern legends to help illuminate each piece played.

The series will continue on February 13 with a concert by Virginia Sindelar, flute, and Richard Schilling, guitar. Performed will be Grand Potpourri, Op. 126, by Mauro Giuliani; *Les Regrets,* Op. 36, Marche et Scherzo, Op. 33, and *Le Montagnarde,* Op. 34 by Napoleon Coste; Serenade, Op. 99, by Anton Diabelli; and Valse from "Suite de Trois Morceau," Op. 116, by Benjamin Godard.

On February 20, Kevin Brau, baritone, and Herbert Burtis, harpsichord, will present English, French, German and Italian Baroque period secular and sacred songs and arias by Dowland, Purcell, Handel, Bach, Rameau, Schuetz, Monteverdi and Scarlatti.

Songs of South America, a trio that plays music drawn from Indian and Spanish styles and from folk ballads of today's leading Latin American composers, will perform February 27. Members of the group are Alejandro Rivera, guitarist, arranger and composer; Cynthia Price, harpist, and Alan del Castillo, singer, flutist and guitarist. They will perform on a variety of authentic South American instruments.

All concerts begin at 12:05pm. Further information may be obtained from Clarise E. Snyder, concert coordinator, at x3-2906.

Addendum

Key members of the Plasma Science Team were missing from the photograph accompanying a feature on the Voyager 2 approach to planet Uranus in the last issue of Tech Talk. They are Alan Lazarus, senior research scientist; Pamela Milligan and Joan Quigley, programming staff, and Anne Bowes, Plasma Group secretary.

THE INSTITUTE CALENDAR

February 5-16

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

MISS THE TECH TALK DEADLINE?

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

Simply submit announcement in writing to Rm 9-030. We prefer a 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).

Seminars and Lectures

Wednesday, February 5

Munk Problem Revisited* – Glenn Ierley, Michigan Technological University, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

Mu-Oxo Complexes of Technetium with Pyridine and Halide Ligands* – Michael Clarke, Boston College, Inorganic Chemistry Seminar, 4pm, Rm 4-231.

Kinetics of Non-Isothermal Diffusion-Controlled Mineral Growth in Contact Aureoles – Prof Raymond Joesten, Dept of Geology and Geophysics, University of Connecticut,** Dept of Earth, Atmospheric and Planetary Sciences Colloquium, 4-5pm, Rm 54-915.

My Role in Politics – The Honorable John H. Sununu '61, governor, NH,** MIT Alumni Association Seminar, 4:30pm, Rm 54-100. Questions will be taken from audience.

Thursday, February 6

Working in Student Services at MIT – Barbara Fienman, Campus Activities Advisor, ODSA; Jeannette Gerzon, associate director, Office of Career Services and advisor, Preprofessional Education; Bonnie Jones, coordinator, Student/International Programs, Alumni Association; Linda Patton, manager, Housing Services,** Personnel Development Careers at MIT Program, 12-1:30pm, Rm 37-252. Bring your lunch.

The Promise Electronic Prototyping – Prof John E. Hopcroft, Dept of Computer Science, Cornell University,** Laboratory for Computer Science Distinguished Lecturer Seminar, 3:30pm, Rm 34-101. Refreshments served, 3:15pm.

Snatching Chaos From Order – Prof Leo Kadanoff, University of Chicago,** Physics Colloquium, 4pm, Rm 26-100. Refreshments served, 3:30pm, Rm 26-110.

Memory Mechanisms – Dr. Mortimer Mishkin, National Institutes of Health,** Dept of Psychology Colloquium, 4-6pm, Rm E25-111.

Sensing Peripheral Nerve Signals for Prosthetic Control: Present Technology and Future Applications* – David J. Edell, assistant professor, Harvard-MIT Division of Health Science and Technology and Dept of Electrical Engineering and Computer Science, Health Science and Technology Seminar, 4:10-5pm, Rm E25-117. Refreshments served, 4pm.

Signal Propagation Delay in Linear RC Models for On-Chip Interconnect – Prof John Wyatt,** Electromagnetic Wave Theory and Applications Group Seminar, 5pm, Rm 34-302.

The Black Religious Experience* – Panel featuring local theologians, Black History Month at MIT Seminar, 7-9pm, Rm 10-105. Discussion of the development of the Black Church and its role today in the Black Community.

Friday, February 7

The Plasma Etching of Polysilicon with CF3C1 Discharges: Modeling of Etching Rate and Directionality – Kenneth D. Allen,** Chemical Engineering Seminar, 2pm, Rm 66-110.

Polycyclic Aromatic Hydrocarbon Formation in an Atmospheric-Pressure Premixed Flat Flame – Samuel O. Amponsah,** Chemical Engineering Seminar, 3pm, Rm 66-110.

Self-Amplification and Start-up in Raman FEL* – Prof Thomas Marshall, Columbia University, Plasma Fusion Center Seminar, 4pm, Rm NW17-218.

A Numerical Simulation of Diesel Autoignition* – Mark Theobald, RA, Mechanical Engineering, Mechanical Engineering Doctoral Thesis Presentation, 4pm, Rm 31-161.

Towards Measuring Human Risks From Chemicals* – Prof William G. Thilly, Dept of Applied Biological Sciences, School of Engineering Center for Technology, Policy and Industrial Development/Whitaker College Program in Health Policy Seminar, 4-5pm, Rm E25-401. Refreshments served, 3:30pm.

Saturday, February 8

Engineering Connections: Making the Most of What You Know and Who You Know* – Ellen J. Wallach, career development consultant, Keynote Speaker, MIT Society of Women Engineers Seminar, 9am-2pm, Rm 10-250. Registration, 8:30am, outside Rm 10-250. Info: MIT-SWE Office, x3-2096.

Monday, February 10

Magnetic Surface Interactions in Liquid Helium Three* – Prof Robert Richardson, Cornell University, Francis Bitter National Magnet Laboratory Seminar, 4pm, Rm NW14-2209. Refreshments served, 3:30pm.

Automatic Programming of Robots* – Prof Tomas Lozano-Perez, MIT, Electrical Engineering and Computer Science Colloquium, 4pm, Rm 34-101. Refreshments served, 3:30pm.

Simultaneous, Mult-Element Analysis of Environmental Samples by Energy-Dispersive X-Ray Fluorescence Spectrometry – Dr. Gary Jones, MIT Parsons Lab,** Dept of Civil Engineering Division of Water Resources and Environmental Engineering Seminar, 4pm, Rm 48-316.

SDI: Is it Moral? Ethical Dimensions of Star Wars Strategy* – Brain Hehir, US Catholic Conference; Richard Pipes, Harvard University, MIT Technology and Culture Seminar Colloquium, 4:30pm, Rm 6-120. Informal supper and discussion follow.

Tuesday, February 11

Double Strand Breaks in Genetic Recombination – Dr. Frank Stahl, Institute of Molecular Biology, University of Oregon,** Biology Colloquium, 4:30pm, Rm 10-250. Coffee served, 4pm, Bldg 56 fifth flr vestibule.

Wednesday, February 12

The Black Women in the Political Process* – Dr. Helen G. Edmonds, author, former visiting scholar in the MIT Writing Program, Black History Month at MIT Lecture, 12noon, Student Ctr Mezzanine Lounge. Bring your lunch; beverages provided.

The Perspective of a Linguist: Syllable Counting, Verse and Pattern Poetry in the Old Testament* – Prof Morris Halle, MIT Hillel Texts from Tech 1986 Seminar, 12:30-1:30pm, Rm 37-252.

Subduction Processes – Dr. Selwyn Sacks, Dept of Terrestrial Magnetism, Carnegie Institution of Washington,** Dept of Earth, Atmospheric, and Planetary Sciences Colloquium, 4-5pm, Rm 54-915.

Indiana Jones and the Temple of VLSI: How Film Sound is Made and What We are Doing About It* – Dr. James A. Moorer, vice president, The Droidworks, an affiliate of Lucasfilm, Ltd and Convergence Corporation, Arts and Media Technology Forum, 4:30pm, Bldg E15 Bartos Theatre.

Thursday, February 13

The Size of the Galaxy – Prof James Moran, Harvard/Smithsonian Center for Astrophysics,** Physics Colloquium, 4pm, Rm 10-250. Refreshments served, 3:30pm, Lobby of 10-250.

An MIT Education for the 21st Century – Prof Samuel J. Keyser, associate provost, Educational Policies and Programs,** School of Engineering Center for Technology, Policy and Industrial Development/Whitaker College Program in Health Policy Seminar, 4-5pm, Rm E25-401. Refreshments served, 3:30pm.

Mergers in the Communications Industry* – Richard H. Churchill, T.A. Associates; Benjamin Compaine, Harvard Program on Information Resources Policy; Thomas Rogers, House Subcommittee on Telecommunications, Consumer Protection and Finance, MIT Communications Forum Seminar, 4-6pm, Bartos Theatre, Rm E15-070.

They Came Before Columbus* – Dr. Ivan Van Sertima, Prof of African Studies, Black History Month at MIT Lecture, 7:30pm, Student Ctr Mezzanine Lounge.

Friday, February 14

A Methodology and Architecture for Chemical Plant Fault Diagnosis – Bernard L. Palowitch, Jr,** Chemical Engineering Seminar, 2pm, Rm 66-110.

TBA – Susan Muller,** Chemical Engineering Seminar, 3pm, Rm 66-110.

Congressional Perspective on the Magnetic Fusion Budget – Jack Dugan, staff director, Committee on Science and Technology, House Subcommittee on Energy Research and Production,** Plasma Fusion Center Seminar, 4pm, Rm NW17-218.

Films

Far From Home* – **Documentary by Klaus Wildenhahn, award-winning German filmmaker,** MIT Film-Video Section/Goethe Institute/Harvard Film Archive screening, Feb 10, 7:30pm, E15 Bartos Theatre. Mr. Wildenhahn will be present. Free.

Emden Goes to the USA* – **Documentary by Klaus Wildenhahn, award-winning German filmmaker,** MIT Film-Video Section/Goethe Institute/Harvard Film Archive screening, Feb 11, 7:30pm, E15 Bartos Theatre. Free.

What are Pina Bausch and Her Dancers Doing in Wuppertal?* – **Documentary by Klaus Wildenhahn, award-winning German filmmaker,** MIT Film-Video Section/Goethe Institute/Harvard Film Archive screening, Feb 12, 8pm, Harvard Carpenter Ctr for the Visual Arts. Mr. Wildenhahn will be present. Admission: $3.

A Film for Bossak and Leacock* – **Documentary by Klaus Wildenhahn, award-winning German filmmaker,** MIT Film-Video Section/Goethe Institute/Harvard Film Archive screening, Feb 13, 7:30pm, E15 Bartos Theatre. Mr. Wildenhahn will be present. Free.

Yorkshire: Parts 1 and 2* – **Documentary by Klaus Wildenhahn, award-winning German filmmaker,** MIT Film-Video Section/Goethe Institute/Harvard Film Archive screening, Feb 14, 7:30pm, Rm E15-054B. Mr. Wildenhahn will be present. Free.

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 do not 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.

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.

Wives' Group – Morning Group: Feb 5,** Pot Luck Dinner, 11:30am, Eastgate Lounge rooftop; info: Lynda Merkan, 577-9519. **Feb 12,** Computer Museum, Feb 12; info: Hilary Langley, 641-4251. Meet at 9:15am, Eastgate. Children welcome. **Afternoon Group: Feb 5,** What's Become of Native Americans? – Prof David murray, Brandeis University. **Feb 12,** American Writing Today – Prof John Hildebidle, MIT literature faculty. All meetings 3-5pm, Student Ctr Rm 491. Babysitting provided in Student Ctr Rm 407.

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.

**English Conversation Classes for International Wives Registration* – MIT Women's League Beginner-Advanced Classes Registration, Feb 6, 9-11am, Student Ctr Rm 491. Info: Jan Kirtley, 277-2628.

MIT Women's League Needlepoint Classes – Feb 13-April 10, (8 classes), 11:30-12:25, Rm 10-340. Teachers fee: $24; cost of materials: $20-30. Work is done in multi-colored wool yarn; design furnished by teacher – no kits allowed. **MIT Women's League Hemstitching and Drawn Thread Classes** – Feb 13-April 10, (8 classes), 12:35-1:30, Rm 10-340. Advance registration for both classes required by Feb 7; send name, address and fee to Nancy Hollomon, 121 Carlton St, Brookline, MA 02146 (734-4763). Teachers fee: $24; cost of materials: $15-25, purchased from teacher at first class. Work is done on white linen thread on whtie evenweave linen fabric. Good eyesight a necessity; design furnished by teacher – no kits allowed.

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: Feb 12, 26, 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

Licensing: A Neglected Entrepreneurial Tool – Walter Cairns, president, Arthur D. Little Enterprises, Inc,** MIT Club of Boston Seminar, Feb 6, 6pm, MIT Faculty Club Penthouse. Wine and cheese served, 5:30pm. For reservations, call x3-2000.

New Hampshire Governor John H. Sununu '61 will visit MIT today (Wednesday, Feb. 5) and give an informal talk on his life in engineering and politics at 4:30pm in Rm 54-100. The community is invited. Later Gov. Sununu will chair the first senior dinner for members of this year's graduating class. Senior dinners, hosted by President and Mrs. Gray, are a means of welcoming prospective graduates to the fellowship of alumni.

MIT Activities Committee

MITAC, the MIT Activities Committee offers discount movie tickets for General Cinema, Showcase and Sack (USA Cinemas) Theaters ($3.00ea). Tickets are good 7 days a week, any 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).

Waterville Valley Day Trip. Sun, Feb 9. Bus leaves West Garage 6am, returns to MIT approx 6:30pm. Cost: Downhill: $32.50/pp; cross-country: $16.50/pp. Reservations may be made in Rm 20A-023.

Family Ice Skating. Sun, Feb 9, 1-4pm, MIT Athletic Center. No athletic card required. Ice skate rentals, depending on availability, $2/ea (sizes 4 and up) – athletic card required for rentals. Skates *must* be returned at the end of the allotted skating time. Free.

Cinderlla. Sat, Feb 22, 2pm, New England Life Hall. The fairy godmother and pumpkin-turned coach brought to life in this lively Boston Children's Theatre production. Tickets: $4.25 (reg $5), available in Rm 20A-023.

Rap Master Ronnie. Thurs, Feb 27, 8pm, Next Move Theatre. The master satirist, Garry Trudeau, immerses us into playful-but-thought-provoking-satire with this musical revue. Tickets: $18 (reg $19.50) available in Rm 20A-023.

Flower Show. Sat-Sun, March 8-16, Bayside Expo Center. More than 3½ acres of beautifully landscaped gardens to brighten up these icy days. Tickets: $5/adults (reg $6), and $1/children ages 6-12 (reg $2), available in Rm 20A-023.

Preservation Hall Jazz Band. Sun, March 16, 3pm, Symphony Hall. Don't miss an afternoon of good old-fashioned foot-stompin', hand-clappin' jazz. Tickets: $17 (reg $18.50), available in Rm 20A-023.

L.L. Bean Overnighter in Freeport Maine. Fri-Sat, March 21-22. Freeport, home of L.L. Bean and 72 more unique stores, restaurants, and factory outlets – including Corning, Dansk, Hathaway, Carters, Cannon, White Stag, Anne Klein, Ralph Lauren, London Fog – and much more. Overnight accomodations at the Freeport Inn (dinner – at the Inn or Muddy Rudder, and breakfast included), with continuous shuttle service from the Inn to the Muddy Rudder & Freeport. Bus leaves West Garage, Fri, March 21, 3pm; returns Sat, March 22, 5pm. Only $46/pp/dbl occupancy only. Reservation can be made 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, Rm A-150.

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 coming. Look for them in mid-February. Only $.75 each.

Ski-Key Books. Containing valuable discount lift ticket coupons 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 non-refundable due to the non-profit nature of our organization.

Social Activities

Hillel Ice Skating Party – Sat, Feb 8, 11pm, MIT Ice Rink. Free/Hillel members; $1/others; skate rentals extra.

**GAMIT Sunday Discussion Meeting* – Gays at MIT, Suns, 5pm, GAMIT Lounge, Walker Memorial Rm 50-306. Dinner served at 6:30pm.

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

Movies

2010: Odyssey Two* – LSC Movie, Feb 7, 7&10pm, Kresge Auditorium. $1/MIT-Wellesley ID.

The Gods Must Be Crazy* – LSC Movie, Feb 8, 7&10pm, Kresge Auditorium. $1/MIT-Wellesley ID.

American Pictures* – Black History Month at MIT multimedia experience on the American underclass, Feb 11, 5:30pm, Rm 26-100. Refreshments served.

Music

**MIT Gospel Choir* – Black History Month at MIT concert, Feb 6, 12noon, Lobby 7.

**Noon Hour Chapel Series* – Bob Seigetsu Avstreih, Sui-Zen Shakuhachi (Japanese bamboo flute), Thurs, Feb 6, 12:05pm, MIT Chapel. Free.

MIT Choral Society Auditions – John Oliver, director. Mon, Feb 10, 7:30pm sharp, Rm 2-190, open rehearsal of John Martin's *Golgathe.* Rehearsals, Mon & Thurs, 7:30-10pm, Rm 2-190. Requirements: must be able to read music and follow choral direction. Info: Mimi, 576-2667 or Dorcas Yao, x5-8538 dorm.

**MIT Gospel Choir* – Black History Month at MIT concert, Feb 13, 12noon, Lobby 7.

**Noon Hour Chapel Series* – Virginia Sindelar, flute and Richard Schilling, guitar, Thurs, Feb 13, 12:05pm, MIT Chapel. Free.

**MIT Chamber Players Series* – Marcus Thompson, music director, Sat, Feb 15, 8:30pm, Kresge Auditorium. Free.

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

Theater

The Cavern – by Jean Anouilh (Lucienne Hill translation)* – MIT Dramashop, modern takeoff on 19th century melodramas, with live orchestra to heighten effects, directed by Dr. Robert N. Scanlan, director, Feb 6-8, 13-15, 8pm, Feb 9, 2pm, Kresge Little Theatre. Admission: $5; $4 students/seniors – Box Office in Lobby 10. Reservations, x3-4720. Information, x3-2877.

David Mamet – MIT Drama Program/Council for the Arts at MIT talk by the Pulitzer-prize winning author, Feb 11, 3pm, Kresge Little Theatre.

Dance

**Western Square Dancing* – Tech Squares Club Level dancing 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 T-Club Lounge; **Intermediate Modern Dance,** T/Th, 5:30-7pm, Walker 201; **Improvisation,** Th, 1-3pm, Walker 201.

MIT Contemporary Dance Club* – Cynthia Mallick, instructor, Aerobix, M,W, 6:30-7:30pm; Jazz I, M, 7:30-8:30pm; Jazz II, W, 7:30-8:30pm, all at McCormick Gym. Fee: $3/single class, $4/non-MIT. Free to McCormick residents. Info: call 723-7081.

Children's Dance Classes – Pamela Day, instructor. Creative Movement/Modern Dance classes for children ages 3-9. Classes, Fri afternoons. For info, call Pamela, x3-5791, T/Th mornings or 648-4838 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 de Puerto Rico.

Rhythmic Gymnastics Classes for Women – MIT Women's League classes, Fri, 12-1pm, Rm 10-340. Info: Helena, 526-2396.

**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
20 Ames Street

Hayden Gallery –

David and Sandra Bakalar Sculpture Gallery – Alexander Calder: Artist and Engineer, through April 13. Reception: Feb 28.

The Reference Gallery – Marina Abramovic and Ulay: The Great Wall of China Project. Two European artists document their silent walk from separate ends along the Great Wall, through Feb 9.

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, Feb 10 through April 5. **Sculpture by Beverly Benson Seamans,** Feb 15 through July 26. **Minor White: Photographs,** 102 prints dating from the 1930s to 1968, through March 1986. **Gjon Mili '27: 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 changeable, touchable plasma sculptures, ongoing. **Physics at the Laboratory for Nuclear Science: 35 Years at LNS,** through Feb 28. Hours: Weekdays 9am-5pm, Saturdays 10am-4pm.

Compton Gallery – Images of Infinity: Photomontages by Yulla Lipchitz, 50-60 photographs and photomontages reflecting 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 construction of ships.

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

Corridor Exhibits

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.

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: Feb 5: M's Ice Hockey vs Southern Maine, 7pm. Feb 7: Squash vs Bowdoin, 4pm. Feb 8: M's Fencing vs Princeton, 10am; W's Fencing vs Princeton, 10am; Squash vs Fordham, 10am; Indoor Track vs Bowdoin, 1pm; M's Gymnastics vs Lowell, 1pm; Squash vs Wesleyan, 2pm; W's Basketball vs Conn College, 2pm; M's Basketball vs Emerson, 4pm. Feb 9: M's Ice Hockey vs Curry, 2pm. Feb 11: Squash vs Brown, 4pm; M's Ice Hockey vs Suffolk, 7pm; M's Fencing vs Brandeis, 7pm; M's Volleyball vs Harvard, 8pm. Feb 13: M's Volleyball vs Northeastern, 7pm; W's Basketball vs WPI, 6pm; M's Basketball vs WPI, 8pm. Feb 14-16: Rifle NECRL Championship, NRA Collegiate Sectionals 8am. Feb 14: Indoor Track vs Bentley & UMass-Boston, 6pm; Wrestling vs Western New England, 7pm. Feb 15: M's Swimming vs Bowdoin, 12noon; W's Swimming vs Bowdoin, 2pm; M's Fencing vs CCNY, 1pm; W's Fencing vs CCNY, 1pm; M's Basketball vs Suffolk, 2pm; W's Gymnastics vs Conn College, Smith, 2pm; Squash vs Stony Brook State, 2pm; M's Ice Hockey vs Brandeis, 2pm. Feb 16: M's Ice Hockey vs NJ Tech, 2pm.

Wellesley Events

Jewett Arts Center* – African Art of the Dogon, Selections from the Hans Gugenheim Collection symbolizing the complementary duality of natural and social order in Dogon culture, Feb 8 through March 23. **Nic Nicosia: Recent Photographs,** Includes selections from his most recent series, *The Cast,* Feb 8 through March 23. **Clay, Paper, Fabric and Glass Workshop Experiments,** Examination of selected works produced in contemporary workshops by leading artists, Feb 15 through March 23. **Contemporary Arts: An Expanding View,** Selected works by contemporary artists which transcend the historical concept of craft, Feb 15 through March 23. **Contemporary Prints from the Permanent Collection,** continuing.

Women and Violence: Breaking the Conection* – Carolyn F. Swift, PhD, director, Stone Center, Stone Center Women's Psychological Development: Theory and Application Lecture, Feb 5, 8pm, Science Ctr Rm 377.

Martin Luther King Tribute* – Peter J. Gomes, Prof of Christian Morals; minister, Memorial Church of Harvard University, Feb 7, 3pm Houghton Memorial Chapel.

***Silent Moves:* Mime Show* – Trent Arterberry, National Assn of Campus Activities 1983 Performing Artist of the Year,** Rebecca Bacharach Treves Fund performance, Feb 7, 8pm, Alumnae Hall.

Spell #7 – Rebecca Bacharach Treves Fund production of Daedalus Production of New York's performance of Ntozake Shange's sequel to *For Colored Girls—, Feb 8, 8pm, Alumnae Hall.*

Colloquium on Daughters and Mothers* – Center for Research on Women 6th Annual Full-Day Colloquium, Feb 8. Registration fee includes lunch at Wellesley College Club. Space limited. Info: 431-1453.

Living in a Multi-Cultural World* – Joyce King, director, Urban Art Program for the City Mission Society; rep, UN End of Decade Conference on Women in Nairobi, Kenya, Intercultural Awareness Now (ICAN) and the Affirmative Action Committee Lecture, Feb 11, 7:30pm, Pendleton East Rm 105.

Women in Consulting* – reps from Touche Ross & Co, Cambridge Associates, Arthur D. Little Inc and SRW Associates, Center for Women's Careers Women in Action: The Realities of Working Program, Feb 11, 7-9pm, Library Lecture Rm. Cost: $5/those with no College affiliation.

Feminism* – Prof Dorothy Smith, University of Ontario, Feb 12, 7:30pm, Library Lecture Rm.

Women Making Music: The New Scholarship, Recordings and Concert Festivals* – Judith Tick, visiting research scholar, Ctr for Research on Women, Ctr for Research on Women Luncheon Seminar, Feb 13, 12:30-1:30pm, Cheever House. Bring bag lunch; coffee provided.

Everyone is a Minority* – Don Polk, executive director, Urban League of Boston and 8 students representing 8 minorities, Chaplaincy/Intercultural Awareness Now (ICAN)/Affirmative Action Committee Panel Discussion, Feb 13, 4:15pm, Jewett Auditorium.

Tupelos Concert* – Feb 14, 8pm, Jewett Auditorium.

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

Send notices for Wednesday, February 12 through Sunday, March 2, to Calendar Editor Rm 5-111, before noon, Friday, February 7.

MacVicar on the undergraduate program

(continued from page 1)

Q: Isn't it your job, then to *lead* the Institute's efforts to revise, reform, improve its academic programs, its teaching and advising of undergraduates, and its development of curricula, texts, and the like? A: People who ask that do not know MIT very well! One doesn't lead a federation of royal barons and tribal chieftains. Cajole, yes. Remind, yes. Persist, yes. As one faculty member said to me, "You are our conscience." This, of course, is not especially reassuring! I am reminded of a remark that former Labor Secretary Ray Marshall attributes to President Lyndon Johnson. Early in his administration, someone came to Johnson and laid out a first-rate idea for goverment action, in a quarter where action was needed. Johnson told him, "That's a great idea. The country needs it. Now go make me do it!"

Q: What, then, will be your focus, your central concern?

A: Of greatest importance is what happens to students once they arrive here at MIT. In fact, for anyone at any educational level, of greatest importance is what happens to them in that formal educational structure as judged by the extent and facets of his or her well-being and contributions later.

To the high school counselors of this year's entering class, our Admissions Office wrote: "What we value most in a student is a very solid background in mathematics and the sciences, the *ability* to read, write and reason *critically,* and a healthy and broad interest in those activities and ideas that give individual meaning to life."

If this sounds to you like a prescription for identifying leaders, it does to me too. And why shouldn't it? For, it is not technicians that we seek to prepare, nor bench-tied engineers practicing narrow specialities and intent on deadlines and objectives devised elsewhere. Our purpose is to direct the best minds toward inquiries and enterprises concerned for the human condition.

Q: How would you define leadership, and why must MIT students be particularly well-suited to that role, in your view?

A: Leaders more often than not are agents or managers of social change. And social change is intertwined with a conception of technology.

Our undergraduate students will come into their adult primes early in a new millenium. More often than not, these graduates will be looked to for good technological judgment, for intellectual rigor, and for social leadership. Our graduates' strengths and their weaknesses will, in turn, either inspire the hopes or dash the confidence of others.

I want our undergraduates to serve well their citizenship in that complex, sophisticated, delicately balanced world. A world of diversity, conflicting expectations, and technologically-driven motivations; a world made all the more precarious by international interdependencies, and by inequities in resource distributions.

It is uniquely MIT's opportunity, I believe, to prepare the world's arguably brightest talents to serve well in both technical excellence and in humaneness and basic decency. Our academic program must look *forward,* to a future where technology and science present dramatic social options and stark choices little imagined only a few student-generations ago.

Q: Is MIT, as now constituted, geared to meet that challenge?

A: Some amongst our MIT academic community sense that our academic program—both its core Institute requirements and many of its specialty courses of study—is not sufficient in character and breadth for students aspiring to make contributions of significance to the world in say, 2015 A.D.

Beginning with conversations between the Deans of the School of Engineering and the School of Humanities and Social Sciences, Gerry Wilson and Nan Friedlaender, a small nucleus of concerned faculty has grown into what may be a critical mass sufficient to launch an unflinching assessment and reformulation of our undergraduate education program.

Q: What have you done specifically?

A: I and the five academic deans have joined together to establish an Institute committee to reshape the Institute requirements in the humanities, arts and social sciences. These constitute half of the undergraduate core curriculum requirements for graduation.

The other half is comprised of science, mathematics, and laboratory subjects. The School of Science—which has primary responsibility for these latter subjects—is just getting underway a parallel examination of the nature, rationale, and appropriateness of the current subjects, preparatory to proposing what could be the first broad, major changes in this set of requirements in 20 years.

At the same time, the School of Engineering is undertaking a bold review of its curriculum. That school is convinced that its current content-dense curriculum, devoid of integration with the liberal disciplines, and paced like a marathon race made up of many sprints, falls far short. Engineering faculty seem ready to question everything from the four-year structure on the SB degree interval, to the necessity for so many specialty subjects, to the contradiction between the solitary experience of the student's educational process as compared to the social and team-oriented working modes of the career professional.

Q: And what about students who might want to concentrate in the humanities. Are changes envisioned there as well?

A: Interestingly, the possibility of a uniquely MIT liberal education program for a small number of new students also is being explored, in generic form, by a committee in the School of Humanities and Social Science, with School of Engineering and School of Science participation.

Q: In all of this, aren't we talking about fundamental changes, even in attitudes?

A: MIT's task is not merely one of exposing students in the sciences and engineering to more humanities and social sciences, but one of developing a true educational partnership among the technical, arts, social and humanistic disciplines so that on some level both the faculty and their students see the interrelationships between science and technology on the one hand, and societal, political, and ethical forces on the other. This suggests, in turn, that these cannot be taught in an isolated, piecemeal fashion by faculty in different disciplines, but that an integrated interdisciplinary approach must be used. One of the challenges of such an endeavor not only will be the education of the Institute's students but also a number of its faculty.

Q: We've talked about expanding the social and political awareness of MIT students. Are there other shortcomings that need to be addressed?

A: MIT must expand students' creative and design capabilities. While relatively little is known about the creative process or the determinants of imagination, there is considerable evidence that the truly creative scientists and engineers are not only broadly educated, but have strong parallel interests in the arts and humanities. There is also evidence that freshmen may arrive more open, creative, and enthusiastic than when they leave four years later, from current-day science and engineering programs.

Q: You are saying that these approaches have been neglected?

A: These are not the current skills taught to undergraduates within the scientific and engineering disciplines. Subject offerings must be developed that will not only serve to introduce students to a wide range of approaches to knowledge, but will serve to encourage them to make connections and analogies within a wide range of social, humanistic, and scientific and technical disciplines.

Q: What has prompted this reappraisal now?

A: In post WWII's three and half decades, MIT has steadily prepared for this moment without knowing when or even if it might come. In a December 1950 press release announcing the establishment of the School of Humanities and Social Studies, a major formal step was taken. This school program was described as centered on, "the relation between science and technology on the one hand, and man and his institutions on the other."

In the interim period the school has grown and matured, and elsewhere in the Institute, related activities have come to pass. We have enriched our institutional base with front-ranking economics, sought-after urban studies, and widely-suffused studies of learning and cognition. Policy studies, energy resources, artificial intelligence, and brain sciences are but a few such areas of activity which mingle with such as robotics, international studies, elementary particle investigations, polymer processing simulation, and maritime law to emphasize the wide ranging character of the current endeavors and interests of MIT faculty members and students.

It is timely for MIT to think through its objectives for the future. For *choices* have to be made. A choice between continued specialization and the technical density of our leading undergraduate programs, and a broader, more fundamental integration of technical with humanistic studies.

Another choice that may surprise you: between continued unchecked growth in research volume—to which increasing graduate student, postdoctoral, and research staff numbers are tied—and reserved time and attention to our undergraduates. In 1982, for the first time in its history, MIT's ratio of graduate students to undergraduates exceeded 1. We must face this four-square. The centrifugal forces on our community that Paul Gray has referred to arise largely from research and professional demands on our faculty. Undergraduate education is the force that *brings us together*—the centripetal force that defines our center. Some use a different metaphor and speak of it as the necessary sine qua non scaffolding for the MIT educational edifice as a whole.

Q: You first articulated these concerns to a meeting of the MIT Corporation. Why did you choose that forum?

A: I need their help. When they sit on Visiting Committees I want them to ask tough piercing questions about the fundamental character of this institution, and about how that department, laboratory, or office fits in. How do the two futures mesh? What role is that faculty envisioning for itself in our institution's undergraduate education? What character of undergraduate education is, in fact, in mind?

You see, this faculty cares so deeply inside for serving and doing well in all that it undertakes, that such reminders and explicit provoking of our dedication and aspirations in undergraduate education can be powerful in our current deliberations. The overall process of the deliberation must have as a result that we be of one mind concerning the kind of educational institution and undergraduate academic experience we are about.

Q: Are you optimistic about the outcome of this initiative?

A: I am encouraged by the heritage, past achievements, and current strengths, and promise of this very special institution to which I have committed my career. MIT stands ready for an even more mature conception of its purpose.

Technology is arguably an attitude. Technology encompasses consequences. It carries responsibilities for identifying risk and for weighing human costs against human benefits. MIT has never shrunk from these responsibilities, but perhaps at no other time in its history has the need been so great for MIT's leadership and example in world affairs. Our message to our undergraduates should be that technology offers suggestions of agenda, on goals and priorities, and that attention to human elements and human consequences of these cannot be less than rigorous, thorough, and broadly shared.

I don't know if we can pull it off. But I believe that the particular galaxy of leadership MIT has now, the unusual confluence of national and international anxieties, social issues, and economic interdependencies, and the emerging unease of our faculty with the educational status quo—give us the very best odds for success that we're going to get for a quarter century or so.

CLASSIFIED ADS

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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 accompanied 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 extensions may be sent via Institute mail. Ads are not accepted over the telephone.

Deadline is noon Friday before publication.

For Sale

Marie Claire pink drss w/sash, sz 7, $25; Ms Chaus orchid drss w/sash, sz 7, $25; Jordache pink stripe sundrss w/sash, sz 7, $15; wh sundrss w/Hawaiian flwrs, sz M, $20, 2 tank tops, 1 magenta & bl terrycloth, sz M, $5; 1 bl stripes, sz sm, $5; ivry poly short drss, M, $10, all in exc cond. Kim, x3-1740 or 242-0804.

Sm elec htr, gd for sm space/foot wrmr, usd 1X, was $20 nw, will take $15 or bst. Lucy, x3-2774.

Wntr mtrcycl suit, lt colr, lrg, $50; wntr mtrcycl ovralls, lrg, $30. Edwin, x3-7433.

Smith-Corona D100 prntr, 6 mo old, v gd cond, barely usd, $130 or bst. Julio, x3-1560 or 494-8411.

Danish lounge chr, brwn cushns, gd cond & cln, v rsnbl. Call 354-2175.

Q-sz mttrss, custm-md by Mystic Bedding of Arlington, usd jst 6 mo, mst sell, orig $199, now jst $100 or bst. Julia, x3-5642.

20-gal Lons fsh tnk w/ass, $35 or bst; Supreme 70 P225 70R14 rad trs, nw, $120 or bst. G.W. x3-4087.

Pr P205/70-R-13-BF Goodrich trs w/raisd lttrs, exc cond, $50. Jack, x8-1619 Draper.

TEAC A-107 stereo cass dck w/Dolby, gd cond, askg $30. Kato, x3-5401.

Omega B-22 XL enlrgr w/50mm El-Nikkor lens, 35mm neg carrier, condnsr lens set, cmplt & ready to use. Todd Cass, 266-7273.

2 full-sz polyurethane mttrsses, exc cond, $25 ea; cffee tbl, $15. Call 494-8866, lv mssg.

X-cntry skis, poles, boots, sz 8-9, usd 4X, gd cond, $40; Girl Scout cookies, sale ends 1/31. Pam, x3-3123.

Nw Morel 403II 3-way spkrs, exc qlty, walnt cabnt, 7 yr guarntee, save $100, $599/pr. Peter, x3-0415.

Twn-szd mttrss & bx spr, gd cond, $75 or bst, mst sell soon. Nancy, x3-6752.

Canon AE1 camra & 30mm lens, case & blt, askg $180 or bst. Call x3-8508/1791 or 494-5457 aftr 9pm.

Car seat for infnt/toddlr, gd cond, $20. Zulqarnain, x3-3193 or 661-1706.

Whirlpool 2-spd, 3-temp wshr, exc cond, $150; RCA 14″ prtbl colr tv, $90; Sony Betamax, 1 yr old, hrdly usd, pd $450, askg $200. Call 643-4276.

1-rm a/c, 4,000BTU, $20. Roy, 576-6965.

Std-sz ping pong tbl, $40. Ed, 658-4934.

Upr grnd piano, circa 1900, walnt, exc cond, $500. Susan, x7500 Linc or 653-1998 eves.

2 twn beds, $50 & $80; xtra-lng dbl bed, $80; formica ktchn tbl w/4 chrs, $100. Call x3-2994 or 891-5205 eves.

Wh enamel futon bed frm, full-sz, as seen in Essentials, exc cond, only $100 ($125 inc futon). Thea, x3-4837 or 625-5303.

Caloric gas stv, wh, 36″, exc cond, $60 or bst; alum hting dcts for forcd hot air ht, free for remvl. Call x3-3656 or 527-5303.

6-mo-old Kenmore lrg cap wshr/dryr, br nw cond, 4 wsh cycls, dryr w/moisture sensr for auto stop, orig $830, $550 or bst, inc 2-yr maint cntrct. Norman, x3-2433/2421 or 776-0592.

Electra Strat-Copy elec guitr, red bdy, w/case, mnt cond, $200. Al, x7907 Linc.

IBM PC 320K totl, 64K mothrbrd, quadram card w/256K, clock/calndr, asynchronous port, IBM monochrome green mntr, mntr/prntr card, $1,750; nw IBM 256K short card, $100. Gary, 232-4734 days.

Elctrnics garg sale: cmpnents, tst instrmnts, hi-res mntrs, cmptr eqpmnt, etc. Ben, x3-8337/5758 or 235-2593.

Youth hcky eqpmnt: 2 JOFA helmts, $60 nw, $20 ea; 3 pr knee & shin guards, sz 1635, $3; pr glvs for 10-yr-old, $5; pants, sz 36-38, $3; pants, chld's sz L, $2; 2 CCM shldr guards free w/purchase of above. Eve, x3-7182, Rm 6-101.

Expndbl DR tbl & 6 solid teak fabric chrs; wh rnd ktchn tbl & 4 chrs; slate top LR tbl; tile end tbls; full-sz mttrss & bx spr, gd cond, v rsnbl. Call x3-1660.

DC-AC pwr invrtr, Tripp Lite freqncy cntrlld, sq wave, 1000 watt, exc cond, only usd 2X, $100. Sarah Dickinson, x3-0371 or 547-1076.

10′ formica countrtop; 12′ wall & bottm ktchn cabnts; gas range/stv; dshwshr, all exc cond, $1,300 or bst. Call x3-2449.

C Itoh 8510AP Prowriter prntr, $225; walnt-staind oak cmptr tbl w/mntr shlf, $75; Kepro silk screen kit, $25. Doug White, x3986 Linc or 646-5185 eves.

Nw Morel 403 II 3-way spkrs, walnt cabnt, 7 yr guarnty, bst valu in price class, save $100, $599. Peter, x3-0415.

IBM PC grphcs prntr, 80 cps draft, 40 cps NLQ mode, prnts bold, cmprssd, undrlind, dbl-wdth, subscrpts, suprscrpts & intrntnl chars, grphcs to 240 dpi, parallel intrfc, 60 mo use, $200 or bst. Bonnie, x3-8240 or Bob 577-1540 eves.

Panasonic b&w 12″ tv, $30; Olympia Report Dlx elec typewrtr, $50. Peter, x3-8070 or 232-8997 eves.

Champion vegtbl/fruit juicr, lists $214, usd 1 mo, askg $150. Call x3-7296.

DEC PRO350, 512kb, 10 Mb HD, LA50 prntr, 1200 baud modm, P/OS v2.0 tool kit, Fortran compilr, Basic compilr, PRO-Communications, Datatrieve, sight & mch more misc sftwr, xtra floppies, 8-mo warr, $5,000. Jose, x3-6896 or 893-4165 eves.

Sharp 8-hr VHS VCR, less than 1 yr old, $225; TI-58 calcltr, nds batt pak, $30. Call 577-8180.

Silver-Reed elec typwrtr, elite, 12 pitch, corr key, v gd cond, $100 or bst. Jim, x3-0254 or 494-1050 aftr 5pm.

Phase convrtrs frm sgl phase to 3 phase: 1-3HP wall type, $150; 1-5HP mtr genrtr, $400; 1-7HP wall type, $200. Bob, x3-4505.

Fender Statocaster elec guitr, '79, sunburst finish, mnt cond w/tremolo. Fred, x2775 Linc.

Teledyne microphn EC100, nw, $15 or bst; Winslow Homer wtr colr paints, nw, 15x21″, $15/6 or $3.50 or bst; 2 ldy's lab coats, wh, $5 ea; 2 tennis rcqts, $5 ea; macrame swag lmp shade, $6; 24 pc bevrage set, nw, $15. Call 876-3983.

12″ video mntr for persnl cmptr, 80x24, nvr usd, in box w/warr, $70. Call x3-1783/4510 or 965-2281.

L's full-lngth bge dwn coat w/muskrat fur collar, sz 12-14, mnt cond, wrn only 2X, can be seen in Rm 5-323, 9-5pm. Pat, x3-6829.

Century car seat, mdl 4300, w/terrycloth seat cvr, infnt-40 lbs, exc cond. Call 662-0488 aftr 6pm.

Sanyo 12″ b&w tv, $30; twn-sz mttrss & bx sprs, $30; baby crib & acc, $35; wd dsk, gd cond 18x50″, 7 drwrs, $50; circt testr, multi-fnctn, nw, $20. Irie, x3-6706 or 739-1425.

21″ b&w tv, $20; lrg dsk, $30; sm drssr, $25; dsk lmp, $15; Q-sz bed, Sealy mttrss, bx spr, base, $60 or bst. Trevor, x3-8591 or 492-7442.

Wght set: 2 benches (bench-press & sit-up), barbells, dmb bells, c 150lb wghts, $60 or bst. John, x3-8963 or 492-7442.

Cld mist humdfr, nvr usd. Linda, x3-4579.

Vehicles

'71 Opel wgn, 4 cyl, 4-spd, AM/FM/cass, halogen hdlghts, all seasn rads, 2 xtra rims, FL car, no rst, rns grt, gd mpg, $800 or bst. Call x4902 Linc or 584-6279.

'73 Alfa Romeo GTV2000 red cpe, 29K, btfl cond, orig ownr, askg $9,500. Call x3-6809 or 358-4698.

'73 Buick Regal, 8 cyl, gd cond, reliabl, $500. Joe, x3-5260.

'74 Ford LTD, 4-dr, auto, well-maint, TX car, no rst, $1,000 or bst. Call x3-4679 or 244-8163.

'75 Chevy Vega wgn, 4 nw trs, gd rnning cond, exc city car, $450 or bst. Judith, x3-5133.

'75 VW Beetle, 10K on reblt eng, gd solid trnsprtn, w/rfrck & ski rck, have all rpr rcpts, $800. Rich, x3-5494 AMs or 623-0962 aftrnoons.

'75 Hornet, 6 cyl, 60K, exc mtr & bdy, gd trs, AM/FM, $450. Call x3-5611, 11am-3pm or 876-5516 anytime.

'76 Fiat 128, 4-dr, cream colr, 4 nw Michelin trs, radio & htr, $700. Call 923-1197.

'76 VW Rabbit, auto, sunrf, hi mi but rns well, $500 or bst. Jeff, x8-4050 Draper.

'77 Chrysler Cordoba, 77K, sunrf, ps, pb, pwr wndws, a/c, nw trs, brks, valvs & more, have all rcpts, gd car, $1,000 or bst. Blair, x3-7830.

'77 Dodge Aspen sta wgn, auto, AM/FM stereo, a/c, nw trs, rfrck, exc cond, $1,200 or bst. Joseph, x3-6705 or 876-8067.

'77 VW Rabbit, exc cond, Germn-md, well-maint, 4-spd, reg gas, ovr 30mpg, AM/FM/cass, nw batt, $1,400 or bst. Call x3933 Linc or 861-9680.

'78 Honda Civic htchbck, v gd cond, 78K, AM/FM, a/c, nw cltch & brks, brwn, $1,550 or bst. Ali, x3-6499 or 497-0845.

'78 Fairmont, 4-dr, 4 cyl, 4 spkr stereo, 4-spd, usual 4 whls, $1,200 or bst. Call x3-7377 midnight-8am or 891-1761.

'78 Pinto, exc cond in & out, wire whls, cass dck, mny nw prts, nw paint, no rst, std, 66K, mst be seen, $1,500. Tricia, x3-2866 or Eric, 254-7440 eves.

'78 Datsun 510 htchbck, 5-spd, 76K, AM/FM stereo, all nw brks, muff & batt, perf cond excpt some dnts, avlbl 2/14, $1,200 or bst. Mr. Menjo, x3-0573/0928.

'79 Mercury Capri, lt bl w/blk trim, 4K, cln, 4-spd, mnl trans, suprb cond, a/c, AM/FM/tape, htchbck, 4 cyl eng, nw w/w trs, brks & shcks, bst offr ovr $2,500. Call x3-7265 or 524-7981 aftr 6pm.

'80 AMC Spirit DL, 2-dr, ps, pb, 80K, AM/FM stereo, mny opts, exc mech cond, v nice int, bdy fair, askg $1,100. Karem, 876-8148.

'80 Fiat Strada, a/c, 5-spd trans, Alpine AM/FM/cass stereo, burglr alrm, only 53K, gd cond, rns well, $1,250 or bst. Ron, x8-5227 Whitehead or 484-0834.

'80 Buick Regal Ltd, a/c, cruise, tlt whl, Chapman, AM/FM, 62K, $3,500. Paul, x3-7903 or 628-1878 aftr 5pm.

'80 Malibu Classic gray wgn, auto, a/c, AM/FM, 40K, gd cond, $3,500. Call x3-4829 or 961-1394 wkends.

'80 Citation, 2-dr htchbck, 4-spd mnl, ps, pb, a/c, AM/FM stereo, 4 gd trs, nw brks & cltch, hi mi but v gd cond, $1,200. Betty, x7720 Linc.

'80 Datsun 510, 2000cc, 5-dr htchbck, xtra lux mdl, nw exh, brks & trs, 50K, exc cond, AM/FM, auto trans, intrmttnt wipr, full feature warning indictrs, side & rear wndw dfrst, Chapman, $3,700. Afsar, x3-5567 or 623-2998.

'81 Cadillac sdn, 29K, nvy bl & gr ext w/gr lthr, no accdnts, nw trs, looks & drvs like an '84 Caddy, $7,500. Call x3-2048 or 1-934-6782.

'81 Chevy Cavalier CL, 4-dr, 4-spd, a/c, AM/FM, 50K, exc cond, $4,100 or bst. Lisa, 232-7797 6-9pm.

'81 Suzuki 250 dirt bike, usd a few times, real gd shape, comes w/tie dwns, boots, helmt & goggls, askg $700 or bst. Paul, x4299 Linc.

'82 Toyota Corolla SR5, 5-spd, 4 nw rads, batt (60 mo), tune-up, stereo, Chapman lck, exc maint, like nw cond. Call 353-1908.

'84 Chevy Camaro, red, 5-spd, char/clth, ps, pb, AM/FM/cass, a/c, rear defog, rear louvr, 13K, exc cond, $7,700 or bst. Laurie, x7520 Linc.

'84 Ford Tempo GL, a/c, auto, ps, pb, 17K, exc cond, askg $5,499; '69 T-Bird, a/c, pwr wndw, ps & more, nw trs, nwly paintd, exc cond, $3,988. Joseph, 324-1711.

Housing

Lexington, 4BR, 2b contmpry ranch, 2,200 s.f., frplc, garg, 15x22 dck, lrg priv yrd, fully furn, all applncs, DW, W/D, disp, etc, $1,400/mo+ utils. Call x3447 Linc or 655-7540.

Lexington, btflly furn hse, 3BR, 2½b, den, library, rsnbl rnt, avlbl Feb-June '86. Brian, x3-5585 or 212-371-5087.

Arlington, 1/2 2-fmly, 3BR, 2b, nwly renvtd, nr Ctr, 3/1 lease, no pets, $850+ utils. Call x3-4394 or 646-8813.

Arlington Hts, 5 rms, 2BR, mod ktchn, disp, lrg LR w/DR, wden flr, ceramic bath, next to shps & T, no pets, $700+ util, req refs. Dana Dedak, x4580 Linc or 641-0585 aftr 5pm.

Hyde Park, well-furn hse, quiet, safe nbrhd, 2-3BR, LR w/frplc, DR, yrd, linen & china avlbl, nr public trnsprtn, $700+ utils, avlbl 3/1/86. Call 720-2069.

Wanted

Vistng prof MIT sks apt/hse for July &/or Aug. Anton, x3-4200.

Stdnt/staff w/gd knwldg of cmptr lang SAS to finsh survey analysis, pay nego. Seth, x3-6467 or Robin, x3-6466 (Pug Wash).

Fridge. Dan, x3-6170.

Babysittr nded for gd-natured 1-yr-old girl, 1-2 days/wk, 8-4:30, to start immdtly, eventual full-time, East campus location ideal. Inna, x3-1661 or 933-6422.

Hlthy, norml-weight volntrs, ages 20-35 nded for study, find out how the foods you eat affect your mood & performance, $200. Teri/Sharon, x3-3087/3077.

DEC I or II wrd prcssr nded to revise manuscrpt, ASAP, top pay. Marilyn, x3-7894.

Roommates

F wntd for quiet, sensbl indpndnt hse, 26+, wrkng or postdoc, Porter Sq, Cambridge, moderate rnt. Bob, x2936 Linc.

M/F grad/post-doc, etc for apt nr Fresh Pond, frplc, view of Boton, quiet st, drvway, nr T, own BR & study, furn if desired. Ed, x3-0958 or 489-4355.

1 rm avlbl in 4BR Cambridge apt, M nonsmkr, pref grad stdnt, 10-15 min wlk to MIT, Kendall Sq, Ctrl Sq, prtly furn, 1st flr of hse in quiet nbrhd. David/Vic, 576-3795.

Quiet sensbl non-smkr F wntd for 3BR hse in Waltham nr Rt 128 & Rt 20, off-st prkg, mod rnt, no pets. Suk, x4079 Linc or 893-1933.

Lost and Found

Lost: gld ring w/engraving of Pan, inside "G.J.S. 1981." Call x3-7287.

Miscellaneous

Exprt typng on wrd prcssr, all knds, gd rates. Karla, x3-2203.

Typng, wrd prcssng, editng, 10 yrs exp. Marie, x3-7309.

Children's Morning Out for 3 & 4 yr olds, 8:45-11:45am, M &/or T, stories, crafts, music, games, cooking, reading & math readiness, field trips, in Westgate. Call 577-1766.

'86 Brides, plan now to have your wedding videotaped, capture the momnts in colr, rsnbl rates. John, 666-8550 before 2pm.

Surplus Property

The Property Office has the following excess 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 1630: Moseley recorder, mdl 20; HP multimeter, mdl 425A; HP lab generator, mdl 211A; Krohn-Hite oscillator; General Radio oscillator; Tigtech welder, mdl 116; HP oscilloscope, mdl 122A; Tektronix oscilloscope, mdl 502A; Heath lab generator, mdl EUW27; HP oscilloscope, mdl 130C; Sanborn transducer, mdl 311; General Radio bridge, mdl 650A.

Case 1634: Hewlett Packad printer & calculator, mdl 9100A & 9120A.

Case 1288: Digital Decwriter II terminal, mdl LA36DE; Omnitec acoustic coupler, mdl 503A, 300 baud capacity.

Case 1647: Canberra scaler; Canberra analyzer; Hamner pulse analyzer; Chicago Nuclear printing scaler; Chicago Nuclear power matrix.

Case 1651: Whittermore strain gauge; Tektronix hard copy unit; Consolidated Electrodynamics Corp recording oscillograph; Philbrick Research dual power supply.

Case 1653: Tektronix oscilloscope.

Case 1654: Sanborn transducer amplifier; Central Scientifc viscosimeter; EG&G Inc microflash strobe; Massa Labs preamplifier; Hewlett Packard X-Y plotter; Radio Shack tape recorder; Dumont oscilloscope camera; Hewlett Packard amplifier.

Case 1660: Shaw-Walker fire proof file cabinet.

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 Assistant (10-215) and in the Personnel Office (E19-239).

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

Persons who are NOT MIT employees 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.

Ken Hewitt	**3-4267**
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**
Appointments:	
Nancy Collins	**3-4077**

Administrative and Academic Staff

Analyst Programmer II, Administrative Systems, to assist in development of external system specifications and translate into internal system specifications and computer programs. Will prepare program logic diagrams and overall data flow; test and document programs for operational use and future maintenance; assist applications programmers in programming, testing, and debugging techniques. Will prepare program modification or enhancement specifications for approval by senior systems analyst. Will establish file requirements and processing techniques; perform all the functions of applications programmer as required; assist users with program problems; attend classes, seminars and the like to develop and maintain knowledge of currently accepted programming standards and techniques. Requires 1-2 years experience in Revelation or other microcomputer database languages and familiarity with microcomputer local area networks concepts and facilities. Familiarity with Novell operating system and TCP/IP protocols desirable. An Associate's degree or equivalent combination of education and experience is necessary. Considerable experience in programming is essential. A86-671

Associate Editor, Alumni Association (Technology Review), to perform general editorial and writing assignments for *Technology Review,* including covering conferences and seminars, analyzing current issues in technology as reported in other magazines and through interviews, researching and writing short contributions, editing articles written by professional scientists and engineers, and assisting with commission material as well as selecting from manuscripts submitted by scientists, engineers, and professional writers. Familiarity with issues in science, engineering, and technology policy; and writing and editing skills appropriate to a general audience will be necessary. A86-670

Coordinator for Reunion Programs, Alumni Association, to plan, develop, and implement the 13 annual quinquennial class reunions. Duties include planning and developing reunion and off-year reunion programs; providing logistical support for all events; recommending timetables and developing, coordinating and implementing all promotional programs for all classes; coordinating the registration process; and providing logistical support for Technology Day. A Bachelor's degree, preferably in business or administration, public relations, or hospitality industry, or the equivalent combination of education and experience preferred. Word processing experience helpful. A86-669

Administrative Assistant, Mechanical Engineering, to assist the Administrative Officer in the fiscal affairs of a major academic department. Will assist in the development, preparation and monitoring of department budgets. Will maintain and adjust when necessary payroll records for academic and nonacademic staff. Will assist faculty in the preparation and monitoring of research budgets. Will perform other administrative functions as requested, such as preparation of correspondence and reports, arranging for study, and recommendations for purchase of office equipment. Requires a knowledge of Institute accounting procedures. Attention to detail and ability to work independently are important. Experience in using a personal computer or the willingness to learn essential. At least 2 years of related experience desirable. Some college/accounting training helpful. A86-668

Communications Officer, Media Laboratory, to report to the Laboratory Director for coordinating corporate liaisons, publications, news and media relations and development. Will be responsible for reporting of research results to corporate sponsors; arranging for visiting research affiliates; hosting corporate visits; initiating and maintaining corporate connections via electronic mail system and an "electronic newsletter"; designing and maintaining press kits and Lab research archives to answer formal media requests; coordinating media requests with the MIT News Office; preparing and fact-finding for approaches to corporations and foundations for funding of chairs and support of discretionary funds; coordinating and interacting with MIT's Development Office and with the School of Architecture and Planning's Development Officer. Some travel may be required. Bachelor's degree in Electrical Engineering or Computer Science and/or 3-5 years public relations, communications, industrial liaison experience; or equivalent combination of education and experience. A86-655

Technical Writer, Project Athena, (temp. 1 year appointment), to be responsible for conducting research and writing brief introductory documentation on DOS, UNIX, and their languages and utility packages. Will write conversion guides between DOS and UNIX. Will oversee the distribution of standard DOS and UNIX documentation. At least three years professional technical writing experience required. Knowledge of MS-DOS, UNIX and at least one year programming language from among C, FORTRAN, Pascal, or Lisp. Experience with an applications area such as graphics preferred. Exceptional technical facility may substitute for one of DOS or UNIX experience. A86-666

Assistant Dean, Office of the Dean for Student Affairs, to counsel and advise students and student groups, with a major responsibility for providing support services to minority students. Will contribute to the development and implementation of policies and procedures in the broad areas of responsibility encompassed by the Office of the Dean for Student Affairs and will assist the Associate Dean for Student Affairs and Head of the Student Assistance Services Section in carrying out the goals of that section. Specifically, duties will include counseling and advising students about their personal, academic, and social concerns which may involve interactions with faculty, staff, doctors, family, and friends; and counseling and advising student groups which may involve organizing group meetings as needs are perceived. More general responsibilities may include representing the ODSA and/or the Student Assistance Services Section at the Institute functions/meetings and contributing to internal ODSA staff development activities. A Master's degree (preferably in counseling, student personnel or related areas) and at least three years of counseling experience are required. Excellent human relations skills, tact, and ability to deal with sensitive information are required as well as the ability to initiate, plan, organize, and follow through on projects while working in a high-pressure environment. A86-665

Space Analyst, Office of Facilities Management Systems, to provide a central source of information about all MIT physical facilities by maintaining accurate and timely space inventories. Will gather and interpret information about room function, intensity of use, and physical configuration by field checking all MIT facilities and by tactful contact with departmental faculty and administrators. Following the field audit, the Space Analyst will code all data relevant to MIT space use; input it into the INSITE computer system; and learn to use IBM's job control language required to run the system. Will produce all output from the system, interpreting information requests to determine what regular or ad hoc reports are needed. Will provide historical statistical analysis of the space data and special analyses upon request from senior management, sometimes converting data to graphic forms. Duties will also include special field audits for the Space Committee and Comptroller's Office, and space utilization studies. Responsibilities also include creating and updating MIT's scaled floor plans in ink on mylar, on a timely basis, and mastering, using and demonstrating a 2D CAD system for all floor plans, as well. Supervision of a part-time draftsperson is required. Some experience in facilities management and computerized systems is highly desirable. The ability to learn how to manipulate a large data base management system and 2D CAD system, and provide appropriate audit trails and historical data without gaps, is necessary. Ability to interpret construction drawings, drafting experience including ink on mylar drawing, and skill to communicate well in written and graphic summary forms with data users, is essential. A Bachelor's degree or equivalent experience, including a basic college math course is required. A86-664

Systems Administrator, Office of Laboratory Supplies, to oversee and implement the operation of automated and manual systems within the Office of Laboratory Supplies. Automated systems include cylinder control, stockroom sales reporting, inventory control and internal billing. Will supervise the performance of administration and processing requirements of automated and manual systems, and will assist the Manager of Systems with the planning, design and implementation of refinements and further automation. Will also be involved with financial administration and internal marketing and customer services related to a large, multi-stock room service operation. Experience requirements include several years of related supervisory and automated systems experience within business operations areas and participation in the conversion of manual systems to automation, from systems analysis through implementation and operation. Related experience in an educational/institutional environment and a working and some technical knowledge of interactive, online business information systems in the DEC VAX/VMS environment are pluses. Bachelor's degree in Business, Accounting, Information Systems or related field, or the equivalent combination of education and experience and very strong written and oral communication skills are necessary. A86-663

Systems Programmer I, Information Systems, to work for MIT's Information Systems in the VM/OS support group, which supports a network of three processors, one 4341, one 4381, and one 3083, running VM/SP, CMS and VS1. Work will entail generation and maintenance of system control programs and Program Products, problem determination, tailoring, documenting changes and user consulting. A Bachelor's degree or equivalent experience and 1-3 years programming experience in a time-sharing environment required. Experience with 370-BAL preferred, VM/370 and VS1 experience desirable. A86-662

Sponsored Research Staff

Research Engineer, Laboratory for Electromagnetic and Electronic Systems, requires an electrical engineer to work in two specific areas combining knowledge of circuits with knowledge of computer operations. Will work independently and establish procedures for and manage LEES VAX 11/750 computer system. Duties will include interaction with vendor on maintenance, maintenance of files, supervision of hardware and software, and assistance of faculty, staff and students in the use of the equipment. In addition, will work with an established research group and contribute to the design and execution of experiments in power electronics and maintain a complex analog simulation system. Will be expected to design, construct and test circuits and systems using bipolar and Mosfet power transistors, thyristors (including gate-turn-off devices), high frequency magnetics, digital and analog integrated circuits, and microprocessors. Ability to effectively interact with vendors is required. Because of the nature of the academic laboratory environment, must have ability to supervise students and be able to interact effectively with faculty and staff. A Master's degree in Electrical Engineering is preferred, although consideration will be given to exceptional candidates with a Bachelor's degree and experience in systems operations for VAX equipment. R86-909

Research Staff/Microprocessor Programmer, Haystack Observatory, to work closely with the digital engineers in the debugging of both hardware and software, modifying code where required. Will at first work to become familiar with the hardware and software which has thus far been completed. Development of original code will also be required. Will be called upon to achieve as high a degree of commonality as possible in all of the code modules. Will also work closely with software designers who are coding the minicomputers for use in controlling the radar, reducing and processing its data and managing the large data bases which are required for the space surveillance operation. The "C" programming language is used throughout the project. Proper documentation of software is an integral part of the work. BS or Associate degree in Engineering or Engineering Technology, with emphasis on Computer Science and/or Programming necessary. Two years of programming experience, including assembly programming, preferably using Intel family microprocessors required. Experience in interactive hardware/software debugging using Development systems such as the H.P. 6400 or Intel's later (16-bit) systems is desirable. This position requires a security clearance or the ability to obtain one. R86-905

Research Associate, Laboratory for Information and Decision Systems, to participate in research program on distributed decision-making organizations. PhD required with demonstrated credentials in cognitive psychology and mathematical modeling of human decision processes. Previous experience in the design and analysis of computer-aided experiments in information-processing and decision-making by small organizations, such as command and control ones, is highly desirable. R86-908

Technical Assistant, Psychology, to design, run, and analyze experiments on visual processing in adults and language development in children. Position involves constructing stimuli (photographic and linguistic), programming a microcomputer, calling subjects, contacting schools and day care centers, testing children and college students, analyzing data statistically, writing up short descriptions of methods, performing minor maintenance of equipment. Familiarity with microcomputers, programming, statistics, and experimental design in psychology preferred. SB degree or equivalent background required. R86-901

Technical Assistant, Psychology and Brain Science, to provide a diverse and expanding array of technical support services to a large research group studying brain architecture, development, and function using a wide variety of traditional and innovative neuroanatomical, neurochemical, and neurophysiological techniques. Techniques currently include autoradiography, HRP histochemistry, receptor binding, immunohistochemistry, and numerous special stains. Major duties will include frozen sectioning, mounting, processing, coverslipping, and ordering of serial sections of brain tissue. Will be responsible for general maintainance, orderliness, and stocking of both the laboratory and a small animal surgery facility. Some work with small animals. Will work as part of a flexible and loosely structured team but often independently and with a minimum of supervision. Efficient work habits and strong organizational skills necessary. Must be able to coordinate activities and set priorities; schedule sometimes unpredictable. Facility with general laboratory biochemistry required. SB degree or equivalent back-

ground required. Experience with general histological procedures (cutting, staining, coverslipping) very desirable. Specific experience with brain tissue and techniques mentioned above helpful but less important than energy, enthusiasm, and the ability to learn and adapt quickly in a busy and dynamic laboratory. R86-900

Research Associate, Center for Technology, Policy and Industrial Development, to be the central source of information and analysis in the Program on the organization and performance of the world motor industry. Duties of the Industry Analyst will include: (1) maintaining a comprehensive, computerized data base on the international motor industry to be maintained on an IBM PCAT, to include data from governments, companies, unions and other sources and be available to researchers associated with the Program, and (2) providing analyses of competitive trends and emerging organizational patterns and production strategies within the world motor industry. These analyses will be written in a manner accessible to a wide industry audience and will be suitable for presentation at the Program's annual Policy Forums for senior industry executives, government officials, and labor leaders. Broad-based knowledge of the motor industry, particularly with regard to manufacturing procedures and producer competitive strategy necessary. Must have experience in developing and maintaining a data base using personal computers and generating reports from that data base. Minimum of three years work experience, preferably involving the motor industry, required. Must have ability to travel domestically and internationally; to negotiate diplomatically with governments, motor vehicle producers, and other sources of data around the world; and to make sophisticated presentations to groups of senior industry, government, and union officials. R86-885

Research Engineer, Applied Biological Sciences, to work on independent research in the areas of fermentation technology, mammalian cell culture and protein recovery. Duties will include laboratory research either independently or in cooperation with postdoctoral fellows and graduate students. In addition, will have responsibility for overseeing and maintaining laboratory facilities in fermentation and cell culture research. Master's degree in Biochemical Engineering and at least one year of postgraduate laboratory experience required. R86-898

Technical Assistant, Center for Cancer Research, to perform laboratory research on molecular and cellular analysis of mammalian genes. Will take care of tissue culture of adhesive as well as suspended cells, such as lymphocytes. Also will work on various types of biochemical preparation and analysis of nucleic acids and proteins, including cloning of mammalian genes by recombinant DNA technique. Will handle mice for injection of cells and chemicals and for preparation of antisera. BS and minimum of 2-3 years of experience in at least some of the techniques described required. Experience in tissue culture essential. R86-897

Library Support Staff

Library Assistant III, MIT Libraries - Catalogue Department (temporary), to assist in a project for the processing of records for multivolume works, the individual volume holdings of which are to be linked to an existing online record in the MIT database. Duties will include maintaining file of records to be linked; photocopying and organizing copies of master shelflist records; printing records linked in the MARC Records Management System of the Libraries' new online circulation and editing system and maintaining a file of the printouts; preparing barcodes, shelflist photocopies and multivolume sheets for mailing to Divisional/Branch Libraries; and participating in linking routine holdings to existing records in the MIT database. High school graduate or equivalent and a minimum of one year direct/related experience required. Accurate typing of 40 wpm and attention to detail essential. Experience using CRT terminal desirable. This is a temporary position ending June 30, 1986. L86-230

Library Assistant IV, MIT Libraries - Catalogue Department (temporary), to participate in a project providing for the original cataloguing and online conversion of 11,250 scientific and technological publications issued by MIT from 1861 to 1974. Will convert the bibliographic records of MIT publications (technical reports) to machine-readable form directly online, according to AACRl catalogue code, OCLC bibliographic input standards, and MIT cataloguing policies. Will assign OCLA field and subfield codes and indicators, barcode publications, verify personal names and series in MIT and online authority files, and create new authority records for personal names. Will also resolve personal name heading conflicts and initiate correction to bibliographic records and authority files to reflect AACR2 rules of entry; input catalogue records on the OCLC terminal from work forms prepared by cataloguers; edit online contributed and Library of Congress catalogue records based on cataloguers' written instructions; assist in retrieval of items for cataloguing from Divisional/Branch Libraries and the Retrospective Collection facility; and maintain statistics of items converted and input. High school graduate or equivalent is necessary; some college study preferred. Minimum 2.5 years direct/related experience required. Working knowledge of the MARC format, preferably in the OCLC Cataloguing Subsystem, and experience with CRT operations required. Experience using AACR2 catalogue code desirable. Accurate typing of 40 wpm and attention to detail essential. This is a temporary position ending December 31, 1986, with possible renewal for second year. Will work Monday-Friday 8-4, 9-5, 10-6, or 11-7 (negotiable). L86-229, L86-228

Library Assistant IV, MIT Libraries-Catalogue Department, Temporary position (Retrospective Conversion), to participate in ongoing retrospective conversion of circulation titles to machine-readable form by converting MIT bibliographic records of Library of Congress-classes monographs for which Library of Congress or contributed records exist online. According to requirements of the OCLC Cataloguing Subsystem, will assign appropriate content designators to MIT bibliographic data according to the MARC format, edit and update catalogue data online to conform to MIT policies and OCLC bibliographic input standards, and add MIT holdings information. Assign barcodes to converted holdings. Maintain statistics of titles converted. Perform auxiliary assignments as required. High School graduate or equivalent necessary. Some college preferred. Required 2.5 years direct/related experience. Experience using OCLC Cataloguing Subsystem highly desirable. Retrospective conversion experience highly desirable. Minimum typing speed, 40 wpm, accuracy and attention to detail essential. L86-219

Secretary/Staff Assistant

Administrative Secretary, Materials Processing Center, to provide secretarial and administrative support to faculty members and research group. Will advise supervisor of financial situations for laboratory personnel, monitor research records and accounts with large annual volume. Will also type materials for classes, manuscripts, proposals, etc.; compose letters, organize and maintain files and professional library; handle telephone inquiries; arrange meetings, and coordinate travel plans. Will perform other clerical and administrative duties as required. Must be able to effectively set priorities and work with frequent interruptions in a busy environment. Accuracy and attention to detail important. Familiarity with MIT procedures desirable. Knowledge of word processing (DEC/IBM) helpful. Business Administration degree or equivalent work experience necessary. Minimum 4.5 years direct/related experience required. NON-SMOKING OFFICE B86-224

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 necessary; knowledge of word processors highly desirable. Ability to work both independently and as part of a team important. Position requires good judgment, patience, tact and understanding. The ability to deal with confidential information necessary. Thorough knowledge of MIT desirable. Some overtime work may be necessary. Minimum 4.5 years direct/related experience required. NON-SMOKING OFFICE B86-193

Administrative Staff Assistant, Research Laboratory of Electronics (part-time), to perform all administrative, secretarial and clerical duties for two faculty and graduate student staff in RLE's Image Processing Group. Responsibilities include typing, filing, receptionist duties, copying, travel arrangements, scheduling seminars, maintaining filing systems, handling purchasing activities, maintaining group roster, and executing library searches. Will also handle academic work for one of two faculty. Excellent command of the English language and excellent typing skills of 65 wpm required. Ability to learn word processing system for producing papers, memos, correspondence, and proposals is essential. Math/Science background highly desirable, but not essential. Minimum 4.5 years direct/related experience required (post-high school education may count toward experience). Will work 28 hours/week, 9-5. B86-217

Sr. Secretary, Laboratory for Manufacturing and Productivity (part-time), to perform secretarial duties which require some independent judgment in the application of office policies. Will do extensive word processing on the DecMate II including straight typing of manuscripts, proposals and papers; type class notes, schedules and letters from general outlines; transcribe from a dictaphone letters and some class notes. Will also proofread and answer phones for 3 professors and 1 laboratory line. Will field questions and direct calls from industrial and government sponsors and representatives and the MIT community. High school graduate or equivalent necessary. Prefer 2.5 years direct/related experience. Minimum typing speed of 60 wpm on DecMate II. Will work 20 hours/week (flexible). B86-232

Sr. Staff Assistant, Sloan School of Management, to support Deputy Dean and Administrative Assistant. Will interact with faculty and staff within and outside the Institute in support of Deputy Dean's varied administrative activities and committee roles and academic research in the field of marketing. Will coordinate and schedule appointments, meetings, seminars, luncheons/dinners, etc.; will disseminate materials and organize agendas as needed; type, proofread and reproduce reports, manuscripts, correspondence and similar material from rough draft. Involves considerable and complicated telephone contact requiring general knowledge of all of the Sloan School and the various departments, faculty, and their areas of research. Will maintain extensive and confidential personnel files of Sloan School faculty; sort, distribute, and review mail, prepare and issue calendar of Sloan School seminars to be published bi-weekly; make travel arrangements, prepare expense vouchers, and order supplies. Will also provide some administrative support for the office of the Associate Dean for Administration. Should be familiar with word processing and office automation systems. College degree preferred with 2-3 years of secretarial experience required. Excellent typing and interpersonal skills desirable. Should have word processing experience and general knowledge of personal computers. B86-231

Sr. Secretary, Center for Space Research, to support three research groups within the Center. Position is 75% secretarial function and 25% data clerk function. Duties will include word processing (using MacIntosh and/or Pacific), xeroxing, mass mailings, general correspondence, proposals, publications, etc. Will also maintain various computer files (on software, etc.) as needed, under the supervision of a staff programmer. Strong secretarial skills required. Ability to work with a wide variety of people and projects necessary. Must be able to work independently while contributing to team effectiveness. Must have willingness and ability to work with different word processing and/or computer systems. Minimum 2.5 years direct/related experience required. B86-221

Sr. Secretary, Chemical Engineering, to answer phones, sort mail, maintain inventory of office supplies, monitor accounts, plan travel itineraries, prepare class notes, direct inquiries to proper area, and greet visitors. Will work directly with the department head in absence of administrative assistant and interface with occupants of suite to ensure smooth operation of Headquarters. Will also type and photocopy general correspondence, technical papers and manuscripts. Will act as messenger and perform other duties as assigned. Good typing and communication skills required. Knowledge of, or willingness to learn, word processing helpful. Minimum 2.5 years direct/related experience required. B86-218

Sr. Secretary, Industrial Liaison Program, to handle various secretarial duties for two Liaison Officers. Responsibility will include extensive contact with corporate members of the ILP and Institute faculty and staff. Duties will include the composition and typing of correspondence, reports, visit and travel agendas. Will assist in the scheduling of appointments between company representatives and MIT faculty and staff; arrange for company research briefings including room scheduling, catering and audiovisual equipment; make travel arrangements, obtain travel advances, prepare travel expense vouchers, and maintain files. Assist with coverage of telephones in working group suites and answer inquiries related to servicing the member companies of the Program. Will independently reply to correspondence when appropriate, reproduce reports and manuscripts and perform other duties as assigned. Will assist when needed at occasional office-sponsored symposia and seminars. Computer input and retrieval on various member company statistics and requested publication information. Must have excellent secretarial and organizational skills as well as strong interpersonal skills. Flexibility important and initiative desirable. Must have ability to work as a strong member of a team. Familiarity with MIT helpful. Will be trained on DEC computer system. Minimum 2.5 years direct/related experience required. B86-215

Sr. Secretary, Mechanical Engineering, to provide secretarial and administrative support to two faculty members. Will prepare technical manuscripts and reports and have considerable interaction with agencies funding research; prepare and distribute teaching materials; answer telephone inquiries and correspondence; arrange travel; and do filing and other general office functions. Will interact with a variety of MIT staff and students. Position involves a good deal of student contact. Excellent typing and organizational skills are essential. Accuracy in handling detail and knowledge of MIT accounting system important. Must have minimum of 2.5 years direct/related experience or an equivalent combination of education and experience. B86-214

Sr. Staff Assistant, Civil Engineering (part-time, 20 hours/week) to do a variety of secretarial and administrative functions for a senior faculty member. Duties will include arrangement of seminars and Advisory Committee Meetings and preparation of Administrative Progress Reports for the Center for Scientific Excellence in Offshore Engineering; accounts and occasional technical reports for research projects; and assistance in operation of Society Awards Committee, typing of correspondence, materials for classes, organization of files, and other tasks as required. Ability to interact with students necessary and familiarity with MIT preferred. Must have somewhat flexible schedule due to variations in work load. Good typing skills required. Minimum 2.5 years direct/related experience required. B86-210

Sr. Secretary, Energy Laboratory, to perform diverse secretarial duties for faculty and research staff in the Sloan Automotive Laboratory. Will prepare high-quality presentation materials and type manuscripts, proposals and technical reports from handwritten drafts; do library searches for reference material; handle extensive telephone contacts, make travel arrangements, schedule meetings and seminars and maintain the office calendar. Considerable interaction with faculty, students and staff. Good to excellent technical typing skills required. Knowledge of word processing (MASS11) or willingness to learn essential. Ability to work with other people and meet deadlines, work under pressure and initiate actions for the overall efficiency of office operations is important. Minimum 2.5 years direct/related experience required. B86-207

Sr. Secretary, Research Laboratory of Electronics, to provide secretarial support for one professor and the research staff of the Speech Communication Group. Will type and format correspondence, course materials, articles and other documents; photocopy materials and prepare viewgraphs; maintain filing systems, student records and mailing lists; answer telephone; schedule appointments and update calendar; sort and distribute incoming mail; send outgoing mail; maintain and order office supplies; prepare various Institute forms; make travel arrangements; and interact with students and receive outside visitors. Excellent interpersonal skills essential; experience or willingness to learn computer typesetting required; some familiarity with math symbols preferred. Minimum 2.5 years direct/related experience required. NON-SMOKING OFFICE B86-206

Sr. Staff Assistant, Research Laboratory of Electronics, to assist Group Leader in Documents and Publications Group. Will type manuscripts, technical reports, correspondence, etc., on text editor; assist in preparation of annual report and other publications; maintain mailing lists; prepare purchase orders, process books and journals; maintain collections, and develop familiarity with all phases of Document Room operation. Provide back-up coverage within group. Minimum 2.5 years direct/related experience and a knowledge of/or willingness to learn computer text editing and formatting essential. Flexibility, strong office and interpersonal skills vital in this busy office. Accurate typing skills required. NON-SMOKING OFFICE B86-205

Sr. Secretary, Electrical Engineering and Computer Science-Microsystems Technology Laboratories, will provide supplementary support to and under the general direction of the Administrative Secretary. Duties will include typing, editing/proofreading memos and correspondence; answering telephones; making appointments, arranging meetings; and maintaining complex calendar; coordinating travel arrangements; maintaining general account and project files; copying, and ordering supplies. Will type technical manuscripts, proposals, budget and financial statements, reports, and presentation materials; write general correspondence/memos according to established guidelines for own or supervisor's signature; provide secretarial coverage for Technical Manager and technical staff as assigned) may review accounting statements and related reports, and prepare requisitions and vouchers. High School graduate or equivalent and a minimum of 2.5 years direct/related experience is required. Must type 60-65 wpm and have word processing experience and/or technical typing. Close attention to detail and the ability to see complex project to completion necessary. B86-204

Sr. Secretary, Literature Faculty-Humanities (perm. 10 month position – academic year), to serve as Film/Media Coordinator and to assist Literature Faculty Administrative Officer. Will oversee rental, screening, and shipment of feature films used by faculty, maintain pertinent schedules, files and bookkeeping records. Will coordinate use of film and audiovisual equipment, maintain a small videotape library, and hire/supervise student projectionists and film assistant. Will assist Literature Faculty Administrative Officer with secretarial and clerical duties. Will use IBM XT (wordperfect program) and DECmate I and II word processors. Will learn to set up and operate video cassette recorders and sound/film projectors and oversee maintenance of all equipment. Typing, knowledge of computers, basic bookkeeping skills and ability to operate audiovisual equipment essential, plus a minimum of 2.5 years of secretarial or related skills required. Interest in film/media and a knowledge of MIT preferred. Must also have good interpersonal skills and ability to work autonomously as well as with a wide variety of people. B86-203

Sr. Secretary, Sloan School of Management, to perform secretarial duties for the Management Science Area Head, Area Coordinator, and two faculty members. Duties will include typing, proofreading and editing correspondence and technical manuscripts; coordinating schedules; arranging meetings; making travel arrangements, and acting as an information source for the Area. Will have considerable and often complicated telephone contact as well as daily contact with outside visitors and others seeking information and/or appointments with the Area Head. Other duties will include composing and initiating correspondence for the Area Head; maintaining chronological correspondence files and other files for papers and information; helping with the preparation of course materials; and aiding the Area Coordinator with Area-wide duties such as reservation of the conference room and audiovisual equipment, and maintaining Area equipment and assisting in the smooth operation of the Area. Good organizational skills; professional manner and ability to maintain confidentiality regarding correspondence, appointments and telephone conversations; ability to work under pressure in a busy office with many interruptions, and the ability to set priorities necessary. Knowledge of MIT preferred. Word processing ability (Wang or IBM PC) and/or strong desire to learn preferred. Minimum 2.5 years direct/related experience required. NON-SMOKING OFFICE B86-194

Sr. Staff Assistant, Industrial Liaison Program, to be responsible for assisting the Manager in ensuring prompt processing of publications orders and maintaining all aspects of work flow in the Publications Office of the Industrial Liaison Program. Will assign work to clerical and student personnel and maintain efficient work flow. Advise Manager on work flow problems and recommend changes in procedure to ensure prompt processing of all orders. Will supervise mailings and distributions for entire department, including coordinating large domestic and overseas shipments and maintaining contact with US Postal Service regarding changes in mailing regulations and procedures. Will respond to inquiries form internal staff, faculty, and outside corporations on policies and procedures of the department. Will respond to requests for lists and labels generated from computer database. Oversee inventory of all office and mailing supplies and maintain equipment including photocopier, postage meter, and electronic scale. Provide general assistance as needed to Manager to ensure that all requests are accurately and promptly filled and that all inquiries receive response. Excellent organizational skills required. Ability to train clerical personnel essential. Ability to set priorities and to adapt to new procedures necessary. Ability to work independently and take initiative, and interest in office systems important. Willingness to learn and extensively use computer system necessary. High school graduate and a minimum of 2.5 years direct/related experience is required. Typing of 50 wpm essential. B86-192

Sr. Secretary-Editorial, Acquisitions, MIT Press, to type materials and correspondence pertaining to publication projects; process rejected proposals (writing letters, returning manuscripts, logging information on rejections); duplicate and distribute materials in-house and throughout the Institute; process travel forms, readers' fees, book orders and other internal documents for acquisition editors; assist Acquisition Coordinator in maintaining contract, rejection, and out-of-print files; and assume primary responsibility for answering phones. Excellent secretarial skills including 65 wpm typing, familiarity with office procedures, memory for detail, knowledge of English grammar, usage and spelling necessary. Must have good telephone manner and an ability to prioritize work from a group of editors. Will be expected to make several trips a day to pick up and deliver mail, distribute in-house correspondence, and maintain stock of office between main Press building and Acquisition Office. Familiarity with and/or willingness to learn DECmate II word processing desirable. Minimum 2.5 years direct/related experience required. B86-191

Sr. Secretary, Sloan School of Management, to support both the Office of Alumni Relations and Management of Technology Program, Sloan School. Duties will include typing all correspondence and using Wang and PC word processing systems; answering telephones; handling incoming and outgoing mail, maintaining all files and records; scheduling appointments, meetings and social affairs; helping alumni interface with School; making travel arrangements; preparing various Institute forms and helping maintain monthly accounting statements and receiving visitors. Must have good organizational and interpersonal skills. Excellent typing of 50 wpm with accuracy and proofreading skills more important than speed. Familiarity with word processing systems preferred but will train. Minimum 2.5 years direct/related experience required. NON-SMOKING OFFICE B86-157

Sr. Secretary, Sloan School of Management, to perform secretarial duties for three professors in the Economic, Finance and Accounting Group of the Sloan School. Will type, proofread and reproduce manuscripts, reports, exams, and correspondence, often of a technical nature. Some work will require transcription from dictaphone, and good command of the English language. Will assist with preparation of course materials and notes, as well as for meetings and seminars. Additional responsibilities will include answering student inquiries, answering phones, scheduling appointments, arranging travel, copying, maintaining files and responding to routine inquiries. Familiarity with and/or willingness to learn Wang word processing and IBM-PC desirable. Excellent typing, proofreading and general office skills, as well as good organizational skills and the ability to work under minimal supervision essential. Technical typing and dictaphone skills needed. Minimum 2.5 years direct/related experience required. B85-109 B85-110

Sr. Secretary, Sloan School of Management, to work for three full-time faculty in the Operations Management subgroup of the Management Science Area. Will type and proofread correspondence, course materials, manuscripts and copy as appropriate; maintain complex calendar; schedule appointments; make travel arrangements; answer phones; interact with students and outside visitors; process mail; monitor accounts; order supplies; and perform other duties as assigned. Should be willing to assume responsibility and work under minimal supervision, handle confidential material, work under pressure and be responsible for accuracy of materials. Technical typing and knowledge of word processing and/or willingness to learn both necessary. Knowledge of MIT desirable. Minimum 2.5 years direct/related experience required. Excellent typing and organizational skills required. NON-SMOKING OFFICE B85-950

Secretary, Spectroscopy Laboratory and Laser Research Center, to provide secretarial support to the department. Will type, perform word processing, prepare routine correspondence, manuscripts, proposals and reports; maintain files; answer phones and assist with general office coverage. Requires excellent typing and proofreading skills. Some overtime may be required. Minimum 2.5 years direct/related experience required. NON-SMOKING OFFICE B86-225

Technical Support Staff

Computer Operator, Research Laboratory of Electronics, in the Digital Signal Processing Group (part-time). Duties will include performing weekly computer backups during non-prime-time hours. Other responsibilities include inventory of computer supplies, clean/order the computer facility, make and run computer cables, and assist in miscellaneous tasks associated with running a computer facility. High school graduate with direct/related experience is required. College student in a technical area is preferred. Should have some familiarity with the UNIX operating system and a general knowledge of digital electronics is required. Working hours will vary from 12 to 16 hours per week and are confined to non-prime-time hours (possibly weekends and a few hours during the work week). T86-220

Assistant Communications Console Operator III, Physical Plant, to answer Operations Center telephones used by the MIT Community to report fire, trouble, maintenance requests and other related information. Will monitor the Institute's Auto Call Alarm System and operate the Facilities Control System to include monitoring of alarms, diagnosing problems and taking corrective action. Will maintain daily log of all Operations Center calls and alarms and indicate what action was taken. Dispatch mechanics to investigate maintenance problems; operate various pieces of communications equipment including paging system, radio network, telephone and intercom. Will perform clerical duties in support of Work Control and various Physical Plant Shops including typing, shut-downs, overtime lists and assisting in maintaining work order systems. Will work 40 hr/week irregular schedule. T86-197, T86-199

Office Assistant

Administrative Assistant, Physical Plant, to provide general office support to several staff members. Duties will include the preparation of various operating reports and budgets, maintenance of files and records, and general administrative, secretarial and clerical functions as required. Good organizational and interpersonal skills as well as the ability to manage data and text on several different PC systems essential. Minimum 4.5 years direct/related experience required. S86-196

Office Assistant, Provost's Office, to perform the following duties: typing of Program correspondence; arranging/coordinating meetings and functions; handling office mail and telephones; processing voucher payrolls; maintaining files and records; ordering and maintenance of supply inventory; handling petty cash; interfacing with Program clients and families, and operating office equipment. The Program is the MIT/Wellesley Upward Bound Program, a coeducational, multiracial, multiethnic, educational program serving 70 Cambridge High School students. The goal of the Program is the motivation of these students so that they finish high school and pursue a college education. Upward Bound has a key staff of four persons in addition to seasonal staff and all members are expected to function as part of the Program. Must have the ability to work with adolescents and persons from varied ethnic, cultural, and racial backgrounds. Must be able to type 40 wpm. Should be willing to either commute to Wellesley College during the Program's summer session or reside there five days per week during that period. Must be able to drive and possess a valid Mass. drivers license. Own transportation helpful, but not required. Should be flexible to work some evenings and weekends. Minimum 1 year direct/related experience is required. S86-200

Office Assistant, Registrar, to assist in the registration of students, maintenance of student permanent records, use of record-keeping terminals (IBM), handling student requests, registration corrections (drops/adds), typing of form letters, and filing. Should be versatile and able to work in a busy environment. Good typing, accuracy with figures, and some College experience preferred, either as a student or employee. Minimum 1 year direct/related experience required. S86-208

Office Assistant, Cell Culture Center (temporary, part-time, 20 hr/wk for 6 months to a year). Duties will include filing and processing all incoming and outgoing mail. Will handle reprint requests and other general office work; assist supervisor in processing shipping materials and invoicing, and minimal accounting procedures. Ability to type 45 wpm with accuracy and neatness and work independently essential. High school graduate and a minimum of 1 year direct/related experience required. 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 other 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 minimum 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, The Laboratory of Architecture and Planning, Aga Khan Program for Islamic Architecture, to greet visitors, answer phones, provide information about the program, type and provide general secretarial support. Will make travel arrangements, assist in organizational details for conferences and seminars, operate telex, and assist visitors with parking arrangements, accommodations and travel arrangements. Requires good interpersonal and communication skills, typing (50 wpm), and organizational skills, as well as the ability to work under pressure. Minimum 1 year direct/related experience required. S85-866

Service Staff

Assistant Animal Technician, Division of Comparative Medicine, to perform duties involved in the care of laboratory animals, working with different species of animals as assignments dictate. Will maintain proper levels of food and water for animals in accordance with established procedures; clean animal cages and trays; change bedding materials and/or litter; wash cages, trays, water bottles and related items; perform miscellaneous housekeeping functions (such as cleaning laboratory walls, floors, etc.) in animal areas, using cleaning equipment assigned; monitor animals and notify Animal Technologist or supervisor if condition of animals dictates; and perform other related duties. Should have High school diploma. Knowledge of and ability to work with animals a necessity. 1-2 years of animal care experience preferred. Willingness to partake in AALAS seminars and training program required. (40 hrs/wk, Wed.-Sun., 7:00 am-3:30 pm) H86-343

Instrument Systems Worker, Automatic Temperature Controls, Physical Plant, to maintain, diagnose and repair microprocessors and associated instrumentation. Must have ability to perform tests and adjustments of input and output devices, also to set up and maintain history and documentation files. Associate degree and/or two years formal training in electronics plus a minimum of 3 to 5 years experience in temperature or process control required. Must be capable of trouble-shooting electronic circuitry. Will work any and all shifts as required by operations. H86-336

Machinist A, Haystack Observatory, who demonstrates familiarity and a high degree of skill with all the commonly used machine tools. With a minimum of supervision sets up work and operates such machine tools, working to close tolerances from blueprints, specifications, verbal instructions or sketches. Makes such tools, dies, jigs and fixtures as may be required. May direct and train machinist of lower grade. Minimum of 5 years of applicable experience as a machinist is required. H86-328

Thoughts of an astronaut

(This essay written by Dr. McNair and edited by Jeannnette Gerzon of the Career Services Office, originally appeared in the 1985 edition of How to Get there from MIT, an annual compilation of career paths followed by a selection of alumni. Dr. McNair received the PhD degree in physics from MIT in 1977.)

By RONALD E. McNAIR

Many of us possess talents and abilities but do not excel because we don't take the chances or act on the challenges that come our way. We need to walk over to the edge of our abilities and then move beyond that edge. We have to step past our place of comfort.

I have found that complacency does not foster self-advancement. You have to take the extra step; run the extra mile. From the outside, this can look difficult—even awesome. However, once you acquire the skills to perform the task, it seems almost easy. Like most things in life, it's easy when you know how.

My own success was contingent on an unyielding determination to press on. I had battles along the way—some of which I enjoyed fighting—and others that I would never choose to ride by again. One of the keys for me was to stay balanced both physically and mentally. To do this, I tried to maintain solid, lasting friendships with people who would see me through—and to maintain my body.

I first came to MIT as a junior for a year of study in physics. I found it to be very different from my home state of South Carolina and from North Carolina A&T where I was studying. It was much easier, though, when I came back later to complete my graduate work. At MIT there was tremendous exposure and opportunity for real research and science. I was able to get into the laboratory and build my own equipment. I was working on lasers at that time. Not only was I challenged to grow academically, but I was also challenged to grow personally. I had good relationships with the faculty and students in my research group. We formed a close-knit unit at that time, and many of us are still in touch. It was closeness that helped me through the transition of settling into a new environment.

As jobs were more plentiful than later in the seventies, it was a good time to be studying physics. But whether the job prospects seem a little better or a little worse, I strongly encourage participation in science and engineering—if it's what you want. The job market can change, and if you're doing what you like to do, you'll be more likely to find employment. If science or engineering is right for you, it can provide a truly fulfilling career. For me, knowing that I could peer into the microscopic world where normally I cannot see and actually effect change was exhilarating.

As an undergraduate I had learned and taught karate, and during my time at MIT my karate activities took a great deal of my time. It was thoroughly worth the effort. For me, karate not only helped me to stay physically attuned, but greatly alleviated the mental stress of graduate school. It also afforded me an outlet for my teaching interests. Karate combined teaching and physical exertion in a flowing art form. I loved it, and it helped me keep both feet on the ground—except when I taught kicks, of course.

Both in terms of karate as well as physics I was very fortunate to have found what I enjoy doing early in life. Finding what you like to do is an important first step towards success. Once you have found your interests you can act on the motivation within you. It is this motivation that can steer you onto a course that is right for you. Along the way, get out and take advantage of the opportunities around you. Find summer employment and meet and talk with people who can assist you on your way.

When I was a graduate student, I often felt that students—and particularly minority students—got into an isolated mode. I think it's tough when you try to bear all your burdens alone. We can achieve a real camaraderie among people, if we allow it to happen. With such friendships everyone can grow.

If you are interested in becoming an astronaut, I would encourage you to pursue your science and engineering interests to the full. Truly there is no more beautiful sight than to see the earth from space beyond. This planet is an exquisite oasis. Warmth emanates from the earth when you look at her from space. I could no more look at the earth and see anything bad than I could look at a smiling little girl or boy and see a bank robber. It's impossible to see anything but goodness. My wish is that we would allow this planet to be the beautiful oasis that she is, and allow ourselves to live more in the peace that she generates.

Discussion on SDI morals planned

The moral dimensions of the Star Wars strategy will be the subject of a public forum at 4:30pm Monday, Feb. 10, in Rm 6-120, sponsored by MIT's Technology and Culture Seminar.

Speaking will be the Rev. J. Brian Hehir of the US Catholic Conference and Professor Richard Pipes of Harvard University, a member of the Committee on the Present Danger. Their initial statements will be followed by questions from the audience.

Father Hehir is secretary of the Department of Social Development and World Peace of the US Catholic Conference. The conference is the operational secretariat and service agency of the National Conference of Catholic Bishops. Father Heir was one of the authors of the bishops' recent pastoral letter on nuclear weapons. He is a senior research scholar at Georgetown University's Kennedy Institute of Ethics and a research professor of ethics and international politics at Georgetown's School of Foreign Service. He received his ThD from Harvard with a specialization in ethics and international politics.

Professor Pipes is the Frank B. Baird Jr. Professor of History at Harvard, specializing in Russian studies. He is a member of the executive committee of the Committee on the Present Danger and a member of the Council for Foreign Relations. He has been associate director of the Russian Research Center, director of East European and Soviet Affairs of the National Security Council and a member of the Reagan transition team for the State Department in 1980.

Nominations wanted

Professor Gene M. Brown, dean of the School of Science, has issued a call for nominations for the Science Council Prize for excellence in undergraduate teaching.

The prize recognizes outstanding instructional performance and is intended to emphasize the importance the Science Council places on teaching. Those eligible include any faculty member in the School of Science who has achieved distinction in his or her teaching. The Prize carries a $5,000 honorarium.

Nominations may be made by any member of the community by March 30, 1985. The Science Council will select the recipient based on the advice of a nominating committee composed of Professors James L. Kinsey (chairman), Maurice Fox, Anthony French and Victor Guillemin.

Stress program offered

The MIT Medical Department will offer a Stress Management Program beginning Wednesday, Feb. 12, 12-1:30pm, in Rm E23-297. The leader will be Scott Borrelli, PhD, licensed psychologist and radio talk show host, who also maintains a private practice.

Participants will learn to recognize stress warning signals, to be aware of their own body's response to stress, and to use relaxation techniques that work best for them. Group members are challenged to look at how they may be creating stress for themselves and how their attitudes and beliefs can interfere with their own happiness and quality of life.

The program will run for five weeks. The fee is $45; $35 for students and MIT Health Plan members. A workbook and relaxation tape are included.

Preregistration is required. Call the Health Education Services, x3-1316.

Technician B (Electro-Mechanical), Electrical Engineering and Computer Science – Microsystems Technology Laboratories, to assist in laboratory, research, or analytical work under the direction of scientific personnel or technicians of a higher grade. Must be able to work for periods of time without supervision. The individual will be assisting in various aspects of the thermal processing area. This includes process development, operation and maintenance of diffusion and oxidation furnaces, LPCVD deposition systems, chemical cleaning stations, and other related semiconductor processing equipment. This position requires the ability to work with sophisticated measurement equipment, and to gather data from this equipment and enter it into a CAF system. The individual must be able to keep accurate laboratory notes and maintenance logs, and to assist in preparation of process documentation. The individual will be working in a state-of-the-art semiconductor fabrication area and will be required to follow strict procedures regarding cleanliness and the safe handling of gases and chemicals. The individual must possess willingness to be flexible regarding temporary tasks or when needed to provide technical support outside of the designated area, such as to building support systems. Graduation from a two-year day technical school or its equivalent and a minimum of one year of applicable experience are required. Experience with microprocessor-controlled equipment desirable. H86-321

Pantry/Salad, Faculty Club, as directed, to prepare and serve desserts, dessert dressing, dessert sauces, appetizers, salads, salad dressings, beverages and hors d'oeuvres. Will assist cooking staff in preparing menu items, and perform other duties as required. Will keep area clean and orderly. Ability to speak and understand the English language and a minimum of 1 year direct/related experience is required. Experience in quantity food preparation preferred. (40 hrs/week, M-F, 11:00-8:00pm) H85-299

The MIT Writing and Communication Center has an opening for a part-time writing tutor(s) during the spring semester, 5-13 hours per week. Available hours are as follows: Tuesdays 10am to 3pm; Thursdays 10am to 1pm; and Fridays 10am to 3pm (a candidate does not have to work a whole block of time; for example, he or she might work Tuesdays 10am to 1pm, or 12 to 3pm). Candidate(s) must have at least a BS (MA preferred) and must be a good writer. Must be able to interact easily with others on a one-to-one basis. Must be able to analyze a piece of writing quickly and to explain concepts. Must have either classroom experience teaching writing or experience tutoring writers, preferably in a writing center environment. Experience tutoring non-native speakers of English and/or technical writers is desirable but not required. Good possibility of continuation next year. Please send resume and short writing sample (2-5 pages, excerpts are fine) to Steven Strang, 14N-317, MIT, 77 Massachusetts Ave., Cambridge, MA 02139.

Black history month is observed

(continued from page 1)

Wednesday, Feb. 12, in the Mezzanine Lounge (Student Center). Participants are invited to bring their lunch. Beverages will be provided.

—Dr. Ivan Van Sertima, professor of African Studies at Rutgers University, will discuss "They Came Before Columbus," Thursday, Feb. 13, at 7:30pm in the Mezzanine Lounge.

—Dr. Helen Boulware Moore, psychologist and administrator at Simmons College, will talk on "The Black Woman: Revisions of a Distorted Image," Wednesday, Feb. 19, at 7:30pm in Rm 9-150.

—The National Society of Black Engineers (NSBE) Banquet will be held Friday, Feb. 21 at 6:30pm in the Mezzaine Lounge. Keynote speaker will be Dr. Lincoln Hawkins, noted chemical engineer. Donations are $3; free for NSBE members.

—Pin Points Theatre of Washington, D.C., will present "1001 Black Inventions," a drama and comedy mixed with audience participation, Tuesday, Feb. 25, at 7pm in the Sala de Puerto Rico (Student Center). Admission is $2.

—*Moving in Boston: The Black Experience*, a film presentation by the Museum of Afro-American History African Meeting House, Boston, will be held Thursday, Feb. 27, from 3:30pm-5:30pm in the Mezzanine Lounge.

Johnson chairs panel

As part of Black History Month, Dr. Willard R. Johnson, professor of political science at MIT, will moderate a forum at 5:30pm today (Wednesday, Feb. 5) sponsored by the Boston YWCA, on divestment of holdings in companies doing business in South Africa.

Panelists will include Raymond F. Beaton, vice president of the Boston Safe Deposit Company; Fahamisha Brown, coordinator of the Free South Africa Movement; Carolyn M. Osteen of the law firm of Ropes and Gray; and Beverly Stripling, chairperson of the national YWCA's Public Policy Committee.

In 1982 the Boston YWCA was the first in the nation, and the first major nonprofit organization in Boston, to sell all its common stock in companies having business dealings in South Africa.

Also, The MIT Gospel Choir will present weekly noon concerts on Thursdays throughout the month in Lobby 7.

Graduate students Melissa Kirven, applied biological sciences, and James Oliver, chemical engineering, are co-chairmen.

Sponsors of the events include the Office of the Dean for Student Affairs, Office of the Dean of Humanities and Social Science, MIT Women's Studies, Office of Minority Education, Council for the Arts at MIT, Office of the Dean of the Graduate School, Office of the Special Assistant to the President, Staff Assistant for Women's Interests, Black Graduate Student Association, Black Student Union, the Hunger Action Group and the Finance Board.

Simonis appointed to Dean's Office staff

Jacqueline Simonis, former program developer in doctoral student affairs at Harvard University, has been named assistant dean for Student Affairs and Student Assistance Services.

The appointment was announced by Dr. Shirley McBay, dean for Student Affairs. In addition to counseling and advising students, Dr. Simonis provides special support services to women and to Nightline, a student-run, peer assistance phone-in/drop-in service.

During her employment at Harvard, she was also a director of student advising (1983), counselor of graduate students (1982-83), and teaching fellow (1982-85). She was also director of career counseling at Lewis and Clark College, Portland, Ore., (1978-81), and a caseworker at the Medical Center Hospital, Portland (1976-77).

A consultant for the Harvard-Milton Study Skills Program, Dr. Simonis has taught career development at Portland Community College, and developed the Women and Work Seminar Series for Reed College, Portland.

She is a Phi Beta Kappa graduate of the State University of New York where she received a BA degree in English (1974). In addition, she holds an MED degree in curriculum and instruction from the University of Oregon (1976) and an EdD from the Harvard University Graduate School of Education in administration and counseling (1985).

Professor Emeritus A.L. Hesselschwerdt

August L. Hesselschwerdt Jr., 75, of Milton, professor of mechanical engineering, emeritus, died January 17 in his home after a long illness.

Born in West Roxbury, he graduated from the old Mechanic Arts High School in Boston. He received the SB degree in 1931 and SM degree in 1934 from MIT.

For a brief time, he was a registered professional engineer with York Ice Machinery Corporation, and was an assistant professor at Wayne State University in Detroit.

In 1942 he returned to MIT as a member of the faculty, and taught here until his retirement in 1975. Since that time, Professor Hesselschwerdt remained a consultant to the MIT physical plant.

During his tenure at MIT he taught mechanical engineering, architecture and food technology.

Professor Hesselschwerdt was a visiting lecturer at the Harvard University Graduate School of Design; the International Institute of Refrigeration in Turin, Italy, and at the University of Beirut in Lebanon.

He had been recently named a Distinguished 50-year Member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers. The honor recognizes 50 years of membership in the international technical society and a professional career distinguished by achievement in the arts and sciences of environmental technology. Of the organization's 50,000 members fewer than 100 have been given this honor.

A former national director of the society, Professor Hesselschwerdt was made a fellow, and in 1969 received its distinguished service award.

He was a member of the Society of Sigma Xi and the American Society of Mechanical Engineers and a past master of the Richard C. MacLaurin Masonic Lodge.

He leaves his wife, the former Gertrude Mahn; a daughter, Ruth Ann Eastman of North Canton, Ohio; a son, Peter L. Hesselschwerdt of Weymouth; a sister, Rosa A. Hesselschwerdt of Roslindale; and four grandchildren.

AMT Forum announced

The AMT Forum, a new series on the arts and media technology, will open with a talk on Wednesday, Febuary 12, by James A. Moorer, an MIT graduate and vice president for audio research and development of Droid Works, Inc.

His presentation, "Indiana Jones and the Temple of VLSI: How Film Sound is Made and What We Are Doing About It," will be given at 4:30pm at The Media Laboratory (E15) in the Bartos Theater, Lower Level.

Moorer received two SB degrees from MIT in electrical engineering and applied mathematics, in 1967 and 1968, and the PhD in computer science from Stanford University in 1975. He is one of the co-founders of the Center for Computer Research in Music and Acoustics at Stanford, and in 1980 became the Digital Audio Project Leader at Lucasfilm Studios.

He will discuss the process of making film sound and will show the architecture of the SoundDroid system and the ASP (Audio Signal Processor), offering examples from a number of recent films.

Other speakers in the series will include Ed Emshwiller, dean of the Department of Film and Video at the California Institute of the Arts, March 19; Frank Stanton, former president of CBS, April 2; and Norman I. Badler, associate professor of computer and information science at the University of Pennsylvania, May 14.

New Car Special

A Special New Car Loan Rate is being offered by the MIT Employees Federal Credit Union, February 1-June 1, 1986. The rate was recommended by the Loan Policy Committee and adopted by the Board of Directors to keep the Credit Union competitive with other lending sources.

All eligible members purchasing new automobiles financed through the Credit Union during this period will be charged the following rates:

—9% per annum for loans financed for 48 months or less, up to 80% of the purchase price.

—9.5% per annum for loans financed in excess of 48 months up to the limit of 60 months for 80% of the purchase price.

The maximum new car loan will be $15,000.

During the period of the special rates, the mixing of collaterals will be permitted. That is, if additional money is required for the down payment, the borrowing power (not to exceed the total purchase price) of the member's signature and/or comaker(s) may be used to borrow sufficient money to buy the new automobile.

In addition, free life insurance will be included up to a maximum of $12,000, the current life insurance coverage amount.

Remember: these rates are for a specific period and will apply only to the purchase of a new automobile. The Credit Union Office, x3-2844 will answer questions concerning the Special New Car Loan Rate.