

Faculty to meet this afternoon

A regular meeting of the faculty will be held today (Wednesday, Sept. 16) at 3:15pm in Huntington Hall (Rm 10-250). Items on the agenda include:

—Report of the Committee on Graduate School Policy recommending candidates for advanced degrees.

—Report of the Committee on Academic Performance recommending candidates for bachelor's degrees.

—A motion to continue on an interim basis arrangements for participation of non-faculty persons in faculty meetings, established in 1969.

—A report and discussion of the proposed Whitehead Institute. (See story at right.)

—A motion to set May 28, 1982 as the date for 1982 Graduation exercises since Monday, May 31, is Memorial Day. (See story at right.)

—The meeting will be restricted to faculty members and ex officio members through the first three agenda items. Thereafter, other members of the community may enter to listen to the discussion.

More swimming hours announced

In response to community interest in Family Swimming at Alumni Pool, the Department of Athletics has announced additional hours for family swim for the small pool only.

The small pool will be open Monday, Wednesday, and Friday from 4-6pm beginning Monday, Sept. 21. Please note that there will be water polo in the large pool at the same time. Regular family swim hours for both pools remain the same (Fridays, 7-8pm; Saturdays 12:30-2pm.)

Open swimming hours for students and adult members of the MIT Community with athletic cards are: Monday through Thursday from 9-11am, 12-1pm, and 7-8pm; Tuesday and Thursday only from 8-9am; Friday from 11am-3pm; Saturday from 12:30-2pm, and Sunday from 1-5pm. This schedule will be in effect until Sunday, Dec. 20. Hours are subject to change because of revised times for intercollegiate and intramural swimming and water polo activities.

Children under 13 may not use the large pool except during large pool Family Swim at which time they must be accompanied in the pool by a parent.

Hayden to host Libraries' sale

Books will be sold as fast as bargain-priced objets d'art when the MIT Libraries open their periodic book sale in Hayden Gallery Tuesday, Sept. 22, 10am-4pm.

The one-day only sale offers members of the community a chance to buy new and used books, maps and technical reports in all subject areas at very low prices. Proceeds from the sale are used for the Libraries' materials replacement fund.

The sale presents a fine opportunity for community members to stock their personal libraries with valuable books at affordable prices.

Thomas F. Jones memorial is set

A memorial service for Dr. Thomas F. Jones, Jr., will be held Thursday, Sept. 24, at 1pm in the MIT Chapel. Dr. Jones, who was vice president for research, died July 14 after a long illness.

A scholarship fund in his memory has been established at the Institute. Contributions may be made to the Thomas F. Jones Scholarship Fund, Rm 4-113.

Low reviews Whitehead proposal

By ROBERT M. BYERS
Staff Writer

MIT Provost Francis E. Low, in a letter to the MIT faculty last week reviewing a proposal that MIT enter into a partnership with the newly formed Whitehead Institute for Biomedical Research, urged Faculty Members to attend the September faculty meeting this afternoon (Wednesday, Sept. 16) where the proposal will be discussed.

In the letter, Professor Low said the arrangement would not be without difficulties for MIT, but he and others who have studied it have concluded that the benefits outweigh the problems.

Professor Low first informed the faculty of the possibility of a collaboration with WI in a letter last July. The September faculty meeting ordinarily is limited to approving September degree recipients. Professor Low said the agenda will be expanded to include the WI proposal. The Faculty Council—composed of the president, provost, vice presidents, deans, faculty officers and department heads—heard a discussion of the proposal at its September meeting last week, but this week's faculty meeting will be the

first opportunity for the full faculty to discuss the proposed partnership.

WI, an independent and autonomous scientific laboratory being organized to pursue molecular approaches to developmental biology, plans to build a \$20 million multi-story research facility on Main St. across from East Garage in Cambridge's Kendall Square Urban Renewal Area. (WI is formulating plans for the building with Boston Properties, authorized developer of the "Cambridge Center" area within the Kendall Square Urban Renewal Project and these plans will be discussed fully with the City of Cambridge, the Cambridge Redevelopment Authority, and other public agencies involved in approving the building proposal.) WI's director-designate is Dr. David Baltimore, American Cancer Society Professor of Microbiology at MIT and recipient of the Nobel Prize in Medicine or Physiology in 1975.

WI's Board of Trustees, chaired by Dr. John Sawhill, former president of New York University, has proposed that there be a close interrelationship established between WI and MIT, including dual appointment of WI scientists to the MIT Faculty. MIT would

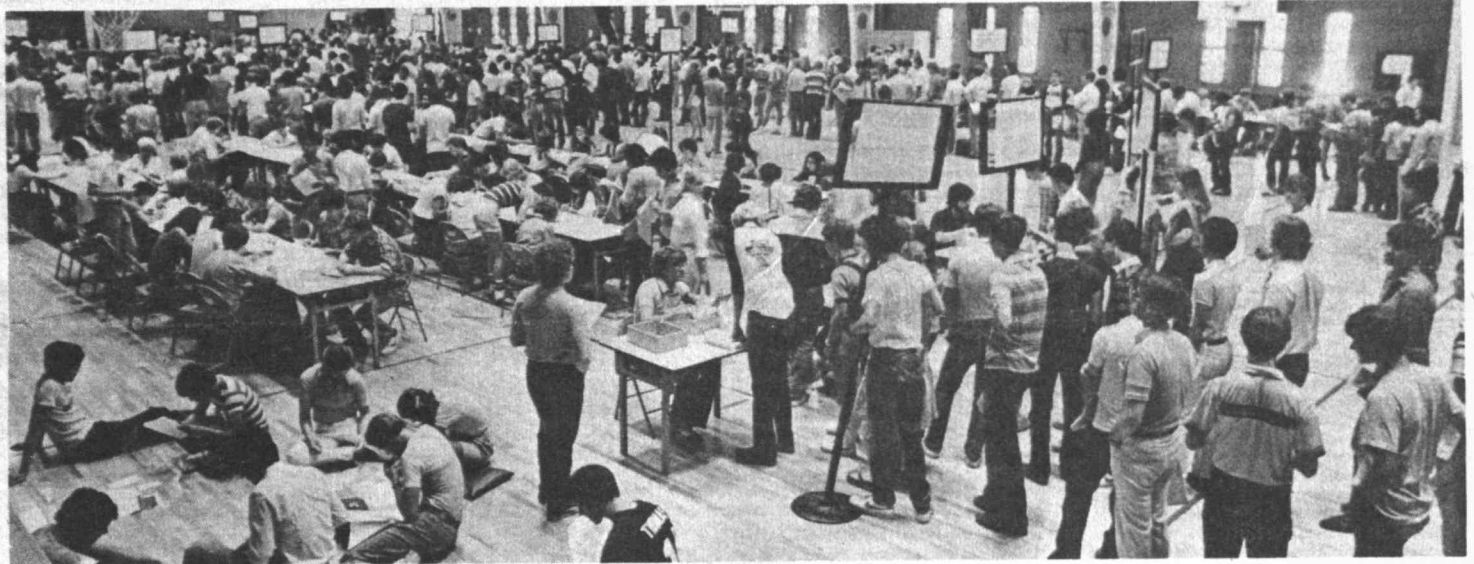
participate with WI in screening and recruiting scientists for WI, but in the final analysis, MIT would have sole authority over its own appointments and MIT's own search and review procedures would be applied in full force.

Potential difficulties, Professor Low said, include the possibility that there might be competition between MIT and WI for research support. Also, the fact that the WI would choose research directions independent of MIT departments might ultimately lead to a problem, although this is ameliorated by the fact that the WI director would always be chosen from the MIT Faculty and that MIT would be well represented on the WI Board of Trustees.

The most significant difficulty, Professor Low said, is that by entering into the collaboration, the appointees from WI would be paid in full by WI. MIT would thus be establishing professorships for which MIT would not have a financial obligation.

Professor Low said he and President Paul E. Gray have discussed potential difficulties with faculty in the Department of Biology, with other Faculty members, and with

(continued on page 4)



DuPont Gymnasium was wall-to-wall bodies last week in the annual Registration Day ritual when most of MIT's some 9,000 students enrolled for classes.

Faculty officers discuss graduation date

(The following Discussion of the Date of the 1982 Graduation Exercises signed by Felix M. H. Villars, chairman of the faculty, Harvey M. Sapolsky, associate chairman of the faculty, and Jack Ruina, secretary of the faculty, was circulated with the Call to today's meeting of the faculty.)

In 1982, the statutory Commencement date would be Monday, May 31. This happens to coincide with Memorial Day, a legal holiday, and requires that an alternative date be considered.

An unusual sequence of events is responsible for the fact that this issue was not brought before the Faculty during the spring term, and that its resolution now involves a problem of more serious concern. These events and the history preceding them are detailed below:

On February 20, 1974, the Faculty (upon recommendation by an ad hoc committee chaired by Professor J. Munkres) adopted the current formulation of Faculty Regulation 2.11 regarding graduation exercises. Regulation 2.11 states: "The academic year shall be divided into two terms of approximately fourteen weeks each—Graduation exercises shall be held on the third Monday following the last exercises of the spring term."

The possibility of a coincidence of the Mon-

day date so specified with Memorial Day was noticed by the Munkres committee, but no rule for dealing with such an occurrence was formulated. This situation occurred in fact for the first time in 1976; in that year, Commencement took place on the preceding Friday, May 28. There appears to be no record of specific Faculty action endorsing this change, however.

In accordance with Regulation 2.11 (see above), the spring term of the academic calendar for 1981 contained the dates: Registration Day, February 2; Memorial Day, May 25; Commencement, June 1. The original version of the academic calendar for 1982, prepared by the Registrar's office last spring, had the following corresponding dates: Registration Day, February 1; Memorial Day, May 31; Commencement, June 7—leading to a fifteen-week spring term. This error was discovered in June, 1981, but its rectification would have shifted the statutory Commencement day to Monday, May 31, 1982. According to Regulation 2.11, no Institute exercises (including graduation exercises) could be held on a legal holiday. The Commencement Committee met on June 18 to address this issue and proposed Friday, May 28, as an alternative date; this was viewed as the only date not requiring additional Faculty deliberation, since the 1976 precedent could

be invoked. This position was taken under a sense of urgency generated by the imminent deadline for getting the MIT catalogue into print, and for providing prompt information of the corrected Commencement date to all students expecting to graduate in 1982. The CEP was asked to ratify this proposed solution, took up the issue at its June 25 meeting, and endorsed it. The May 28 date consequently is the date for the 1982 Commencement that appears in the 1981-82 catalogue. In July the Registrar mailed a postcard to graduating seniors (Class of 1982) and continuing graduate students informing them that May 28 would be the Commencement date in 1982.

In August, 1981, the Commencement Committee and the CEP were alerted to the fact that the May 28 date coincided with the Jewish holiday of Shavuot, and that the disregard of this fact was upsetting to many members of the MIT Jewish community, and more seriously, to those students (and their families) whose belief called for observance of this holiday, and who by this fact would be prevented from participation in the graduation exercises.

In response to the protest, an ad hoc group, chaired by Kathryn Lombardi, Executive

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Sustaining Fellows to hear VP George Bush

Vice President George Bush will be the principal speaker Friday, Oct. 30, at the annual dinner meeting of the MIT Sustaining Fellows.

MIT Sustaining Fellows, now numbering some 530 persons in this country and abroad, are donors, both alumni and friends of MIT, who have demonstrated significant and sustained support for the Institute and its programs.

Some 400 persons, including spouses, are expected for the annual dinner meeting where Vice President Bush will speak. The vice pres-

ident is expected to arrive prior to the dinner at 7:30pm and depart immediately following his address. Aides said other activities or appearances may develop for the vice president's trip to the Boston area, but details are still being arranged.

The invitation to the vice president to speak at MIT was extended by Breene M. Kerr, Class of 1951, chairman and chief executive officer of Kerr Consolidated, Inc., Oklahoma City and chairman of the Sustaining Fellows. Co-hosts at the dinner will be MIT President Paul E. Gray and Chairman Howard W.

Johnson.

Mr. Kerr is a Life Member of the MIT Corporation, the Institute's governing body, and a past president of the MIT Alumni Association. He is also a member of the Institute's Corporation Development Committee which initiated the Sustaining Fellows program in October of 1979 to give recognition to donors and to provide a mechanism that allows donors to share directly in the activities of the Institute. Professor Elias P. Gyftopoulos serves as the faculty chairman for the Sustaining Fellows program.

INSTITUTE NOTICES

Announcements

Graduate Student Research Forum in Technology and Development***—Organizational meeting and potluck dinner, Wed, Sept 16, 6pm, Rm 20D-205.

Attention: Students Interested in Law—Meet Prof. Jeffrey A. Meldman, Chairman of Prelaw Advisory Council, Wed, Sept 23, 4pm, Rm 4-145. For more information contact Preprofessional Advising and Education Office, Rm 7-102, X3-4158.

Strobe Lab Open House for New Grad Students in EE & CS*—Thurs, Sept 24, 3-5pm, Rm 4-409. Discussion on High-Speed Photography.

Attention: Students Interested in Law—Meeting with Law School Admissions Panel (Harvard, Cornell, Chicago, NYU) Thurs, Sept 24, 7:30-9pm, Rm 4-163. For information contact Preprofessional Advising Office, Rm 7-102, X3-4158.

Basic Pistol Marksmanship Course**—Starts Sept 24 for five consecutive Thursdays, 6-8:30pm, DuPont Pistol Range. Fee of \$40 covers everything. Course will cover safe handling, cleaning, storage of pistols; stress safety aspects as well as marksmanship skills up to competitive level. Do not bring personal guns to class. For pre-registration or information, call Andy Platias, X8-1419, Draper.

Official Notice—All changes in addresses and telephone numbers must be turned into the Registrar's Office E19-335 by Sept 22, for inclusion in the student directory. Telephone requests will not be accepted.

Want to see how a regular display terminal can mimic a fancy IBM Model-3270 terminal? You can enjoy full-screen editing and display features from certain ASCII display terminals by connecting to IPS's IBM 370/168 via the newly-acquired Series/1 minicomputer. If you'd like to see how it's done, come by the Bush Room (10-105) on Thursday, Sept 17, 10am-3pm.

The Medical Foundation, Inc. and the Charles A. King Trust have announced the 1982 Postdoctoral Research Fellowship Applications for investigation in the bio-sciences and community health. Application deadline is October 16, 1981. For additional information, please call Barbara Stowe, X3-3952.

IPS Fall Computing Courses**—IPS Academic and Research Computing Services (ARCS) is again offering courses. If you're a potential user, a new user, or a current user, we encourage you to take advantage of these introductory non-credit classes and seminars. Please note that some courses have prerequisites. We feel that taking the prerequisite or having equivalent experience will make the courses more helpful and more enjoyable. Persons having no technical background should begin with "Introduction to Computing." Registration is going on. Limited class size, only those who pre-register are guaranteed admission. Late registration fee: \$5. Fees are payable when you register and are intended to defray the cost of computer time.

Club Notes

MIT /DL Bridge Club**—ACBL Duplicate bridge, Tues, 6pm, W20-473. Info: Arthur, X8-1414, Draper.

Caribbean Club**—Open to MIT-Wellesley community. For more info call Laverne, X3-5961.

Chess Club**—Speed chess, bughouse, and analysis for players of all levels. Meets Sat, 1:30pm-6pm, Rm 491, Student Center. Info: Brad, X3-7554 or 494-0263.

Frisbee Club**—For information: John Schutkeker, X5-7231 Dorm.

GAMIT*—Gays at MIT. Everyone invited, gay, bisexual or straight. Drop by for some free refreshments or just to talk. Every Sun, 5pm, GAMIT Lounge, Rm 50-306 (Walker Memorial).

Hobby Shop**—Complete facilities for wood-working, metal working and darkroom. Mon-Fri, 10am-6pm, Wed, 10am-9pm, W31-031. Fee: \$12/term students; \$20/term community. For information call X3-4343.

MIT Amnesty International Human Rights***—Group meeting to decide activities and events for upcoming term. All are welcome. Wed, Sept 16, 8pm, Rm 10-280. Call X5-9623, Dorm or 494-8110.

MIT Juggling Club**—meeting every Sun, 2-5pm, lobby of Bldg 13, or outside in front of Student Center. Beginners and onlookers welcome. Free.

MIT Soaring Association**—meeting for those interested in joining or learning more about MITSAs. Refreshments served, films including *Dawn Flight* will be shown. Thurs, Sept 17, 7:30pm, Rm 491, Student Center. Contact Lee Marzke, X5-7380 or Steve Bossolari, X5-8352.

MIT Scuba Club**—For membership info and club activities call Mike Hammer, 491-1284.

Outing Club**—Meetings, Mon and Thurs, 5-6pm, Rm 461, Student Center. Like the outdoors? Come share your interests, plan trips, and shoot the breeze. See our bulletin board by the Medical Dept. for current trips and shows.

Overeaters Anonymous—Meetings are held Mon and Thurs, 12-1pm, Conference Room 35-338. For info call X3-2153.

Shotokan Karate Club*—Rigorous training for physical well-being and self-defense. Classes meet 6-8pm, Tues and Fri, Varsity Club Lounge, Thursdays, Dance Room. Info: Jim, X3-8148.

Tae Kwon-Do Club**—Korean Martial art involving rigorous training to develop total-body and mind control meetings. Mon, 7-9pm, T-Club Lounge (DuPont); Fri, 7-9pm, T-Club Lounge and Sun, 4-6pm, T-Club Lounge. Call Hal, X3-6055 or Antony, X5-9504, days.

Tiddlywinks Association*—Meetings every Wed, Small Activities Office, 4th floor, Student Center, 7:30pm. Interested? Just curious? Everyone is welcome.

Table Tennis Club**—Meets every Mon, 8-10pm, T-Club Lounge, DuPont.

Women's Exercise Class**—Exercise, it's fun and healthy! Suzanne Brown, Instructor. Mon, Wed, Fri, 1-2pm, Women's Lounge, Rm 8-219. Fee: \$7/wk, \$28/mo. Wear comfortable clothes.

Women's Rugby Club**—meets for practice Mon and Wed, 5:30-7pm, Briggs Field. All women are welcome, enthusiasm required. Contact Pam, X5-7237, Dorm. for more information.

Women's Water Polo Club**—Practices Mon, & Wed, 3-5pm, and Thurs & Fri, 5-7pm at Alumni Pool. Any woman who is an undergraduate, graduate or staff member is welcome. No experience needed. There will be several practices and a game or two in the fall with the main season starting in March. For more information call Karen Fortoul, X3-6799 or Lisa Freed, X3-6759.

Wu-Tang Chinese Martial Arts Club**—classical Chinese martial arts—Northern Praying Mantis, Tai-Chi Chuan and weapons. Beginners welcome. Practice: Varsity Lounge, Dupont, Wed, 6:30-9pm, Sat, 9-11am; Dance Studio, Dupont, Mon, 8-10pm. Info: Howard Ou, 262-3192; Howard Kolodny, 247-8691, Nick Vlanes, X3-4625.

Religious Activities

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

Campus Crusade for Christ*—Family Time—a weekly fellowship including music, message and refreshments. Fridays, 7:15pm, Rm 37-252, Marlborough Lounge. For more information: Phil Little, X3-2843.

Tech Catholic Community**—Sunday liturgies: 9am, 12 noon, 5pm, MIT Chapel. Prayer Group and potluck supper, Mondays, 6:30pm, info: Bob Simon, X3-1858.

Jewish Religious Services*—Fri: Orthodox services at sundown, Kosher Kitchen, Rm 50-005; Conservative/Reform services, 5:30pm, Hillel basement, 312 Memorial Dr.; Sat: Egalitarian Conservative services, 10am, Chapel; Orthodox services, 9am, Bush Room 10-105; Selichot services, 12 midnight, Hillel Basement, 312 Memorial Dr. For info: X3-2982 or X3-2987.

Prayer Time*—Friday afternoons, 1-2pm, weekly Bible Class led by Rev. Miriam R. Eccles, founder and director of the Alpha and Omega Missionary Society. Guest speakers, music and refreshments. Rm 20E-207. Welcome!

United Christian Fellowship*—Large group fellowship meeting: prayer, singing, sharing bible teaching. All are welcome to join. Meets on Friday, 7:30pm, Rm 1-236. For information: Elaine Pope, X5-9566 Dorm Line or X3-6940.

Noon Bible Study*—Every Wednesday, Rm 3-465, bring your lunch, all welcome. Ralph Burgess, X3-8121. (Since 1965)

Islamic Society*—Every Friday prayers will be held at 1pm, Kresge Auditorium, Rehearsal Room B.

Lincoln Laboratory Noon Bible Studies*—Tuesdays and Thursdays, M Trailer. Contact Annie Lescard, X262. **Morning Bible Studies**—Fridays, 7:30-8:30am, L-217. For information contact Ed Bayless X8289, Linc.

Lutheran Episcopal Ministries*—Interdenominational service of Holy Communion, Wednesdays, 5:10pm, MIT Chapel. Supper follows in the basement of 312 Memorial Drive.

The Church of Christ in Cambridge*—Christians from MIT/Harvard/BU... Worship and Discussion Group, 1st and 3rd Sunday evening of the month, 6pm, Rm 37-252, Marlborough Lounge. For information call Robert Rancolph, X3-4861.

Vedanta Society*—Meditation and discourses on the Gita by Swami Sarvagatannanda of the Ramakrishna Vedanta Society of Boston. Fridays, 5:15pm, MIT Chapel. First meeting, October 2.

New Subjects

4.685 Islamic Architecture and Urban Form: Architecture and Urbanism in the Islamic World. 3-0-6. A survey class for architecture students designed to give an up-to-date appreciation of Islamic architecture from its origins to the present day. Illustrated lectures showing the broad outline of architectural and urbanistic development in the Muslim world, and the methods of analytical inquiry into specific buildings and towns. Construction and planning techniques; past, present, and possible methodologies in this and related fields, including application of archaeological models. Instructor: Michael Burgoyne.

4.687 Special Studies in the History, Theory, and Criticism of Architecture and Urban Form in the Islamic World: What is Islamic Architecture? 0-9-0. An architect's analysis of the question, "what is Islamic architecture?" not by asking what makes a building Islamic, but by discovering how it was built. Each stage in the construction of a typical medieval building will be examined, with emphasis on practical knowledge for the modern architect. Motivation of the Islamic client; acquisition of the site; appointment of the architect; composition of the construction team; design (including functional requirements, typological requirements, ornamentation); on-site layout of the plan; "services"; design and construction of arches and vaults; completion and use. Instructor: Michael Burgoyne.

Class Changes

The following changes or additions have been made to the schedule of classes previously announced by the Department of Architecture for the Fall 1981 semester:

4.648: American Landscapes, Towns and Buildings—will be offered this term (Brueggemann). Lecture: Monday and Wednesday, 12-1:30pm, Rm 3-133

4.651: Modern Art from Cubism to Present (Humanities Dist.) (Tower). Lecture: Mon and Wed, 11am, Rm 3-133. New section times: either Mon at 12 noon or 1pm or Wed at either 12 noon or 1pm. Please note: the first lecture will be Mon, Sept 14, Rm 3-133. The first meeting of all sections will be on Wed, Sept 16, 7:30pm, Museum of Fine Arts.

4.831: Environmental Art—will not be offered Fall 1981.

4.974: Introductory Moviemaking Workshop (Davenport)—schedule change: rec Wed, 7-10pm and Fri, 10am-1pm, N51-100.

Mathematics
18.295: Tensor Calculus—tensors, differential forms and Riemannian geometry with applications in general relativity. Some modern differential geometry. Prof. D. Freedman. Class meets in the first semester, AY 1981-82, Mon, Wed, Fri, 12 noon-1pm, Rm 2-135.

Science, Technology, and Society
ST5-SO2: MIT and the Problem of New Learning—This seminar to be taught by Professors Elting Morison and Walter Rosenblith will be held Tues, 2-4pm, Rm 20D-205 and not in Rm 24-112 as originally announced.

Linguistics and Philosophy
24.04: Problems of Philosophy—The class meets Mon, Wed, and Fri, 2pm, Rm 20E-013. Instructor: James Higginbotham.

Student Jobs

Person needed to set up and operate audio teleconferencing system and associated hardware for communications policy seminar. Possibility of some audio design work. Familiarity with audio desirable but we are willing to train. Worthwhile job for anyone interested in communications technology and policy. Freshmen are encouraged to apply. 4-6 hrs every 2 wks, \$4.84/hr. William Lazarus E53-409, X3-5266 or X3-3124 and leave message.

Person needed to drive child to and from school, run errands in Cambridge and Boston areas, help with reading mail, etc. Must be able to drive well. License required. Mother visually impaired. Wed 2:30, Thurs 4:30, Fri 2:30 and some mornings. Flexible., \$45/wk. Contact: Elizabeth Goldring, X5-4517, home, 367-2376.

Need graduate student to teach part-time at Palfrey Street School. Will be teaching basic math and Algebra I. 10:15-noon, Mon, Wed, Fri. Noon-1:30 Tues and Thurs; \$5,000. Contact: Carol Ganz or Nadia Solomita, Palfrey Street School, 926-1844.

Dependable person to read written material to student with visual disability. Must have good knowledge of math (beyond calculus) and provide own transportation to meet in MIT dorm. 6 to 8 hrs/wk, \$4.40/hr. Contact Dean Linda Vaughan, 5-104, X3-4861.

UROP

For more information on UROP opportunities, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Rm 20B-141, X3-5049 unless otherwise specified in the listing. Undergraduates are also urged to check the UROP bulletin boards located in the main corridor of the Institute and in the UROP Office.

Third Call for Proposals—Proposals for fall UROP support may be turned in any time after Sept 10. Please submit them for review and signature to the UROP Coordinator in your faculty research supervisor's department before turning them in to the UROP Office.

General Principles—Do not ask for what you do not absolutely need. Be sure you have submitted your past UROP evaluation. Write a coherent proposal.

Announcement of Awards—Starting the week of Sept. 21, the UROP Office will announce funding decisions. Please do not call us that week. Answers will get out as fast as we have them. Decisions will be made in order of receipt of proposals until the money runs out.

Availability of Funds—1) Generally available for materials and supplies requests within reason. 2) Generally available for overhead waiver requests when faculty or departments offer wages to UROP students. 3) Difficult to obtain if you are asking for significant wages from UROP itself.

1981/82 UROP directories are now available in the UROP Office (20B-141) and in the Information Center (7-121).

Institute Office Automation Planning Project—Will help with initial studies of existing word processing usage at MIT and with the development of a set of short-term guidelines for word processing needs assessment and equipment selection, including a list of recommended vendors. SUITABLE FOR SOME FRESHMEN. PAY AVAILABLE. Contact Prof. M. Hammer, NE43-217, X3-5840 or Sandor Schoichet, NE43-212, X3-5845.

Institute Office Automation Planning Project—Will help with initial studies of existing word processing usage at MIT and with the development of a set of short-term guidelines for word processing needs assessment and equipment selection, including a list of recommended vendors. SUITABLE FOR SOME FRESHMEN. PAY AVAILABLE. Contact Prof. M. Hammer, NE43-217, X3-5840 or Sandor Schoichet, NE43-212, X3-5845.

Visual Perception Project—There are certain visual tasks for which human performance is as good as the limit predicted by the laws of physics. For some tasks, human performance is so good that only the most sophisticated machines could duplicate it, and in some cases, no such machines exist. Although these "hyper" abilities have been known for some time, there are many that are not understood in terms of the underlying physiological and physical mecha-

Women row on national crew

By KEN CERINO
Director of Sports Information

Two members of the MIT women's crew team were selected to the first United States lightweight crew squad for women this summer. Faith Alexandre '81, of Ossining, N.Y., and Katherine Yelick '82, of Des Moines, Iowa, made the team after competing in a training camp in Minneapolis, Minn.

Their first taste of international competition came in August at the Canadian Henley championships in St. Catherine's, Ontario. Rowing in the national team's second boat, Alexandre and Yelick helped their squad finish second in the open women's eight category behind another US boat.

"The lightweight program for women at the national level is just starting to get off the ground," Doug Clark, the MIT coach, said. "This was the first time the US had a national women's lightweight squad. Faith and Kathy both did an outstanding job and both will participate in the national camp again next summer."

In June Alexander and Yelick rowed for the Pioneer Valley Club of Massachusetts at the open nationals in San Diego. With Alexandre at

stroke and Yelick at bow, Pioneer Valley won the open lightweight eight race over the University of Pennsylvania and Radcliffe.

Alexandre was captain of the 1981 MIT women's crew team which won the lightweight varsity eight race at the Eastern Association for Women's Rowing Championships in New Preston, Conn., in May. She also received the MIT Pewter Bowl Award for contributions to women's athletics. Yelick, meanwhile, is starting her fourth year on the MIT women's crew squad.

In other crew news, MIT's Doug Clark was a member of the coaching staff at the US Women's Heavyweight Training Camp in Newport Beach, Calif., this summer. He coached a team at the National Sports Festival in Syracuse in July, and then took the national "B" heavyweight squad to the Canadian Henley where they finished third behind Canada's top two "A" boats.

There will be a meeting for all freshman women rowers at 5pm Wednesday, Sept. 9, at the Pierce Boathouse. The varsity women's squad will have its first practice at 5:30pm Wednesday. All women interested in rowing should call Coach Doug Clark, X3-6246, for further information.

Procedures class series planned

Two new eight-week sessions of "Introduction to Administrative Procedures," in which exempt and support staff members learn who to talk to about what, will be offered by the Personnel Office beginning in October.

More than 1,000 employees have taken the course, which presents representatives of administrative and service departments who outline the services of their offices and explain procedural information. Subjects and instructors will be:

Accounting—Paul Honiker, Richard May, Robert Sullivan, Ruth Walsh

Campus Patrol—Chief James Olivier

Graphic Arts—James Coleman, Al Paone

Housing & Food Services—George Hartwell
Office of Sponsored Programs—James Grayson, Patricia Greer

Payroll—Frederick Crowley, Joseph Cullinan

Personnel—Virginia Bishop, Kenneth Hewitt, Terri Viohl, Kerry B. Wilson

Physical Plant—Mort Berlan

Purchasing—Mary Anne Petti

The fall programs will begin Monday, Oct. 5, and Friday, Oct. 9. Departmental supervisors are asked to nominate one or two employees from their area to attend one of the two sessions. Employees who are interested in attending should tell their supervisors.

Course outlines, program schedules and application forms can be obtained from department or laboratory heads or administrative officers. Wanda Osborn, X3-1674, in the Personnel Office, can provide further information. Deadline for nominations is Friday, Sept. 25. Letters will be sent to those selected for the program.

Chemical Engineering—The following projects are available: 1) Reactor F-Tests. Determination of reactor and feed line volumes with a flow method are needed. Also, f-tests should be made on reactor to extend previous runs to lower flow rates. SUITABLE FOR SOME FRESHMEN. 2) Thermodynamics. Calculations are needed for equilibrium composition of normal pentane isomerization and hydrogenolysis products. Requires having taken 10.14. 3) Temperature Controller. Interfacing between a microcomputer and a stepping motor is needed. Familiarity with microcomputers is desirable. Contact Prof. Fred Putnam, 66-457, X3-6489.

Clusters and Superclusters—Will help in numerical study of large-scale clustering of galaxies in space. Will develop and execute programs on an interactive mini-computer system. Proficiency in FORTRAN and interest in astrophysics required. Contact Dr. Eric Feigelson, 37-411, X3-3130.

NDE Techniques for Advanced Composite Aircraft Structures—Desire Jr. or Sr. with electromagnetic field or circuit theory background to assist in development of new NDE techniques. Work includes computer data acquisition, digital signal processing, design, execution, sample fabrication, etc. PAY POSSIBLE. Contact Prof. M. Zahn, N10, X3-4688.

Chemical Analysis of Oil Shale Pyrolysis Products—Work involves oil shale pyrolysis under truly in-situ conditions and chemical analysis of pyrolysis products. The analyses to be performed are: distillation, gas chromatography, and possibly NMR. Analysis results will be used to determine reaction kinetics and suggest conditions for further in-situ tests. PAY AVAILABLE. 10 hrs/wk. Contact David Barr, 7-006, X7488, or Prof. Cleary, 3-352 or 3-356, X3-2308, also 1-800 or X3-2318.

TECH TALK
September 16, 1981
Volume 26
Number 7

Tech Talk is published 39 times a year by the News Office, Massachusetts Institute of Technology. Director: Robert M. Byers; Assistant Directors: Charles H. Ball, Robert C. Di Iorio, Joanne Miller, Tech Talk editor, William T. Struble and Calvin D. Campbell, photojournalist; Reporters: Elizabeth C. Huntington and Caridad Tharan (Institute Calendar, Classified Ads, Institute Notices).

Address news and editorial comment to MIT News Office, Room 5-111, MIT, Cambridge, MA 02139. Telephone (617) 253-2701.

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Blackmer named to head political science dept.

Dean Harold J. Hanham of the School of Humanities and Social Science has announced the appointment of Professor Donald L. M. Blackmer as head of the MIT Department of Political Science. The appointment will take effect on January 15, 1982.

Professor Blackmer succeeds Professor Alan A. Altshuler, who has headed the department since 1977 and who will resume his position as professor of political science and of urban studies and planning. Professor Altshuler will also devote more time to the Future of the Automobile Program, a multinational research effort that he co-directed with Professor Daniel Roos. The Automobile Program is a joint activity of the Center for Transportation Studies and the Center for International Studies.

Dr. Blackmer, professor of political science, has been associate dean of the School of Humanities and Social Science since 1973 and director of the Program in Science, Technology and Society since 1977. He is



a specialist on communism in Europe and the Soviet Union.

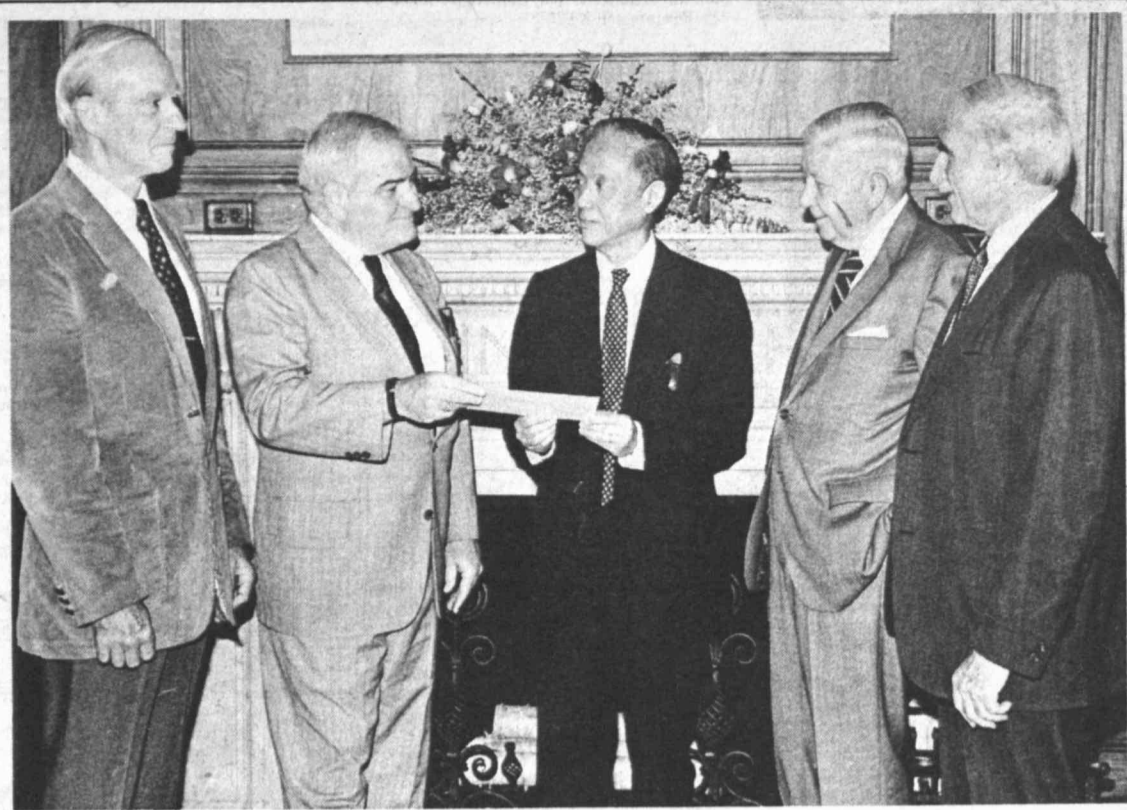
Professor Blackmer received all his degrees from Harvard University: the AB in 1952, the AM in 1956 and the PhD in political science in 1967. He was awarded a Sheldon Travelling Fellowship in 1952-53.

He was executive assistant to the director of MIT's Center for International Studies from 1956 to 1961, when he became assistant director. He became an assistant professor of political science in 1961, associate professor in 1967 and professor in 1973. He served as executive officer of the Department of Political Science in 1972-73.

Dr. Blackmer has been a research associate at Harvard University's Center for European Studies since 1973 and a member of the Council on Foreign Relations since 1974. He is past chairman and member of the executive committee of the Council for European Studies, and a former member of the Planning Group of the American Council of Learned Societies.

He is the co-author of three books and author of *Unity in Diversity: Italian Communism and the Communist World*, published by the MIT Press in 1967.

He and his wife, Jean, live in Concord, Mass. They have three children.



President Paul E. Gray presented the honorarium for the James R. Killian, Jr. Faculty Achievement Award to this year's recipient, Institute Professor C. C. Lin at a brief ceremony in the President's office last week. Joining in the occasion were Professor Felix L.H. Villars, left, chairman of the

faculty, Dr. Killian, second from right, and Institute Professor Ascher M. Shapiro who was chairman of the selection committee. Professor Lin, who is also professor of applied mathematics, will present one or more Killian Lectures later in the year.

—Photo by Calvin Campbell

Medical board seeks nominees

The Medical Advisory Board seeks nominations for three positions, one from each of the following areas: support staff, MIT Health Plan, and Technology Wives Organization.

The Medical Advisory Board, a presidentially appointed committee, serves as a communications link between the Medical Department and its users. Its objectives are to keep the community informed of services available through the Medical Department and to receive criticisms and suggestions for modifications or additions to services to meet the changing needs of the community. The Board meets during the academic year, usually on the last Monday of the month from 12 noon to 1:30pm.

Those interested in being considered as a member of the Medical Advisory Board or anyone who wishes to suggest the name of a good candidate is invited to submit a name, room number, and extension to Constantine B. Simonides, vice president in the Office of the President, Rm 3-209.

Two join staff of Dean's office

Jeannette Gerzon, a former consultant to the City of Cambridge, and Linda J. Vaughan, director of counseling for the Harvard School of Public Health since 1979, have been appointed assistant deans for student affairs. Ms. Gerzon also serves as advisor on preprofessional education. Announcement of the appointments was made by Dr. Shirley McBay, dean for student affairs.

As assistant deans, both will counsel students and will also be concerned with program development. As advisor on preprofessional education, Ms. Gerzon will advise students interested in medicine, law, psychology and related fields. Ms. Vaughan will provide advice and support to the student-run Nightline, to handicapped students and to women students.

Ms. Gerzon received the BA degree in psychology from Boston University, and the EdM degree in counseling and consulting psychology from Harvard University. She did counseling at Glenview Mental Hospital in Bristol, England from 1973-74, and social work and psychotherapy for the Kennebec Valley Mental Health Center and the State of Maine Department of Mental Health and Corrections from 1976-77, when she became a child protective worker for the Maine Department of Human Services. While a graduate student at Harvard, she was a group



Dean Vaughan and Dean Gerzon counselor at Dana Hall School in Wellesley. She became consultant to the City of Cambridge in 1979.

Ms. Vaughan holds the AB degree in social science from Harvard University and the EdM in counseling psychology from Boston College. She is currently a candidate for the PhD degree in counseling psychology at Boston College. From 1968-69 she was an administrative consultant at the Ithaca Women's Clinic, Ithaca, N.Y., and from 1969-71, was assistant director of the Special Children's Center, also in Ithaca. From 1971-75 she was assistant to the dean of students at Harvard Medical School. She became assistant director of the Graduate Program in Health Policy and Management at the Harvard School of Public Health in 1975, and associate director in 1977-79. During this time she also served as staff psychotherapist at Harvard Health Services.

Annual Luce competition is open

Professor Eugene B. Skolnikoff has announced that MIT is eligible again this year to nominate two persons for the annual Luce Fellows competition.

Professor Skolnikoff is director of the Center for International Studies, which administers the program at MIT. He will name a small committee, representative of the different MIT schools, to interview applicants and make a final selection.

Luce Fellows spend about 10 months in the Far East working in their professional fields. The purpose of the program, sponsored by the Henry Luce Foundation, is to offer a select group of young Americans an experience in Asia designed to broaden their professional perceptions of Asia, of America and of

themselves.

Fifteen winners are selected from the nominees from 60 universities. MIT has had five winners in the four years it has submitted nominees.

Eligible are seniors, graduate students, faculty members and recent graduates. Persons wishing to be considered for nomination will need to provide—by Oct. 15—an academic transcript, an essay on the reasons he or she wants to spend a year in Asia, a brief statement of career goals, and a local address and phone number.

For further details and applications, call or see Professor Skolnikoff, Rm E38-648, X3140, or Amelia Leiss, CIS assistant director Rm E38-652, X8064.

Hale named to Ferrari P. Ward chair

By CHARLES H. BALL
Staff Writer

Dr. Kenneth L. Hale, one of the world's leading specialists in the indigenous languages of Australia and an expert on American Indian languages, has been appointed the Ferrari P. Ward Professor of Modern Languages and Linguistics.

The Ferrari P. Ward chair was established at MIT in 1966 through a bequest from Mr. Ward, an inventor, industrial consultant and a member of the MIT Class of 1926.

In the Ferrari P. Ward Professorship, Dr. Hale succeeds Dr. Morris Halle, who has held the chair since 1976. Professor Halle, a leading scholar in the modern field of linguistics, was recently appointed Institute Professor, a rank that MIT reserves for scholars of special distinction. The original holder of the Ward chair, whom Dr. Halle succeeded, was Institute Professor Noam A. Chomsky, whose research on the nature of language has revolutionized linguistic science.

Dr. Hale's appointment was announced by Dean Harold J. Hanham of the MIT School of Humanities and Social Science and by Dr. Samuel Jay Keyser, head of the Department of Linguistics and Philosophy.

Dr. Keyser said that Professor



Hale's "remarkable abilities as a linguist reflect his strong commitment to other cultures and their need to survive intact." He added that Dr. Hale is "a true humanist in the best sense of the word."

Among his contributions to the MIT linguistics program, Professor Keyser said, special note should be taken of two American Indian students who obtained their doctorates under Professor Hale's guidance. "The special needs of these students required extraordinary efforts on the part of the thesis advisor because the program had to be adapted to their language and to their background," he said. "Partly as a result of Professor Hale's efforts these students successfully completed the rigorous doctoral program and thus became the first American Indian PhD's in linguistics in the country since the time of the great anthropological linguist, Franz Boas, who also trained a number of American Indian language scholars."

Born in Evanston, Ill., in 1934, Dr. Hale received the BA in anthropology from the University of Arizona in 1955, the MA from the University of Indiana at Bloomington in 1956 and the PhD from the University of Indiana in 1958. In 1956-57, Dr. Hale also held a fellowship in anthropology at the University of New Mexico at Albuquerque.

From 1961 to 1964 Dr. Hale was an assistant professor of anthropology and linguistics at the University of Illinois. From 1964 to 1966 he was an associate professor of anthropology at the University of Arizona.

He came to MIT in 1967 as an associate professor of linguistics and

was made a full professor in 1972.

Dr. Hale has carried out extensive field work and has researched five American Indian languages and several Australian Aboriginal tongues. His research involves the testing of established and emerging principles of linguistics against the evidence presented by Native American and Australian Aboriginal languages. His work is at the forefront of linguistic research in these languages and its implications for a theory of universal grammar.

Another important area of Dr. Hale's work is on the potential role of theoretical linguistics in the bilingual education programs of American Indians. Dr. Hale believes that the strong interest of American Indians in studying their native languages could become a means to introduce the scientific study of a language and its accompanying logical systems and methodologies into the curriculum in Native American schools. Linguistics might then become a vehicle for teaching the methods and attitudes of scientific inquiry not only in American Indian schools, but in American schools generally.

Professor Hale is the author or co-author of many professional articles.

In keeping with his commitment to the idea that local languages should be allowed to occupy a position of dignity and power in local educational systems, he is writing a book designed to make use of American Indian languages in an elementary school environment.

Dr. Hale is married to Sara Whitaker Hale. They have four children and make their home in Lexington.

Silk appointed associate dean at Sloan

Professor Alvin J. Silk has been named Associate Dean of MIT's Sloan School of Management.

In announcing the School's faculty, Dean Abraham J. Siegel, Dean Abraham J. Siegel said, "Professor Silk brings a distinguished record of accomplishments to this critically important position. He has worked long and selflessly on behalf of the School for many years." Dean Siegel went on to comment on Professor Silk's contributions as chairman of the School's doctoral program, and his role of professor of management science and coordinator of the marketing group, where he has directed and produced fundamental and applied research to improve the effectiveness of marketing decisions.

Professor Silk, an internationally renowned specialist in marketing and management science, joined the School of Management faculty in 1968 as an associate professor. Dur-



ing a leave of absence he served as a Ford Foundation Visiting Professor at the European Institute for Advanced Studies in Management in Brussels, Belgium. He gained the rank of professor at MIT in 1974 and soon after was appointed chairman of the Doctoral Program Committee.

Professor Silk did his undergraduate work at the University of Western Ontario (AB, 1959) and his graduate work at Northwestern University (MBA, 1960 and PhD, 1968). He held faculty appointments at the University of California, Los Angeles and the University of Chicago be-

fore coming to MIT.

Professor Silk's research has focused on issues related to advertising testing and expenditure policy for copy development. His contributions to the marketing field include the development in 1978 with Professor Glen L. Urban of ASSESSOR, which blends the use of models, measurements and statistical techniques for pretest market evaluation of new products. He has published widely and is a member of the editorial boards of the Journal of Marketing and Marketing Science.

Historian to open T&C seminars

Professor William H. McNeill, historian at the University of Chicago, will give the first of a fall series of lectures on Technology, Agriculture and Food, sponsored by the Technology and Culture Seminar at MIT, at 4:30pm, Thursday, Sept. 17 in Rm 9-150. Professor McNeill will discuss technology, agriculture and food before 1750. The lecture is free and open to the public, and will be followed by an informal supper and discussion.

Other speakers in the series will be Institute Professor Nevin S. Scrimshaw, director of the Clinical Research Center at MIT; William Hinton, author of books on China; Professor Frederick Ausubel of Harvard University, and Professor William Friedland of the University of California.

THE INSTITUTE CALENDAR X3-3270

September 16 through September 27

MISS THE TECH TALK DEADLINE?

Put your announcement on the MIT Cable System. "Today at the Institute" runs from 9 to 5 daily on Channel 10 and can be viewed in Lobby 7, Lobby 10, and anywhere the cable is connected.

Simply phone X3-7414 and leave your announcement. 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 the cable (except for exhibits and some multimeetings programs).

Events of Special Interest

Welcoming Party**—for current and prospective members of Tech Wives Organization. Sun, Sept 20, 3-5pm, Bush Room 10-105. Companions and children welcome. Refreshments served. For information call Rosalyn, 964-2338 or Robin, 494-0159 even.

Using MIT's Personnel and Career Services Resources*—The Women's Forum cordially invites you to attend the first meeting of their 10th Anniversary year. Mon, Sept 21, noon-1pm, Bush Room 10-105.

The MIT Libraries Book Sale*—Tues, Sept 22, Hayden Gallery, 10am-4pm.

Seminars and Lectures

Wednesday, September 16

Atomic Energy: Worldwide Outlook and Prospects, Including the French Program*—Prof. Andre Giraud, Paris Dauphine University, former Minister of Industry, and former Chairman of Compagnie Generale des Matieres Nucleaire. Center for International Studies Seminar, 12 noon-2pm, CIS Seminar Room II, E38-762f (292 Main St., Kendall Square). Bring your own brown-bag lunch.

Inertial Oscillations, Shear Dispersion, and Parameterizations of Horizontal Ocean Mixing*—Bill Young, W.H.O.I. Oceanographic Sack Lunch Seminar, 12:10pm, Rm 54-915. Coffee and tea served.

Damage to Bridges and Its Causes; Maintenance of Existing Bridges*—Prof. Specht, Technical University of Berlin, West Germany. Civil Engineering Seminar, 4-6pm, Rm 1-190.

On the General Equation of Motion of Quantum Thermodynamics and the Distinction Between Quantal and Nonquantal Uncertainties*—Gian Paolo Beretta, doctoral thesis presentation, dept. of mechanical engineering, 4pm, Miller Room 1-114. Coffee served at 3:45pm.

Synthesis and Reactivity of Early Transition Metal Complexes Containing Multiple Metal to Carbon, Nitrogen, or Oxygen Bonds*—Scott Rocklage, graduate student, MIT. Inorganic Chemistry Seminar Series, 4pm, Rm 4-370. Coffee and donuts served at 3:30pm, Moore Room 6-321.

"The War Without Winners"—film and discussion on the economic and social impact of the arms race. MIT Disarmament Study Group, 5:15pm, Rm 9-150.

Thursday, September 17

A Postdoc in Europe During the Great Physics Revolution*—I. I. Rabi, professor emeritus, physics, Columbia University. Physics Colloquium, 4pm, Rm 26-100. Refreshments served at 3:30pm, Rm 26-100.

Design of Cable-Stayed Bridges*—Prof. Lindner, Technical University of Berlin, West Germany. Civil Engineering Seminar, 4-6pm, Rm 1-190.

Linear Programming and Combinatorial Topology of Sphere Systems*—Prof. Jack Edmonds, mathematics, University of Waterloo, Ontario, Canada. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies served after seminar.

Thursday Afternoon Cheney Room Program**—Sept 17, The Evolution of Women's Roles: What the Past Can Tell Us. Prof. Jean Jackson, anthropology, MIT. Refreshments 4-4:30pm, talk and discussion, 4:30-6pm; Sept 24, Women Against Violence Against Women. Slide show and discussion, 4-6pm, Rm 3-310. Everyone welcome to all events.

Low reviews Whitehead proposal

(continued from page 1)

members of the Corporation and its Executive Committee. It is their conclusion that the benefits outweigh the potential problems of going ahead with the arrangement, he said.

Among potential advantages for MIT, Professor Low said, is the fact that the collaboration with WI—and the additional faculty it would bring—would provide MIT with the means of enriching its teaching and research programs and expanding into new areas. A number of MIT graduate students will be able to pursue their research activities at WI with full funding from WI, Professor Low said.

Moreover, MIT research programs in the biological areas that interface with WI would be strengthened, Professor Low said. WI has offered to provide MIT with a \$7.5 million endowment fund, the earnings from which would be applied to departments, centers and laboratories which have continuing interactions with WI. At the outset, this would apply specifically to the Department of Biology, but Professor Low said it is possible that in the future other departments might discover areas of common interest and interaction with WI and would also be included.

There is a particular long term advantage for MIT, according to Professor Low. WI will direct its research efforts towards molecular approaches to problems of develop-

mental biology. Although this is an area of research where MIT is already strong, Professor Low said, its expansion now should help MIT research in biology remain strong and current through the 1990s.

Professor Low said he and others in the MIT administration are not unmindful that the independence of WI from MIT raises the question of whether WI goals and procedures will be comparable and compatible to those of MIT. MIT, he said, will make every effort to achieve compatibility in such areas as salaries, benefits, affirmative action, sabbatical leave, percent of time devoted to and the nature of involvement in outside activities, and tenure commitments.

WI, for its part, Professor Low said, wants to be linked to MIT because MIT's tradition of excellence will help guarantee that WI will be an institution of quality research from the outset. The relationship would provide WI scientists with the same dual teaching and research focus that characterizes most of American science.

Professor Low said WI will be independent of commercial interests. WI will have patent rights to the results of its own research, as MIT does, but no company will have a pre-arranged preferential right to WI licenses. Since the distance between commercial and basic research activities in biology has become so short, WI, like MIT, may face complicated decisions about commercial involvement, Professor Low said. WI representatives recognize this possibility and have indicated that WI will be guided by the principle that its mission is to contribute openly to scientific knowledge and that all other goals must be subservient to that one.

In his Faculty letter, Professor Low also described the organization, background and financing of WI.

WI was established by Edwin (Jack) Whitehead, founder and former president of Technicon, Inc., a major supplier of automated equipment for clinical laboratory equipment. Technicon was merged with Revlon, Inc., several years ago and Mr. Whitehead, who was Technicon's principal stockholder, determined to establish a biomedical research institute. Professor Low said that since Mr. Whitehead's wealth came from advances in medical research, Mr. Whitehead felt it was important that some of the wealth be applied to still further advances.

Professor Low noted WI has agreed to appoint three representatives from MIT to serve on its Board of Trustees and former President Jerome B. Wiesner, Dean Abraham Siegel of the MIT Management School, and Dr. W. Gerald Austen, chief of surgical services at the Massachusetts General Hospital and a member of the MIT Corporation, have agreed to serve in that capacity. There are three other vacancies on the board, Professor Low said, that are to be filled collaboratively by WI and MIT. Dr. Donald Frederickson, former director of the National Institutes of Health, has agreed to be one of these trustees. WI also has agreed that the WI director shall be drawn from MIT Faculty ranks and that the director also shall serve on the Board.

Mr. Whitehead himself is not a member of the WI board. Besides Dr. Sawhill, the board includes three of Mr. Whitehead's children, John Whitehead, a Technicon executive, Peter Whitehead, an architect, and Susan

Technology, Agriculture and Food before 1750*—Prof. William H. McNeill, historian, University of Chicago. Technology and Culture Seminar, 4:30pm, Rm 9-150. An informal supper and discussion with the speaker will follow the lecture.

International Organization and Sustainable Development*—Brian Johnson, senior fellow, International Institute for Environment and Development. DUSP and Center for International Studies Seminar, 5:30pm, Rm 10-485.

The Russian Heroine: Where To Find Her and Where Not To*—Barbara Heldt Monter, associate professor, Slavonic Studies, University of British Columbia. MIT Foreign Languages and Literatures Seminar, 8pm, Rm 14E-304.

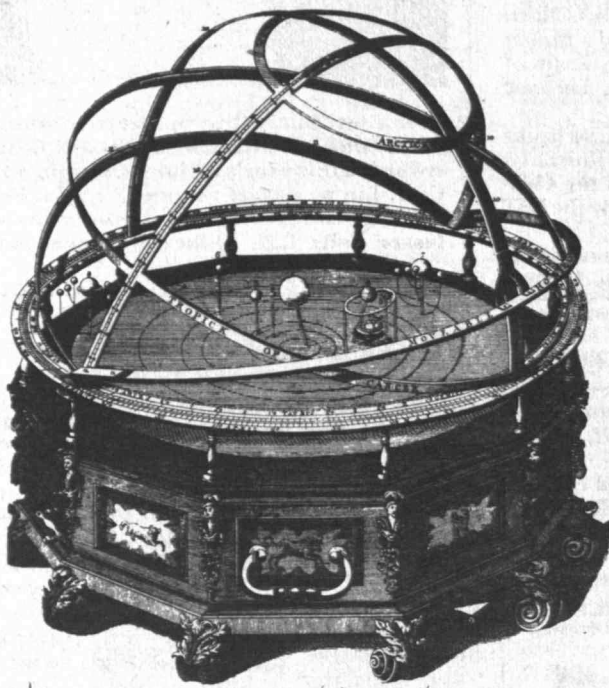
Friday, September 18

Studies of Toluene Combustion by Molecular Beam Mass Spectrometry**—Phillip Westmoreland, graduate student, MIT. Department of Chemical Engineering Seminar, 2pm, Rm 66-110.

Superconductivity of Graphite Intercalation Compounds*—Y. Iky, Institute for Solid State Physics, University of Tokyo. Center for Materials Science and Engineering Colloquium, 4pm, Rm 9-150. Coffee served at 3:30pm.

Conditionals and Similarities Amongst Worlds*—Prof. Jonathan Bennett, Syracuse University. MIT Philosophy Colloquium, 4pm, Rm 37-212.

"Let's Stop Equivocating"—a discussion on being Jewish in America with Chaim Kline, 9pm, Ashdown Dining Room. Preceded by Shabbath services at 5:30pm (Hillel basement) and dinner at 7:15pm. For dinner reservations: Hillel, 253-2982.



The GRAND ORRERY as it was first made by Mr Rowley.

Orreries or planetariums like the one above were a new tool to 18th century scientists. Two examples are included in the exhibition of 18th century scientific instruments, graphics and rare books in MIT's Compton Gallery (Rm 10-150). Both were made by Benjamin Martin of London for use at Harvard University. One is a small model powered by a hand crank, the other a more massive, brass model has a clockwork mechanism to move the planets powered by weights. The large orrery is surrounded by an ecliptic circle engraved with the calendar and the signs of the zodiac. Orreries were named for Robert Boyle, 4th Earl of Orrery, and a great nephew of the scientist Robert Boyle, who commissioned one of the earliest planetariums.

Sunday, September 20

Biblical Big Shots: Models of Leadership*—Ernest Rabinowicz, mechanical engineering, MIT. MIT Hillel Foundation Seminar 12pm, Hillel Lox and Bagel Brunch, Mezzanine Lounge, Student Center. \$2 for Hillel members, \$2.50 for non-members.

Monday, September 21

The Asymptotic Number of Unit Interval Graphs*—Dr. Phil Hanlon, dept. of mathematics, MIT. Applied Mathematics Colloquium, 4pm, Rm 2-339.

Tuesday, September 22

The Combinatorics of the Euler Characteristic*—Prof. Gian-Carlo Rota, mathematics, MIT. Mathematics Department Seminar, 3pm, Rm 4-163. Tea served at 4pm.

Randomness and Complexity*—Charles Bennett, IBM T. J. Watson Research Center, Yorktown Heights, N.Y. VLSI Seminar, 4pm, Rm 9-150.

Ultrafast Rates and Phase Transitions by Vibrational Spectroscopy*—Prof. Herbert Strauss, dept. of chemistry, University of California (Berkeley). Physical Chemistry Seminar, 4pm, Rm 4-370. Coffee at 3:45pm, Rm 6-321.

Stalling Pressure Rise Capability of Axial Compressor Stages*—C.C. Koch, aircraft engine division, General Electric Company. Gas Turbine and Plasma Dynamics Laboratory Seminar, 4:15pm, Rm 31-161. Refreshments at 4pm.

Recent Developments in Astrometry*—Prof. William van Altena, Yale University. Astrophysics Colloquium, 4:15pm, Rm 37-252 (Marlar Lounge). Coffee served at 3:45pm.

Molecular Mechanisms in Site-Specific Recombination: The Lambda System*—Dr. Arthur Landy, biological and medical science, Brown University, Providence, R.I. Biology Colloquium, 4:30pm, Rm 6-120. Coffee served at 4pm, vestibule of fifth floor, bldg. 56.

As You Like It*—T. Postlewait, assistant professor, MIT. The Plays of Shakespeare, Humanities Lecture Series, 7pm, Rm 1-190.

Wednesday, September 23

The Resilience of the Air Transportation System to External Pressures*—Hon. Walter M. McLeish, administrator, Canadian Air Transportation Administration. Flight Transportation Laboratory Seminar, 2:30-4pm, Rm 33-319.

Detailed Electronic Structural Studies of Blue Copper Proteins and Spectral Analogs*—Kevin W. Penfield, graduate student, MIT. Inorganic Chemistry Seminar Series, 4pm, Rm 4-370. Coffee and donuts served at 3:30pm, Moore Room 6-321.

The Politics of Health Care: Will There Be Health Under Reagan?*—Dr. Wayne Lencer, pediatrician, former organizer Boston City Hospital Union. MIT Socialist Group Seminar, 7:30pm, Rm 4-159.

Thursday, September 24

10⁻¹¹ Seconds After the Big Bang*—Prof. Alan Guth, physics, MIT. Physics Colloquium, 4pm, Rm 26-100.

Homeostatic Control: A Summary*—Prof. Fred C. Schweppe, associate director, E.P.S.E.L., MIT. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee served after the Seminar.

Friday, September 25

Char Combustion in an Atmospheric Fluid Iced Bed*—Cathryn Sundback, graduate student, MIT. Chemical Engineering Seminar, 2pm, Rm 66-110.

Reliability of Over Pressure Protection Systems: A Markov Analysis*—Dr. P. L. Thibaut, Brian, Air Products & Chemicals. Chemical Engineering Seminar, 3pm, Rm 66-110.

Community Meetings

MIT Faculty Club**—The Club is open Monday through Friday. Luncheon hours Noon-2pm; Dinner hours: 5:30-8pm.

Student Art Association Art Classes**—Register in Student Center, Rm 429, X3-7019, 1-5pm. Courses offered in life drawing, ceramics, photography, color photography, silk flower making, calligraphy, Chinese brush painting, stained glass and parent-toddler art.

Alcohol Support Group**—Personal Assistance Program, Medical Dept. A self-help support group for persons concerned about the effects of excessive alcohol use on their lives. For place, time and day of the week, contact Ron Fleming, X3-4911.

Overeaters Anonymous**—Meetings are held Mondays and Thursdays, 12-1pm. Conference Room 35-338. For information call X3-2153.

President Gray's Open Office Hours**—Tues, Sept 29, Oct 13, 27, Rm 3-208, 4-6pm. An opportunity to share ideas or thoughts on issues with the president.

Whitehead, a law student; Dr. Herman Sokol, president of Bristol-Myers and a former Technicon Board member; Dr. Leonard Skeggs, professor of biochemistry at Case Western University and inventor of the Technicon Auto Analyzer; Dr. Lewis Thomas, chancellor of the Memorial Sloan-Kettering Cancer Center, and Dr. Baltimore.

Professor Low said Mr. Whitehead plans to fund WI through three mechanisms. He will provide the initial sum—expected to be \$20 million—to construct and equip the WI building. Second, he has established an annuity trust to provide WI with \$5 million of annual income. Third, Mr. Whitehead is arranging that on or before his death there will be an endowment established for WI of at least \$100 million to supplant the annuity trust.

Professor Low said all terms will be set down in documents before definitive agreements with MIT are executed. Once the documents are signed, funds for WI will be assured and will be independent of control by any outside group or individual, including Mr. Whitehead.

According to Professor Low, Mr. Whitehead several years ago explored establishment of a biomedical research institute in association with Duke University. At that time, Professor Low said, Mr. Whitehead was considering a more medically-oriented institute, significantly different than what is being proposed for a Cambridge site near MIT. The Duke effort was not successful and, Professor Low said, Howard W. Johnson, chairman of the MIT Corporation, has discussed with Duke President Terry Sanford the reasons for that. Professor Low said he and Mr. Johnson are convinced that there was nothing in the Duke experience that would provide a reason for not proceeding with a possible MIT affiliation.

MIT-MASS GASP-Group Against Smoking Pollution**—Get together, with discussion of legislative program in Cambridge and Mass., and nonsmokers' protection in the workplace. Thurs, Sept 17, 7:30pm, Rm 1-114. All welcome.

Pottery Sale**—Created by members of the MIT Student Art Association. Wed, Sept 16, 10am-4pm, Lobby 10.

Wives' Group**—Wed, Sept 16. The first meeting this year will be a "getting acquainted" meeting, during which newcomers will be welcomed by older members and have a chance to begin to know each other better, too. West Lounge (second flr) Student Center, 3-5pm. Babysitting is provided in Rm 473 (fourth flr), Student Center. Wed, Sept 23, "Shopping and Where to Get Information You Need," Student Center, 3-5pm. Babysitting is provided in Rm 473, Student Center.

Thursday Afternoon Cheney Room Program**—Sept 17, The Evolution of Women's Roles: What the Past Can Tell Us. Prof. Jean Jackson, anthropology. MIT Refreshments 4-4:30pm, talk and discussion, 4:30-6pm; Sept 24, Women Against Violence Against Women. Slide show and discussion, 4-6pm, Rm 3-310. Everyone welcome to all events.

Weight Control Program**—A ten-week program for members of the MIT community to be offered by the Medical Dept, beginning Tues, Oct 13. Introductory meeting, Tues, Sept 29, noon, 3rd floor conference room, Infirmary W5. For information and pre-registration for the Sept 29 meeting call Health Information and Education Service, X3-1316.

GAMIT**—Gays at MIT. Group discussion, "Coming Out", Sun, Sept 20, 5pm, GAMIT Lounge 50-306, Walker Memorial.

American Association of Retired Persons (MIT Chapter)**—Fall outing, Sat, Sept 19. Places are still available for trip to Essex, Conn. to ride the steam train and Riverboat. For information and reservations call Jim Maclary, X3-2745. Chapter meeting, Tues, Sept 22, West Lounge, Student Center, 5:15, dinner; 6:15, business meeting; 6:30, quilting (art form using paper strips), demonstration by Dorothy Donahue; 7, installation of officers. Send \$4 for dinner reservations to Jim Maclary, Rm E19-671, X3-2745 by Sept 18. Check payable to M.I.T. Cambridge Chapter #2893, A.A.R.P.

Tech Wives' Organization (TWO)**—community orientation meeting, Wed, Sept 23, 7:30pm, Bush Room 10-105. Mr. Eugene Chamberlain, International Students Advisor and Associate Dean for Student Affairs will speak on the spirit of MIT and opportunities for MIT community members at the Institute. Representatives from various departments (personnel, athletics, medical, child care, arts, libraries, and campus patrol) will be present to meet you and answer your questions. Refreshments served. For more details call Anne Prince, X3-2195.

Movies

The War Without Winners**—a film exploring the economic and social impact of the arms race. Discussion follows. MIT Disarmament Study Group. Wed, Sept 16, 5:15pm, Rm 9-150.

Lina Braake (Lina Braake and the Interest of the Bank)**—Foreign Languages and Literatures German Film Series (with English subtitles). Thurs, Sept 17, 7:30pm, Rm 10-250. Free.

Eulerian and Lagrangian Description Flow: Visualization*—Fluid Mechanics Films, Thurs, Sept 17, 4-5pm, Rm 3-270. Free.

Coal Miner's Daughter**—LSC Movie. Fri, Sept 18, 7 & 10pm, Rm 26-100. Admission: \$1 w/ MIT or Wellesley ID.

The Big Sleep**—LSC Classic Series. Fri, Sept 18, 7:30pm, Rm 10-250. Admission: \$1 w/ MIT or Wellesley ID.

Altered States**—LSC Movie. Sat, Sept 19, 7pm & 9:30pm, Rm 26-100. Admission: \$1 w/ MIT or Wellesley ID.

Prisoner of Zenda**—SCC Midnite Movie. Sat, Sept 19, Sala de Puerto Rico, Student Center. Bring a blanket and sit on the floor. Free. MIT/Wellesley ID required.

The Front**—LSC Movie. Sun, Sept 20, 6:30pm & 9pm, Rm 26-100. Admission: \$1 w/ MIT or Wellesley ID.

Der Starke Ferdinand (Strongman Ferdinand)**—Foreign Languages and Literatures German Film Series (with English subtitles). Mon, Sept 21, 7:30pm, Rm 10-250. Free.

Sous Les Toits De Paris (French version with English subtitles)**—Humanities Film Series, Wed, Sept 23, 7pm, Rm 14E-304. Free.

Aguirre The Wrath of God**—Humanities Film Series, Wed, Sept 23, 7:30pm, Rm 66-168. Free.

Pressure Fields and Fluid Acceleration*—Fluid Mechanics Films, Thurs, Sept 24, 4-5pm, Rm 3-270. Free.

Krawatten fur Olympia (Ties for the Olympics)**—Foreign Languages and Literatures German Film Series (with English subtitles). Thurs, Sept 24, 7:30pm, Rm 10-250. Free.

Ikiru**—LSC Classic Series. Fri, Sept 25, 7pm, Rm 10-250. Admission: \$1 w/ MIT or Wellesley ID.

Tess**—LSC Movie. Fri, Sept 25, 6:30pm & 10pm, Kresge. Admission: \$1 w/ MIT or Wellesley ID.

The Elephant Man**—LSC Movie. Sat, Sept 26, 7pm & 10pm, Kresge. Admission: \$1 w/ MIT or Wellesley ID.

The Eiger Sanction**—SCC Midnite Movie. Sat, Sept 26, Sala de Puerto Rico. Bring a blanket and sit on the floor. Free. MIT/Wellesley ID required.

The Mouse that Roared**—LSC Movie. Sun, Sept 27, 6:30pm & 9pm, Rm 26-100. Admission: \$1 w/ MIT or Wellesley ID.

Music

MIT Performance Groups' Audition Times

Choral Society—Mon, Sept 21, 7:30pm, Rm 6-120, open rehearsal and auditions of new members. Audition in octets on music rehearsed in open rehearsal.
Early Music Society—Wed, Sept 16, 5:30-8pm, Rm 4-145. Both new and returning members: bring whatever music and instruments you have, no special preparation necessary.
Symphony Orchestra—Thurs, Sept 17, 7:30pm, Sala: first full rehearsal. Bring one piece you know well by a famous composer (either a solo or a part) and be prepared to sight-read.
Small groups:
Chorallaries—Call X3-3210.
Marching Band—Call X3-3210.

Dance

Indian Classical Dance*—Indrani and Sukanya, Sangam. Sat, Sept 19, 7:30pm, Kresge Auditorium. Tickets: \$10, \$6, \$4 (MIT students: \$4, \$2). Available in Lobby 10 from Sept 14.

Yoga*—Classes begin Mon, Sept 21; intermediate, 5:45pm; beginners, 7:15pm; all levels, Sept 24, 12:05pm. Classes in Room 10-340. For information call #62-2613.

Exhibits

Hart Nautical Museum*—Collection of ship models, half-models and drawings. Bldg 5, first floor. For information call MIT Museum, X3-4444.

The MIT Museum and Historical Collections*—unique collection of scientific instruments, architectural drawings, portraits, photographs and memorabilia that illustrates M.I.T.'s history and developments in 19th & 20th century American technology.

At the Museum, on view Mon-Fri, 9am-5pm, 265 Mass. Ave., 2nd flr, Cambridge. Openings
Photographs by Timothy H. O'Sullivan 1840-1882: Photographs are from a geological expedition of the fortieth parallel 1867-1869. The expedition involved exploration and survey of land from Virginia City, Nevada to Denver, Colorado.
Selections of Posters of the First World War: From the permanent M.I.T. collection. These posters were designed for the U.S. Shipping Board by a group of well-known artists who donated their services. In the absence of mass media as we know it, these posters were a valuable communication device and conveyed a message of patriotism and shared responsibility for the successful completion of the war effort.

Ongoing Exhibitions
Margaret Hutchinson Compton Gallery*—Scientific Instruments in Eighteenth-Century Culture. Presented in association with the American Society for Eighteenth-Century Studies. Approximately 50 instruments in the exhibition have been assembled from collections at MIT, Harvard, The Rhode Island Historical Society, and The Smithsonian Museum in Washington, D.C. Included are beautifully carved wooden microscopes, handsome brass telescopes, interesting orreries (mechanical models of the universe), navigational instruments and various types of hydraulic mechanisms. Gallery hours: 9am-5pm, Monday-Friday; 10am-4pm, Saturday. On view through October 31. For more information call MIT Museum, X3-4444.

Selections from the Forbes Collection of Whaling Prints: lithographs, aquatints, and engravings about the technology and lore of a once great industry. **The Past as Prologue:** a collection of architectural drawings and models—a visual history of planning and building at M.I.T. **Mechanical Computing:** slide rules, slide rules, and more slide rules. **Julius Adams Stratton:** perspectives of a continuing career in celebration of his 80th birthday. For information call MIT Museum, X3-4444.

Corridor exhibits: Building 4: **Samuel Cate Prescott, Rogers Building, Norbert Wiener, Karl Taylor Compton, Community Service Fund, Ellen Swallow Richards, Building 6: Laboratory for Physical Chemistry, Building 8: Solar Energy, Society of the Sigma XI.** For information call MIT Museum, X3-4444.

Institute Archives and Special Collections*—Hetch Hetchy Dam Controversy: Public Land versus City Water. Photographs, maps and records from the John Ripley Freeman (1855-1932) Papers.

Wellesley College Exhibition: Charles Marville: Photographs of Paris at the Time of the Second Empire. First exhibition in America of Marville's photographs taken mostly between 1852-1870 of the old Paris of Balzac, Baudelaire and Victor Hugo before the vast urban reorganization. On view through October 18, Jewett Arts Center, Wellesley College Museum. Open Mon-Sat, 10am-5pm, Sun, 2-5pm. Free.

Stroboscopic Light Laboratory Corridor*—Permanent exhibit of high speed photographs. Main corridor, near Rm 4-405.

Cambridge & Somerville Street Corner Series*—Selected photographs by Brian Swift. Rotch Visual Collections, Rm 7-304, 9am-5pm. On view through Sept.

Library Tours

Introduction to the MIT Libraries and the Institute Library Catalog 14S-200**—Meet at the kiosk in the Humanities Library Reading Room, 14S-200. Wed, Sept 16, 11am. Tours also available on request. Inquire at the Humanities Reference Desk or contact Kathy Powers, X3-5673.

Barker Engineering Library 10-500**—Wed, Sept 16, 3:15pm; Thurs, Sept 17, 3:15pm. Tours also available on request. Contact Carole Schildhauer, X3-6051.

Dewey Library E53-100**—Tours available on request. Contact Arlyne Jackson, X3-5677.

Humanities Library 14S-200**—Self-directed tour available in Humanities Library Reading Room. Tours also available on request. Inquire at the Humanities Reference Desk, or contact Kathy Powers, X3-5673.

Rotch Library 7-238**—Wed, Sept 16, 2pm. Tours open to all library users. Tours also available on request. For further information, contact Barbara Reed, X3-7052.

Science Library 14S-100**—Tours available on request. Contact Lisa Cornelisse, X3-3528.

Von Hippel Reading Room 13-2137**—Tours available on request. For further information, contact Polly Baslock, X3-6840.

Branches and Reading Rooms

Aeronautics and Astronautics Library 33-316**—Tours available on request. For information, contact Kate Herzog, X3-5666.

Chemistry Reading Room 18-480**—For information, contact Eileen Dorschner, X3-1891.

Institute Archives and Special Collections**—For information, contact Helen Slotkin, X3-5688.

Lindgren Library 54-200**—Wed, Sept 16, 3:30pm. For further information, contact Jean Eaglesfield, X3-5679.

Microreproduction Laboratory 14-0551**—For tour information, contact Peter Scott, X3-5667.

Music Library 14E-109**—For tour information, contact Linda Solow, X3-5636.

Rotch Visual Collections 7-304**—Tours included as part of the Rotch Library tours. Tours also available on request. For further information, contact Merrill Smith, X3-7088.

Student Center Library W20-500**—Tours available on request. For further information, contact Sylvia McDowell, X3-7050.

Von Hippel Reading Room 13-2137**—Tours available on request. For further information, contact Polly Baslock, X3-6840.

Wellesley Events

Youth and Ethical Conflict**—Robert Coles, social psychiatrist, Harvard University. Wed, Sept 16, 7:30pm, Alumnae Hall, Wellesley College, Wellesley. Free and open to the public.

In Honor of President Keohane*—Opening of an exhibition of the finest paintings and sculpture from the Wellesley College Museum Collection. This exhibition includes works by Vasari, Amigoni, Angelica Kauffmann, Piamontini, Cezanne, Leger, Matisse, Copley and Durand and celebrates the inauguration of Wellesley's eleventh president, Nannerl Keohane. Fri, Sept 18, Mon-Sat 10am to 5pm, Sun 2 to 5pm, Jewett Arts Center. On view through January 1982.

The Classical Quartette*—a concert, Fri, Sept 18, 7:30pm, Wellesley Auditorium.

Poetry reading by Nicki Giovanni*—Thurs, Sept 24, 8pm, Wellesley Auditorium. Sponsored by Harambee House.

Sports

Home Schedule*—Golf vs St Anselm's, Sept 10, 1pm; Soccer vs Harvard; Men's Tennis vs Bentley, Sept 16, 3pm; Baseball vs Lowell, Sept 18, 3pm; Club Football vs Roger Williams, Sept 19, 1pm; Women's Tennis vs Emmanuel, Sept 19, 11am; Women's Sailing, Man-Labs Trophy, Sept 19-20, 9:30am.

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.

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

Send notices for Wednesday, September 23 through Sunday, October 4, to Calendar Editor Rm 5-113, before noon, Friday, September 18.

Johnson & Johnson to Support Medical Research

New Medical research projects at MIT have been funded under a new Johnson & Johnson Fellowship Program by the worldwide manufacturer of health care products.

Johnson & Johnson has made a five-year commitment to the program which initially will support three junior faculty members and three postdoctoral fellows.

Announcement of the program was made by David R. Clare, presi-

dent of Johnson & Johnson, and Dr. Paul E. Gray, president of MIT.

"The MIT research projects will help move medicine and health care ahead," Mr. Clare said. "The Johnson & Johnson Fellowship Program helps MIT meet some of its basic research goals and advances Johnson & Johnson's chief interest in strengthening science and technology in the medical field."

"We welcome the support of Johnson & Johnson in funding basic research at the institute," Dr. Gray said. "Corporate support is essential in strengthening the bonds between higher education and the industrial community."

First recipients of Johnson & Johnson Fellowships are: James C. Weaver, Dan Adam and Monty

Krieger, all of the Harvard-MIT Division of Health Sciences and Technology, and Gregory Pattel, Stephen Chung and Jeffrey Braman of the Department of Biology.

Among the research projects funded, one will focus on cholesterol buildup in the body. Another will develop non-surgical methods of obtaining pH and blood gas measurements which could lead to improvements in monitoring critical care patients. A third objective is development of more effective identification and treatment of spontaneous ventricular fibrillation—a heart problem which causes some 400,000 sudden deaths in this country annually and is the principal cause of death in men under the age of 55.

Registration opens for Sky Art events

Registration for Sky Art Conference '81 to be held at MIT Friday, Sept. 25-Tuesday, Sept. 29, is now open.

Registration materials and information on the conference are available at the MIT Center for Advanced Visual Studies (W1). Registration for the full conference is \$200 for the public, \$95 for students, artists and senior citizens, and \$75 for MIT students, staff and employees. For a single day, costs are \$55 to the public, \$25 to students, artists and senior citizens, and \$20 to the MIT community. Students in the Master of Science in Visual Studies Program at MIT will be admitted free.

In addition, CAVS needs volunteers for pre-conference work. Anyone interested in helping out on administrative and technical details should call Portia Smith at x3-2804.

Weight control program returns

A ten-week weight control program for members of the MIT community will be offered by the Medical Department beginning Tuesday, October 13.

An introductory meeting will be held at noon Tuesday, Sept. 29, in the third floor conference room of the Infirmary (W5) to acquaint prospective participants with the program and help them decide if they want to enroll.

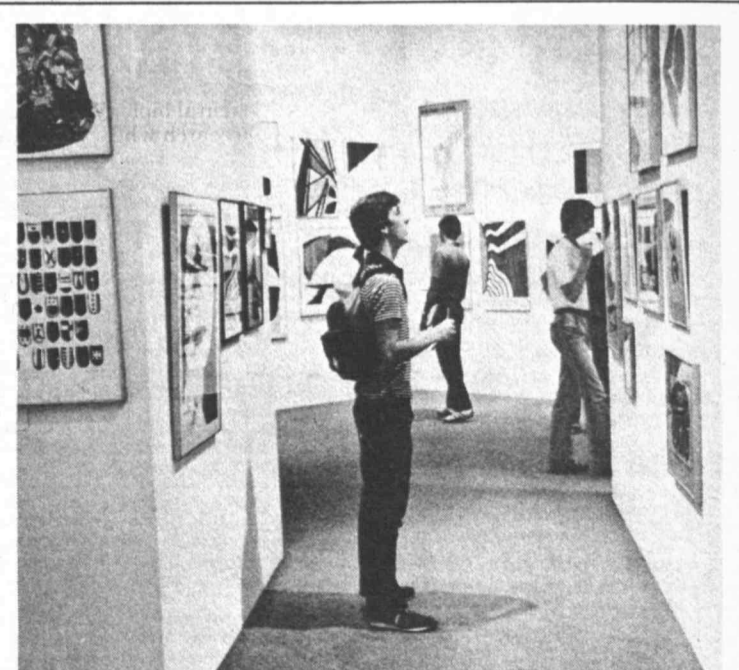
The program is designed to promote gradual weight loss and to encourage awareness of one's eating behaviors and ways they can be

changed to facilitate permanent weight control.

The sessions will be led by Connie Roberts and Debbie Nakasako, registered dieticians at Brigham and Women's Hospital.

The fee for the program is \$50 for students and members of the MIT Health Plan and \$70 for other members of the community.

For information and pre-registration for the introductory meeting on September 29, call the Health Information and Education Service at X3-1316.



Time is running short for students to sign up in Hayden Gallery for graphics from MIT's Student Art Loan Program. Picking out three favorites from the student art loan collections can be a tough decision. Students looking over the collection of more than 200 prints from the Catherine N. Stratton Collection of Graphic Art and the List Student Loan Program register their three choices of framed prints or posters by well known artists. The works will be distributed after a random drawing of sign-up cards on Friday, Sept. 18. The winners will keep one work of their choice in their rooms for the academic year.

—Photo by Calvin Campbell

CLASSIFIED ADS X3-3270

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Persons who have no extensions or who wish to list only home telephones may submit ads by coming in person to the Tech Talk office, Rm 5-113, and presenting Institute identification. Ads may be telephoned to X3-3270 or mailed to Rm 5-113. *Deadline is noon Friday before publication.*

For Sale

Moving sale: Sat, Sept 19, 9-4pm, 159 Palfrey St. Watertown; furniture, rugs, TV, stereo, curtains, misc items.

Inexpensive clothing, infants' clothing, K ware, linens, furniture, yard sale, 52 Maple Ave. Cambridge, 10am-4:30pm, Sat, Sept 19, Laura, X3-6752.

Single bed, wd w/ firm, comfortable mattress, \$60; lge, hand-crafted 4-drw chest, \$65; chr, \$8; desk, \$25; bedside tbl, \$10; lamp, \$9. Jonathan, X3-6309 days, 494-0117 eves.

Heataver for oil burner, heat controlled blower for 8" stack, used 1 yr, new \$200, selling \$100. Ed X7933, Lincoln or 658-4934.

Free! Maytag washing machine, motor probably nds replacement. Call 926-1792.

Single bed w/ wooden frame, coffee tbl, bkshelf, best offer. Call X3-6513.

Chrome & glass coffee tbl, \$35; comf, cushioned maple chr, \$25. Call 665-6236.

Radio controlled boat w/ 2 channel transmitters, \$250 or best offer. Howard X3-5239.

Loft: platform 6'H, 7 1/2' x 8'; 8' x 3 1/2' desk & 14' of shiva below; overall 8'x8'x8'. Primed, ready to paint in color of your choice, also, 24" 10 spd racing bike in disrepair. Best offer on ea. Lyle, X3-6850.

Queen sz firm mattress in exc cond, lightweight, \$45. Elaine X3-6239.

4 tires Delta, S78-14 on GM rims, virtually new, \$100; batt, 12 mo old, on 48 mo warranty. Angelo X8-2535, Draper.

VW Bug rear bumper, new, in orig wrapping, \$20; 1/4" elec drill, 1-sp, \$10. Stuart X5-6645, Dorm.

Singer Zig-Zag sewing mach, new, nvr used, mdl #368, \$75; 2 bl Tiltall tripods, new cond, \$50/ea; 4x5 Polaroid back mdl #545, new cond, used twice, \$75. Gisela, X3-7432.

16 mm cartridge rotary carousel storage stand, holds 480 reels. Call X3-1844.

Cleveland trombone, exc cond, used 3 mo, \$250 or best offer. Call 328-4420 after 6pm.

Eight pc DR set, vy gd cond, must sell, \$275. Joyce, X3-5052.

Frye boots, laced & pr casual shoes, sz 8 1/2, barely used, \$45/both. Eileen, X3-7505.

'79 15' Boston Whaler harpoon day sailer, exc cond, w/ trailer, \$3,300, negot. Call 864-2372, 6-9pm.

Airline ticket to Chicago, \$100; Seattle, \$150; gd 'til Nov. Mike X5-9730, Dorm.

Delco AM car radio, \$20 or best offer. Tom X5-420, Lincoln.

14' fiberglass outboard, comp equipped w/ 40 hp Evinrude motor & Holsaclaw trailer, \$1,000. George, 395-8186.

Oriental rug, 12x8; 2 fancy big chrs; playpen; full sz mattress & other small items. Call X3-6726 or 566-1593.

Man's 3-spd bike, mech sound, gd transp, \$15. Tony, 267-4958.

Must sell: nw CB radio, sharp 40 channels, \$50; buck knife, folding hunter, \$22; Schwinn varsity bike, 10-spd, 25 1/2" frame, \$110; bio feedback device, \$10; Coleman, 1 burner camp stove, \$10. Mark, X3-2621 or 489-3358 after 5pm.

'74 Mercury Cougar, \$1,300; sm desk, chr & bkshelves, \$15; crib, \$20; RCA color TV, \$175; b&w TV, \$50; elec fan, \$30; dinette set & chrs, \$90; baby car seat, \$15. Call 739-1642.

Trailer hitch for '74-76 Ford Pinto, Granada, Comet, Maverick, pass. or sw., like new in orig box w/ instructions, \$25; Pioneer GX4040 stereo radio & TS-100 door spkrs, like new, \$75. David, X3-3905.

Teak Scandinavian D tbl & 4 chrs, \$350; 6'x4' pine bkcase, \$30; 3'x3' walnut bkcase, \$12; 4 drwr dresser, \$40; 4 drwr filing cabinet, \$15. Call 924-6859 or 354-1140.

Screenhse, Sears largest, vy gd cond, \$175; 2 sturdy matching padded tub chrs, w/ht vinyl, \$50/pr; 6' heavy redwd picnic set, 5 pcs, tbl, 26' benches, 2 end seats, vy gd cond, \$100; 4 drwr steel file cab, \$25. Call 449-1352.

Dbl-bed, exc cond, incl frame, \$50. Anne X3-2195 or 494-0944 eves.

Pr poly glass mnted snow tires, H78-14, gd cond, \$60; 1 nw G78-14 mnted, recap tire, \$25. Linda 749-0892.

Cello 3/4 size, gd playing cond, incl bow & canvas case, \$350. Call X3-2916.

Two almost nw Delta XP78 4 ply tires, G78-14 mtd on Chev rims, \$30 pr or \$20/ea. Gordon, X3-3491.

Banjo w/case, exc cond, \$60. Alan X7483, Lincoln or 358-7615.

One mo. old superfirm Simmons Beautyrest, queen sz, mattress & springs, \$550; dark brown cotton velvet queen sz sleep sofa, \$400; 9'x12' bound rug, color seafoam, \$125. Larry, X5-889, Lincoln or 367-0213.

Cello, student model w/ bow & felt-lined canvas case, \$550. Frank X8-1476, Draper or 275-6632.

Westinghse port dsh wahr, like new, \$175; 4 upper K cabinets, best offer; K exhaust hood w/ fan, \$25. Manuel X3-7610 or 648-4467.

BIC 960 turntbl, minus cartridge, \$35. Paul, X3-6908.

Japanese made 10-spd M bike, nds some front work, \$65. Michael, X3-5536.

Frigidaire refrig, FD-13T-62, \$75; GE washing mach, nds maintenance, free. Phil X3-2944, X3-7452 or 328-7884 eves.

Bookcase, 41"x47"x11 1/2", four shlvs, \$25; bureau, 41"x34"x18", three drwrs, \$35. Pam, 938-0345 or 547-4038 eves.

System for immediate sale, Technics SB6000A spkrs 100 W, Onkyo SA6 amplifier 60w/ch, Gerard turntbl GT 25, \$550. Zahir, X5-8984 or X5-8747, Dorm.

Navy blue down parka, 2 yrs old, gd cond, Trailways Berkeley, \$60. M lg size. Anne, 782-7865 Wed or Thurs, 7-11pm.

Mod Danish DR set w/ 4 chrs; full sz bed w/ bkcase hdbd; 2 mirrors suitable for dressers; black & pink wrought iron K set w/ 4 chrs. Best offer. Tony X7657, Lincoln.

Wilson tennis racket, 4 1/2", wood, gut strings, metal press & cover, \$18. Call 472-1347.

Med. light touring 10-spd 23" Raleigh "Phillips" frame, gd components, exc cond, \$180 firm. Dan, 247-8691 eves.

Elec dryer, hardly used \$110; new 20" Puritron SS range hood, still in box, \$30; K set, wood tone formica top w/ leaf & 4 chrs. Call X3-7239 or 893-3373.

Martin mdl 0-18 guitar (1963), w/ hardshell case, \$550. Julie, X3-6155 or 491-7232.

Stereo phono AM/FM, works well, tubes, \$15. Harry, X3-1637.

JVC A-X4 intergrated amplifier 60 w/ch \$225; Luxman PD-264 turntbl, \$125; ADS L810 II (latest version) spkrs, \$600/pr. Boon, X3-7274 or 494-8641 eves.

Pure wool Mohawk rug, dusty rose beige, 23'x12', formerly w w for 2 rms, fair cond, pad incl, orig \$750, make offer, white Corning ceramic cook top, 4-units, under 2 yrs, orig \$420, best offer. Call 965-3895 before 8pm or X8-3549, Draper.

TI 1200 hand calculator, \$10; 12" b&w port TV, \$50; various area rugs, \$3-\$5. Lee, X3-7727, wklys.

Magnavox mahog console AM/FM stereo & record player, \$50; Ariens lawn-vac attachment, fits most power units, \$75. Call 862-5904.

Moving sale, sm OA welding tanks & carrier, \$75; brass & glass fire screen, \$70; elec hedge trimmer, \$20; u-drive-it wood splitter, \$20. Hank, X3-2237.

Selmer saxophone. Call 332-7152 after 6pm.

Color TV 20" RCA Admiral vy gd cond, \$175; '74 Malibu Classic 4 dr, p, b, a, auto, a, c, \$1,000. Call X3-1823 or 497-1273 eves.

Baby Snuggli, hardly used, also live pine trees, up to 6' tall, you dig them up, \$.50 ft. Haj or Elke, X3-3228 or 1-386-2488.

Musicians, Fender Rhodes Stage 73 elec piano, \$675; amp Yamaha G100-212 (100 w, 2 12" spkrs), \$350; amp Yamaha G50-112 (50 w, 1 12" spkr), \$225. All in superb cond. Matt, 492-0468.

Seven jalousie windows, 42"x57", best offer. Coldspot refrig, old but runs well, best offer. Jack, X8-1636, Draper.

Karman rug 8x10, \$2,300; Chinese rug, 8x10, \$1,200, both 25 yrs old, very gd cond. Debbie, X3-6047.

Deluxe ed scrabble, crossword game, exc cond, \$17 or best offer. Beverly, X5-7262, Dorm.

Twin sz mattress 6" foam, new \$40. Rolf, X5-9735, Dorm.

HP41 CV calculator & card reader, 4 application packs, 2 solution books, collection of programs, \$300. Oldrich, X8-3578, Draper.

Household items: 14 cu ft Sears Coldspot refrig, \$150 negot; Tappan gas range, \$100; Sears gas space heater, \$100; vac cleaner, desk chr, 23" b&w console TV, 2 wood chrs, more. Claudio, X3-6005 days.

Toaster \$5; sq plastic tbl, \$2; full length mirror, \$3; airplane clothes bag, \$5; wdn jewelry box, \$4; r tape recorder, new \$140, used \$35; large suitcase, \$7; plant pole, \$2; rubber tree, \$6; 4 plant cacti, \$12; 2 ft orange tree, \$4. Joan, X3-6894 until 6pm or 628-6011 eves.

Green unbound rugs, new, 7x10, & 4x6, \$20 & \$12; 6 hse dra w hardware, 30"x65" \$5 ea; 1 w/ht wood cabinet 18x41"x27", \$35; 2 wall lamps, \$10 ea; Enc. Brit yearbks 1939-61, \$2.50 ea; Nat. Geographics '70-'73, \$50 ea. Call X3-6085.

Two Schwinn intermediate sz children's bikes, look gd, work perfectly; 5-spd Stingray fastback, 15" frame & 20" wheels, \$25; 10-spd w carrier, 18" frame & 24" wheels, \$50. Hal, X3-29, Lincoln.

Two bureaus, solid wd, 1 blue w/ht \$40 nds refinishing; 1 rose w/ht exc cond w mirror, \$85; dbl bed complete, w/ht vinyl hdbd, mahog footbrd, \$85. Call X3-1316.

Pr poly glass mnted snow tires, H78-14, gd cond, \$60; 1 nw G78-14 mnted, recap tire, \$25. Linda 749-0892.

Cello 3/4 size, gd playing cond, incl bow & canvas case, \$350. Call X3-2916.

'64 Chevelle, 4-dr, 6 cyl, standard, hi-mi, car, gd engine, shabby body, new green sticker, \$150 or gd offer. Tom X8-1470, Draper.

'65 Olds big, rusty, worn, runs well, 13 mpg, \$175 or best offer. Ross, X3-5150 or 242-4334.

Five adorable kittens free to gd home. Donna, 643-3621.

'68 Olds Cutlass, 4-dr, V-8, 350 eng, p, a, p, b, green w blk interior, 80K, radials, AM FM stereo, 2 Jensen spkrs, (in Burlington, Mass.), \$700 or best offer. Joanne, X7705, Lincoln.

'68 Plymouth sta wgn, runs well, nw muffler & tail pipe, fall sticker, \$350. Jack, 861-0141.

'69 Plymouth Fury III, auto, a, c, p, a, p, b, nw carb, just tuned, \$450. Merle, 183-202, Bates.

'70 MGB, body in gd cond, runs well, \$1,800. Call X3-7364.

'70 Opel Kadett, Californian car, no rust, stick shift, 25 mpg, \$999 or best offer. Call 864-3230.

'70 Ford LTD convert, gd eng, gd tires, body fair, high miles, AM FM radio, asking \$495 or best offer. Bob X8-3032, Draper.

'71 Suzuki, T350, less than 3K on rebilt eng, new tires, \$295 or best offer. Call X8-3379, Draper.

'71 Impala, 89K, runs gd, every part new, no rust, \$650 firm. Ahmed, X3-7097 or 625-7793 eves.

'71 Mercury Comet, 6 cyl, 98K, gd cond, snow tires, nds minor work, asking \$550. Call 923-2194, 5-11pm or X8-1326, Draper.

'71 Toyota Corona, AM FM, gd running cond, some rust, minor dents, \$750 or best offer. Call X5-9670, Dorm or X3-6891, Ram.

'71 VW Bus, gd cond, rblt engine, new clutch, \$1,200. Bertrand, X3-5957.

'73 Chevy Caprice, 2 dr, hard top, 58K, neat & ctn, \$1,000 or best offer. Call X3-6194 or 662-6006 eves.

'74 Peugeot, "THE" Peugeot, 2-dr sedan, best cond, silvergray, light brown uphol, \$2,500. Erika, 646-5928 eves or X3-2342 days (daytime conversation on topic limited!).

'74 Audi 100-LS, 4-dr auto, a, c, 72K, \$1,700 or best offer. Kathy, 647-7344 or 492-0652 eves.

'75 Honda CB 360T motorcycle, under 3K, mint cond, \$900. Tony, X3-4156.

'75 Honda 550 cc, exc cond, sissy bar, 2 helmets, saddle bag, luggage rack, crash bars, many extras, \$1,600 or best offer. Tony, X3-2582.

'75 Pontiac Catalina, 4-dr, a, c, 60K, exc cond, \$2,000 or best offer; boy's 10-spd, blue Rampar, exc cond, 19", \$100. Call 489-3036 between 4-6pm.

'76 MG Midget, bright red convertible, new short block w guarantee, gd mi, exc cond, great fun car. Call 322-7777 eves or wkends.

'78 Subaru Brat, 4-w/ht drv, low mi, cap, AM FM stereo cassette w rear Jens spkrs, many more extras, top cond, \$3,500. Call 275-6238.

'79 Honda Civic, 4 spd, front w/ht drive, AM FM stereo cassette, rustproofing, 24K, mint cond, best offer over \$4,000. Harriet, X3-4239.

'79 Honda Twinstar motorcycle CMT 185 blue & red, 878 mi., \$850. John X7560, Lincoln.

'80 Fiat Brava 131, mint cond, a, c, 5-spd, 5K, 5 mo old, forced to sell, \$6,800. Call 227-2578.

'80 Renault Le Car, 14K, yellow, AM FM stereo, rear window defrost, tinted windows, \$4,200. Call 495-7145 or 491-2564 eves.

Housing

Arlington, 7 rm apt, furn, 4 BR, cab K w/ side by side fridge, self-cleaning oven, 1 1/2 B, gas ht & hot water, pking & garage, grad students pref, no pets, \$800/mo. George, 183-215, Bates.

Arlington Hts, home rental, Jan 1, '82-Aug 31, '82, 8 rm, furn, 1 1/2 B, garage, porch, backyard, fp, 15 min to Harv Sq, \$600/mo. Call 862-0356 or X3-5578.

Bedford Center, furn, antique colonial (1830) hse for rent, 3 BR, 2 1/2 B, 4 fp, fully insulated, families preferred, \$750/mo. Call 275-2707 eves.

Belmont, furn basement room, 10'x18", non-smoker, pking, very quiet, coffee privilege, \$43/wk. Call 484-6833.

Billerica, Wyman hilly area, embankment rack, brickfront, D, K, lge LR, FR, 3 BR, garage, beaut lge corner lot, high 70's. Joseph X5308, Lincoln or 275-1242.

Cambridge, large, quiet BR avail 3-5 days/week or 1 week/month, Brattle-Huron area, three-floor apt in Victorian house, use of apt, including kitchen, laundry privileges, ideal for commuting or visiting scholar or researcher, \$200-\$250/mo. Call X3-8067.

Medford, Wellington section, 7&7 duplex, exc cond, 1 1/2 B, 79,000 sq ft lot, nr schools & Orange Line, \$87,900. Bill, 332-3706 after 6pm or Jean X3-1611, 9-4.

Roommates

To shr 2 BR apt nr Tufts w/ one F & two cats; nr T, pking avail, \$230/mo plus heat, non-smoker pref. Trish, X3-8540.

F to shr hse in Randolph, lots of land, peaceful neighborhood, \$200/mo + util. Ann, X3-5155.

Rm in private home, non-smoking, quiet, considerate working person pref, \$250/mo incl util, security deposit & ref req. Call 296-8387 after 6pm.

Young couple wants rmmate to shr 3 BR hse, \$250 incl util. Joan X8-1811, Draper or 729-2328 eves.

Riders from Mass Ave, Arlington to MIT, 9-5pm. Sung, X3-5686.

Reserved vanpool seats avail, Framingham-Marlboro area, arrive MIT 8:30, depart 5pm. Charles Newbold, X3-3902 or 877-1018.

Animals

Will swap Albany sticker for East garage. Sally, X3-4579.

Mandolin lesson, all styles, music theory optional. Bob, 864-3830, 10am-4pm.

Will swap West garage sticker for Albany or East garage. Antoinette, X3-7145.

Weight loss study at Clinical Research Center. Women volunteers ages 20-30, 40-80 lbs overweight are sought. Live on campus at CRC but may work or study during the day. Call X3-3091.

Pianist & flutist seek string player to join amateur trio. Paul X3-4827 or 782-4449.

Wood lathe & tbl saw, also wood working hand tools. Call 729-6427.

Back seat, preferably black vinyl, to fit a '77 Chevette. Call X3-2424 or 354-4664 eves.

Parking space for storing car, prefer suburbs nr public trans. Peter X3-2631.

Beaut shepherd-collie mix, young, spayed, loving, \$40; black angora-persian, declawed, neutered, 2 yr, gorgeous cat, \$25; Cinderella, shepherd-greyhound, spayed, intelligent, unique beauty, exc home needed, \$60. Call 646-0181.

Lost: old silver brooch, Sept 9. Reward. Gisela, X3-2208.

Found: along Vassar St., Wed, Sept 9, blk & w/ht long-haired female cat. Call X3-7983.

Missing during academic Midway, Marine Corps poster, "The Strong Silent Team," at Dupont gym. Pls return to Gy Sgt. Sauer, X3-2990.

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Parking space for storing car, prefer suburbs nr public trans. Peter X3-2631.

Ride needed from Union Sq, Somerville to Wellesley, arriving before 10am, leaving after 5pm. Dan X3-5814.

Used computer paper & tab cards, stop throwing away valuable materials, contact me & help put a student through MIT. Kyle 492-8678.

Storm windows in reasonable cond, any size. Jim, X3-2180.

Extension ladder, home insulation, tall bookcases, lead letterpress type. Len, 623-7739.

String players needed in Arlington Philharmonic Orch. Wed, 7:30-9:30pm, Unitarian Church in Arlington Center (Bus Rte 77). Bring stand; BU Celebrity Series subscriber who can order tickets for 1 performance. Marilyn, X5724, Lincoln or 648-0969.

B&W drawings and sketches for fantasy art book, sword & sorcery theme, pays copies and royalties, all material submitted considered. Rich, X3-6857.

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cents and adults, as well as excellent organizational and interpersonal skills. The ability to work independently, but also as a member of an interdisciplinary team is essential. Applicants must have a BA or BS in recreational or occupational therapy or related field. Teaching certification preferred. R600

Technical Assistant (30 hrs/wk). Psychology, to work on a project on cognitive development in adolescence. Involves extensive testing of ten to sixteen year old children, plus coding and analysis of data. Candidates should have a BA, preferably in mathematics or scientific discipline. Some statistical experience also necessary, including experience with or willingness to learn computer data analysis techniques. Research experience, either with children or involving human experimental psychology, helpful (teaching does not constitute this form of experience). Candidates must also be licensed drivers. R598

Technical Assistant, Psychology, to train and care for Rhesus monkeys for various ongoing research experiments and to assist in data acquisition. Further responsibilities include assistance in surgery; pre- and postoperative care of experimental animals; supervision and maintenance of all laboratory equipment, supplies, and expenditures; making and testing of electrodes for use in laboratory experiments. BA or BS in biology or related field preferred. Experience with laboratory animals desirable, as well as familiarity with elementary electrodes, digital logic and/or computers. Candidates must be willing to learn new procedures as research advances. This individual will have to be flexible about working hours. R597

Technical Assistant, for molecular genetics laboratory of the Biology Dept. Will work in recombinant DNA technology; nucleic acid biochemistry; and yeast, bacterial and bacteriophage genetics. This individual will be responsible for maintenance of yeast strain collection, phage strain collection; preparation of solutions; the performance of various assigned experiments; and other related activities. Techniques used in this laboratory include hybridization methods, gel electrophoresis, and the use of radioactivity. Applicants should have 3 or more years related experience or a Master's degree. R594

Research Associate, Earth and Planetary Sciences, to work in theoretical geophysics. Will perform theoretical modelling of wave propagation; analysis of full waveform acoustic log data to determine in situ properties; theoretical modelling of laboratory observed physical properties of ocean sediments and sedimentary rocks; and interpretation and correlation between laboratory and in situ data. Candidates must have PhD in Geophysics, with at least 2 years postdoctoral experience in modelling full waveform acoustic logs as well as physical properties of porous rocks. R593

Technical Assistant, Biology, to investigate the biosynthetic and behavioral activities of cells grown in three-dimensional protein lattices. Will also study the morphological changes undergone by cells in the same milieu. Candidates should have BS or MS in Biology or related field, as well as experience in all preparatory techniques for electron microscopy and in the use of the scanning and transmission electron microscope. Experience with ultramicrotome, vacuum evaporation, metal coating techniques, reconstruction, and photomontage are also necessary. Background of candidates should total at least 3 to 5 years experience with cell culture techniques; handling and preparation of single cells or their sectioning. Training in cinematography desirable. R592

Exempt

Registered Nurse, Clinical Research Center, to be responsible for general and specialized nursing procedures and medications in this 12-bed well-patient research unit. Will take charge duties when necessary; work closely with laboratory and dietary departments; maintain complete and current information on patients' conditions and studies being performed; and work, generally, under the close supervision of the Head Nurse and Investigators. Position involves rotating to nights. Applicants must be graduates of an accredited nursing program and have their Massachusetts registration, along with a minimum of 2 years experience. Pediatric experience will be considered. Good interpersonal skills are important here. E088

Administrative Assistant, Center for Policy Alternatives, to perform administrative work in accounting, payroll, personnel project administration and purchasing. Will prepare staff payrolls and personnel forms; maintain personnel files; interview secretarial candidates; maintain contract/grant proposal files; prepare budget projections; inform project personnel on administrative procedures; oversee payment of invoices; handle petty cash; oversee requisition and purchase of furniture and needed equipment; as well as handle accounting for project funds. These activities will come under general direction of the Assistant to the Director. Requires the ability to work with every level of the MIT community; administration, academic staff and students. Attention to detail and good communication skills essential. Accounting or bookkeeping experience as well as knowledge of MIT helpful. E087

Facilities Inventory Auditor, Office of Facilities Management, to act as a central source of information about room function, intensity of use and physical configuration in all MIT facilities. Will update scaled floor plans in ink on mylar; provide liaison with faculty members and administrators; make decisions about room use; record field data for current configuration and future audit purposes; convey data in written form to Data Base Manager; do field audits for Space Committee and Comptroller's Office; assist in studies on space utilization; space assignment for 224 Albany St. Storage Facility; and report directly to Director of OFMS on regular basis. Candidates must have an Associate's degree or the equivalent, along with a thorough knowledge of buildings from a building services and occupant perspective. Drafting experience in ink on mylar drawings essential. This position demands smooth interpersonal skills. E085

Area Food Service Supervisor, Food Service, to manage food service area in preparation for and during meal times. Will check with Food Production for any changes in daily schedule; make certain all food and supplies as well as employees are ready to open for lunch and dinner meals; check all food items and report or correct any deficiencies; maintain constant flow of food and supplies during meal periods, occasionally checking for portion controls; make certain each area is cleaned after food has been stored; assist when needed at special functions; check all deliveries for designated area; set up daily schedule for cleaning of area; assist in daily inventories and orders; and answer any customer inquiries. E084

Library Support Staff

Library Assistant IV, to work under direction of Section Head, assuring access to all monographic materials ordered and received by Dewey Library. Will identify and resolve procedural problems; handle card catalog maintenance; coordinate collective staff efforts for filing and revising; assist with serials receipt and control procedures; be responsible for Technical Processing Section in absence of Section Head; schedule, monitor and review work of student assistants; assist at main reference desk according to prearranged schedule. Position involves extensive contact with other members of Library staff, users, and staff of the central Acquisitions and Catalogue Departments. Applicants should have a minimum of 2.5 years direct/related experience. Post high school education may count toward experience. Familiarity with current Library of Congress cataloging and filing procedures required. Accurate typing, organizational skills and ability to work with minimal direction important. NON-SMOKING OFFICE. B1337

Library Assistant III, Humanities Library, to process precatalogued, newly catalogued, and recatalogued materials, including reference materials. Will maintain outstanding files; investigate monograph claims; keep commitments and receipts statistics; prepare bindery and reclassification instructions for monographs; file and correct shelf list; maintain Browsey of new books; check MIT Library Catalogue and bibliographic tools for titles selected by librarians; type book orders; prepare gift acceptance forms; participate in Reference/Information Service one to two hours per day, answering inquiries. Applicants should have high school graduation or its equivalent, as well as 1 year direct/related experience. Accurate typing and attention to detail are essential. This individual will have to organize priorities and work independently at times. B1325

Secretary/Staff Assistant

Administrative Secretary, to the Director and Associate Director of the Ralph M. Parsons Laboratory in the Dept. of Civil Engineering. Will supervise operation of laboratory headquarters office, including typing, answering telephones, arranging appointments and travel, handling mail, ordering office supplies, and scheduling meetings. This individual will also provide liaison with faculty and students of the laboratory. Candidates should have a minimum of 4.5 years experience or an equivalent combination of education and experience, along with excellent organizational abilities and technical typing skills. Skill in composing letters also required. Experience with word processing or the willingness to learn essential. This position involves dealing with a steady flow of faculty and students. NON-SMOKING OFFICE. B1324

Sr. Secretary, to provide office support to the Regional Director of the Alumni Association. Will assist with support of southeastern alumni clubs, Alumni Fund, and other alumni relations activities; assist Regional Director with coordination and implementation of programs for and with alumni in the southeastern region. Will take dictation and type correspondence and general materials, at times on word processor; perform research from various records; prepare and coordinate printing and mailing pieces; file; arrange travel; coordinate meetings; interact by telephone and personally with alumni as well as MIT administration and faculty; perform other general office tasks, and assist with special projects as required. Applicants must have 2 to 3 years secretarial experience and excellent typing skills. Abilities to order priorities independently and to communicate smoothly with a variety of persons essential. NON-SMOKING OFFICE. B1344

Sr. Secretary (part-time), to work for 5 faculty members of the Department of Architecture. Will type correspondence, reports; answer phones; arrange travel; file in this single secretary office; and coordinate student programs with faculty members. Applicants must have excellent typing and organizational skills. B1341

Sr. Secretary, Technology Adaptation Program, to edit and type correspondence and reports for large overseas program. Will supervise the work of temporary assistants; investigate sources; place orders, and followup on equipment purchases for overseas office; arrange air and sea freight; assist with travel arrangements; set up courier mail service; send telex and telegram messages; distribute messages received; coordinate production, devise format, and maintain system for program publication series; assist with administration of conferences, seminars and committee meetings; set up and maintain program files; monitor telephones and perform various other secretarial services for staff members. Requires excellent typing and organizational skills. Candidates must have 2.5 years related experience or an equivalent combination of education and experience. The ability to order priorities and work under occasional pressure essential. Familiarity with technical terminology useful. B1336

Sr. Secretary (20 hrs/wk), to perform secretarial and minimal administrative duties for a guest of the Institute currently associated with the Systems Dynamics Group of the Sloan School of Management. Will type; perform dictaphone transcription; process bulk mailings; answer telephones; arrange travel; and handle correspondence. Requires excellent typing and dictaphone transcription skills. Knowledge of Digital WPS 8 word processing system or the willingness to learn crucial. This individual will be assisting with word directed toward worldwide nuclear disarmament. NON-SMOKING OFFICE. B1335

Sr. Secretary, Mechanical Engineering, to provide secretarial and administrative support for 1 faculty member. Duties will include preparing technical manuscripts and reports, updating mailing lists and distributing materials, answering telephone inquiries, handling correspondence, and preparing teaching materials. This individual will also have extensive contact with students and international companies funding research. Candidates must have 2 to 3 years experience or an equivalent combination of education and experience, along with excellent technical typing skills. The abilities to order priorities independently and to communicate smoothly with a variety of persons are also essential. Attention to accuracy of detail important. Position involves working under occasional pressure. B1334

Sr. Secretary, Provost's Office, to provide secretarial support for a senior faculty member who is heavily involved with both Institute activities and federal level advisory work. The office environment is informal and the work varied. In addition to standard office responsibilities, this individual will make travel arrangements and organize meetings. Two to three years of experience are required, along with

good typing, shorthand or speedwriting and a command of English grammar. Candidates must also be able to communicate smoothly and handle telephone inquiries. Knowledge of MIT useful. This individual will work in Bldg. E40. B1317

Sr. Staff Assistant, Research Laboratory of Electronics, to be responsible for secretarial functions in aid of faculty members and researchers. In addition to customary secretarial duties, position will include typing of research proposals, technical reports, and class notes. Technical typing ability required. Should also have 2.5 years direct/related experience or the equivalent combination of education and experience. B1316

Sr. Secretary (part-time), Civil Engineering, to perform secretarial duties for 3 faculty members and graduate students in their research groups. Will type technical reports, manuscripts, correspondence, statistical tables and charts from handwritten texts; schedule travel; file; schedule meetings; answer telephones; and help monitor monthly expenditures on research accounts. A minimum of 2.5 years experience or an equivalent combination of education and experience are necessary, along with excellent typing skills and the ability to work independently. B1304

Receptionist/Secretary, Ocean Engineering, to perform general secretarial duties. Will type and proofread reports, correspondence and similar materials; answer telephones and receive visitors; provide routine information and refer callers to appropriate persons; sort and distribute mail; prepare various institute forms; order and maintain inventory of office supplies; maintain files and records for office; and monitor monthly accounting statements. Requires high school graduation or the equivalent, along with at least a year of direct or related experience. B1349

Secretary, to provide office support in the Office of the Director of the Plasma Fusion Center. Will receive, screen and assist visitors and phone callers; arrange seminars and special functions; schedule use of rooms; update PFC telephone directory, general mailing lists; coordinate Mail Center operation; coordinate personnel related matters; assist with filing, photocopying, and typing of correspondence and manuscripts. Candidates must have a year's front office experience, along with excellent typing and organizational skills, and a command of English grammar. Good interpersonal skills are called for, as this individual will have contact with a variety of persons in this busy office. B1340

Receptionist/Secretary, Lab. for Nuclear Security, for the Bates Linear Accelerator in Middleton, MA. Will receive visitors; type memos, letters, travel vouchers, and technical reports; attend to switchboard and internal paging system; respond to Emergency status Board and to Fire and Accident alarms; keep records of computer reservation, computer terminals, property loans, etc.; file purchase requisitions, library accessions and correspondence; and, as receptionist, serve coffee and refreshments at meetings. Candidates must be able to function effectively in emergency situations. The ability to communicate well with a variety of others in an isolated work situation is essential. B1331

Staff Assistant, Center for Policy Alternatives, to provide office support to the Assistant Director. Will work with research staff on projects related to environmental/occupational health policy. Will arrange travel; handle correspondence; organize proposals; monitor project accounts; prepare course materials, publications and Congressional testimony; communicate with students, faculty and governmental agencies. A minimum of 2 to 3 years experience or an equivalent combination of education and experience are required. Excellent typing skills essential, along with shorthand or speedwriting. This individual will have to organize and set priorities independently at times. Word processing skills desirable. R1326

Secretary (part-time), Dept. of Civil Engineering, to provide secretarial support for 2 professors. Duties will include handling a filing system, typing correspondence, and keeping track of editorial activities of a scientific journal. Requires technical typing skills, plus experience with word processing or the willingness to be trained. B1323

Secretary, Energy Lab, to provide office support in the Sloan Automotive Engine Laboratory. Will organize and type class notes; prepare presentation materials; reports and proposals from machine dictation and handwritten drafts; perform library searches; as well as interact a good deal with faculty, students and staff. A minimum of a year's direct or related experience required, along with excellent typing skills. Applicants should have experience in or the willingness to learn technical typing and word processing. The ability to work under occasional pressure essential. B1321

Technical Support Staff

Technical Assistant (part-time), to perform experimental work with animals in the Toxicology Laboratory of Nutrition and Food Science. Will maintain experimental mouse colony including breeding and weaning; update all animal weight records and other experimental data; perform autopsies and record gross pathology observations; assist senior investigators as required; perform general laboratory duties, including preparation of solutions, scintillation counter sample workup, and various other experimental analyses. Requires a knowledge of gross anatomy in mice and rats, and a basic knowledge of chemistry. B1315

Technical Assistant, Office of President, to assist Manager of Computer Center at the Umama Harbor School of Science and Technology in Boston. Will assist in maintaining entire computer system (PDP-11-34; Apple II plus); monitor computer lab during all periods; assist Manager, students and teachers in protective maintenance of hardware and software; keep lab ready for use by students and teachers; assist in efficient use of computer resources; operate computer and write programs; prepare data and keep school records up-to-date; cooperate with MIT staff and students in developing computer curricula; handle administrative aspects of computer usage. Candidates should have familiarity with BASIC computer language. B1328

Office Assistant

Sr. Office Assistant, Resource Development, to work in the Development Office, handling the responsibilities of an Assistant Analyst. Will provide varied information to senior officers and others at MIT for fund raising purposes; clear companies to person or program for approach for funding purposes; head up correspondence for posting; assist Analyst with writ-

ten and telephone requests; prepare data for prospect control system. The position requires good typing, filing and organizational skills, as well as the ability to interact well with many persons. Also involves, at times, working to meet deadlines. Advancement likely. NON-SMOKING OFFICE. B1346

Sr. Office Assistant, Resource Development, to work in the Development Office, preparing backup material for solicitation visits by senior officers of MIT and others. Will answer telephone requests for information; read magazine articles; evaluate information for future use; update committee memberships on individuals; limit posting of pertinent information from correspondence onto workcard; and prepare data for prospect control system. Candidates should have excellent typing skills and strong organizational abilities, along with the capacity to work under pressure to meet deadlines. Since this individual will be answering inquiries over the phone, good interpersonal skills are important. Advancement likely. NON-SMOKING OFFICE. B1345

Sr. Office Assistant, MIT Press, to be responsible primarily for bookkeeping activities. Will maintain records of all billings, paper inventory, books into warehouse; will expedite all invoices through central accounting and prepare monthly report of all bills passed through department. Secretarial duties include answering telephones, filing, office record-keeping, as well as some typing and ordering of supplies. Requires good basic bookkeeping and typing skills, along with some familiarity with book production and manufacturing. Candidates must be able to work under pressure and to communicate smoothly with a variety of co-workers. Attention to detail is essential. B1333

Sr. Office Assistant, Bursar's Office, to assist the Account Representative in servicing student financial requirements. Will aid students; answer questions; provide forms; answer telephones; type correspondence; participate in review of accounts and statements; file; process check requests and maintain check vouchers; update Financial Adjustment sheets by logging petty cash disbursements; cancel late registration fines; distribute Guaranteed Student Loan Checks; receive and receipt fee payments; maintain records on parent billing; and perform other related tasks as required. Candidates must have good typing and communications skills, as well as the capacity to work in a very busy office, occasionally under pressure. B1319

Editorial Assistant/Production Assistant, Center for Advanced Engineering Study, for the Self-Study Video Course Program. Responsibilities include set-up, typing, proofreading and correcting of complex technical material. Also includes layout and pasteup of camera-ready copy; consultation with and correspondence with authors, and some secretarial/clerical duties. Position requires strong verbal and written skills; familiarity with preparation of complex technical material (mathematical symbols, Greek alphabet), good organizational and interpersonal skills, and willingness to learn and utilize new skills. Requires 65 wpm typing; Bachelor's degree or equivalent combination of education and experience. B1137

Office Assistant, Information Processing Services, to file; mail monthly accounting statements; enter accounting data into console; assist users with account status questions at counter and over telephone; maintain office log books; and type reports and forms. Position demands typing and good interpersonal skills. B1338

Service Staff

Evening and Night Custodians/Night Polishers, Physical Plant, must be able to speak, write and understand the English language. Variety of shifts, regular and irregular schedules.

Bar Busperson, Faculty Club, to bus glassware throughout the Club, operate glasswashing machine, and store clean glassware. Will assist with set-up and breakdown of private function bars; restock front bar, party bars; assist with liquor service when necessary; remove trash nightly, and be fully responsible for sanitation and cleaning in bar service area and lounge area. Applicants must be at least 18 years of age and able to speak, read and write English. H527

Heat and Vent Mechanic, Physical Plant, to work irregular shift. Applicants should have broad range of experience in building and maintaining heating, ventilating and air-conditioning (HVAC) operations. Specific experience is required in the operation of steam heating systems, HVAC controls, boilers, water treatment, and refrigeration systems, with hands on experience in the repair, replacement, and adjustment of their operating components. High school graduation plus 5 years experience in the operation and maintenance of building HVAC systems. Formal training in mechanical operations and maintenance may be considered as a substitute for a portion of the experience requirements. H524

Audio-Visual Operator "C", Graphic Arts Service, to set up, operate and maintain all types of slide and motion picture equipment such as projectors, rewinders, splicing machines, etc. Will clean, inspect, and repair slides and films; maintain department records of all equipment and films; drive motor vehicle to deliver and pick up material and equipment. Will perform other related duties as assigned. Applicants should have high school graduation or its equivalent, along with a minimum of 1 to 2 years applicable experience. Commercial driving experience is also necessary, as well as a Massachusetts driver's license. This position will involve occasional overtime and weekend work. H500

Technician C, Haystack Observatory, to perform various routine jobs of skilled or semi-skilled nature, such as mechanical assembly and wiring, keeping apparatus in good condition, and performing calibration tests and analysis. This individual will be primarily involved in routine maintenance, and the operation and modification of a high power radar digital computer interface system, under the direction of engineering personnel. Requires familiarity with digital construction techniques such as wire-wrap and p.c. boards. Working knowledge of shop tools for mechanical assembly is also essential. Position involves climbing antenna towers by protected ladders and steps, as well as working unusual hours during periods of system trouble or priority modifications. H488

Plumber, Physical Plant, to maintain complete plumbing systems, including air, gas and vacuum systems. Requires ability to work from blueprints, specifications, verbal instructions or sketches. A minimum of 5 years applicable experience as well as a Mass. State License are also necessary. This individual must be available to work irregular schedules as determined by the needs of the Pipe Shop. H499

Metal Worker, needed to work in Physical Plant. Requires a minimum of 5 years trade

experience in fabricating and installing metal work from plans and specifications, and the ability to read prints, in order to do layout work for shops and departments. Applicants must be certified welders and have experience in all phases of metal work and operating metal working shop equipment. Sheet metal and glazing experience desirable; work on metal sash and casements helpful. This individual will have to work effectively on ladder and scaffolding, and may be called upon to work irregular shifts. H498

Sr. Technician (Electromechanical), Plasma Fusion Center, to instruct, under the direction of supervisor, more junior technicians and students, providing understanding of and skills for assembly/construction, rework/modification, bench testing, and maintenance of high energy particle beam source equipment by interacting with scientists. Requires graduation from a 2 year technical school or the equivalent, and a minimum of 5 years applicable experience. Acquaintance with the technologies of demountable high vacuum systems and aseptic mechanical assembly is necessary, along with direct experience in ion source construction; electron gun construction; power vacuum tube construction; or operation/servicing of commercially available scientific instruments incorporating particle optics. H486

Technician A (Mechanical), Laboratory for Nuclear Science, to assist in laboratory, research or analytical work, under the direction of scientific personnel. Will operate highly technical experimental apparatus. Applicants should have experience with vacuum pumps, ion pumps, turbo molecular pumps, and mass spectrometer leak detection, welding, brazing and soldering, plumbing and piping techniques and associated hardware, hydro-pneumatic pumping systems including water pumps, compressors, and refrigeration units, rigging techniques. Candidates should have completed a program at a two year technical school or its equivalent, and have a minimum of 2 years relevant experience. H480

Shop Helper B, Nuclear Reactor Laboratory, to assist in the general maintenance work and material handling at the Reactor. This individual will be required, under supervision, to operate and maintain tools and laboratory equipment. Will assist in cleaning and maintaining various laboratories and areas; perform miscellaneous work for the shops and laboratories which may not require the services of a machinist, instrument maker technician or other highly skilled employee. Applicants must be at least 18 years of age and skilled in the use of hand tools. Position involves frequent handling of radioactive materials and therefore strict adherence to radiation protection procedures. H479

Technician A (Electronic), Plasma Fusion Center, to assist, under the direction of a supervisor, in the construction and testing of electronics for high power radio frequency equipment and high voltage pulse generators. Will also work in the RF Shop ordering supplies and maintaining stock. Requires graduation from a 2 year technical school, and a minimum of 2 years applicable experience. Acquaintance with high voltage and RF work will also be necessary. Experience with high frequency transmitters, microwave equipment, or high voltage pulse power supplies highly desirable. H476

Sr. Technician (Electronic), Plasma Fusion Center, to instruct, under the direction of supervisor, junior technicians and students, providing the theoretical understanding and skills required for the construction and testing of electronics for high power radio frequency equipment and high voltage pulse generators. Will also help organize the RF Shop, order supplies and maintain stock. Requires graduation from a 2 year technical school or the equivalent, and a minimum of 5 years applicable experience. Candidates should have demonstrated skills in high voltage and RF work. Experience with high frequency transmitters, microwave equipment or high voltage pulse power supplies highly desirable. The capacity to work independently important. H475

Sr. Technician (Electronic), Plasma Fusion Center, to instruct, under the direction of supervisor, junior technicians and students, providing the theoretical understanding and skills required for the construction, testing and maintenance of megawatt-level power supplies for a high energy particle beam source. These supplies include 12 pulse rectifiers, high current solid state regulators, and high voltage pulse-forming networks. Requires graduation from a 2 year technical school or the equivalent, and a minimum of 5 years applicable experience. Applicants must also have demonstrated skills in working with high voltage, high power supplies, along with a readiness to work with minimal supervision. H474

Technician A (electronic), to assist, under the direction of a supervisor, in the construction, testing and maintenance of megawatt-level power supplies for a high energy particle beam source. These supplies include 12 pulse rectifiers, high current solid state regulators, and high voltage pulse forming networks. Requires graduation from a 2 year technical school or the equivalent, plus at least 2 years of related experience. Applicants should also have some knowledge of high voltage, high power supplies. H473

ADMINISTRATIVE STAFF:
A159, Systems Programmer, Information Processing Services
A158, Systems Programmer, Information Processing Services
A157, Purchasing Agent, Purchasing and Stores
A156, Applications Programmer, Office of Facilities Mgmt.
A155, Administrator, Medical
C047, Administrative Assistant, Nuclear-Engineering
A153, Staff Accountant, Comptroller's Accounting Office
A152, Staff Accountant, Comptroller's Accounting Office
A151, Programmer Analyst, Information Processing Services Operation
A149, Programmer Analyst, Information Processing Services Operation
A148; A150, Industrial Liaison Officer, Industrial Liaison Program
C043, Postdoctoral Associate, Nutrition & Food Science
C045, Business Services Officer, Libraries
C044, Assistant Director for Public Services, Libraries
A144, Operations Manager, Medical
A140, Systems Programmer, Information Processing Services
A137, Applications Coordinator, Office of Facilities Management Systems
A136, Manager of Information Systems, Medical
A135, Applications Programmer, Information Processing Services Operation
A134, Systems Analyst II, Administrative Computing Services

Faculty officers discuss graduation date

(continued from page 1)

Assistant to the President, met on August 14 with Rabbi Shevitz to see what might be done. On August 20 the Commencement Committee met, deliberated, and concluded not to request reconsideration of the May 28 date. This position was reported to the Chairman of the Faculty. The Commencement Committee was persuaded to hold a further meeting in which students directly affected would have a chance to state their concerns. This hearing took place on September 8, with the Chairman of the Faculty present by invitation. After three hours of deliberation, a motion was introduced to propose moving the date to Tuesday, June 1; this motion was defeated, but by a narrow margin.

The CEP, at its regular meeting on September 10, took cognizance of these developments. The conclusion emerged that given the time constraints, and the seriousness of the issues raised, the question should be placed on the agenda of the September Faculty Meeting.

Blue Cross visit

Marianne Ferguson of Blue Cross-Blue Shield will be at MIT Wednesday, Sept. 30, 12-2pm to confer with employees who have questions about their BC-BS Master Medical Plan. Retired employees covered by BC-BS Medex III are also welcome to visit. Meetings will take place in the Benefits Office Conference Room (E19-434). Call Leslie Patton, x3-4271, to make an appointment.

C041, Postdoctoral Associate, Plasma Fusion Center
C040, Records Management Officer, Libraries
A126, Assistant Director, MIT Associates Program
A119, Sr. Systems Analyst, Information Processing Services
A087, Systems Analyst II, Administrative Computing Services
A084, Administrative Staff, Area Coordinator/Systems Analyst, Administrative Computing Services
C034, Postdoctoral Associate, Biology
C029, Academic Staff, Radiation Protection Officer, Medical
A082, Administrative Staff, Systems Analyst, Information Processing Services
A004, Administrative Staff, Sr. Systems Programmer, Information Processing Services Operation

RESEARCH STAFF:

R588, Research Associate, Earth & Planetary Sciences
R586, Systems Programmer, Laboratory for Nuclear Science
R582, Technical Assistant, Psychology
R580, Sponsored Research Staff, Energy Laboratory
R579, Economist/Policy Analyst, Energy Laboratory
R581, Engineer, Ocean Engineering
R577, Technical Assistant, Biology
R576, Magnetic Separation Engineer, National Magnet Laboratory
R575, Sr. Magnet Design Engineer, National Magnet Laboratory
R568, Technical Assistant, Biology
R566, R567, Research Scientist, Experimental, Plasma Fusion Center
R565, Sponsored Research Staff, Physics
R563, Research Scientist, Center for Space Research
R559, Technical Assistant, Biology
R558, Research Scientist, Artificial Intelligence Laboratory
R557, Research Specialist, Artificial Intelligence Laboratory
R556, Research Specialist, Artificial Intelligence Laboratory
R555, Research Specialist, Artificial Intelligence Laboratory
R554, Research Scientist, Haystack Observatory
R551, Technical Assistant, Biology
R541, Electronics Engineer, Haystack Observatory
R539, Research Associate, Earth & Planetary Sciences
R520, Electrical Engineer, Plasma Fusion Center
R518, Research Staff, Mechanical Engineering
R512, Control Systems/Diagnostics Engineer, Plasma Fusion Center
R511, Power Electronics Engineer, Plasma Fusion Center
R504, Sponsored Research Staff, Laboratory for Nuclear Science
R500, Research Scientist-Computational/Theoretical, Plasma Fusion Center
R488, Postdoctoral Physicist, National Magnet Laboratory
R485, Research Engineer, Plasma Fusion Center
R475, Assistant Director, Aeronautics & Engineering
R469, Technical Assistant, Chemistry
R455, Theoretical/Computational Research Scientist, Plasma Fusion Center
R442, Principal Research Scientist, Mechanical Engineering
R434, Systems Programmer, Lab. for Computer Science
R429, Systems Programmer/Analyst, Plasma Fusion Center
R422, Research Scientist-Experimental, Plasma Fusion Center
R412, Research Scientist, Research Lab. of Electronics
R409, Theorist/Designer, Plasma Fusion Center
R401, Staff Scientist, National Magnet Lab.
R397, Biomedical Engineer, Dept. of Mechanical Engineering
R396, Research Associate, Aeronautics & Astronautics
R390, Sponsored Research Staff, NMR Spectroscopist
R387, Sponsored Research Staff, Group Leader, Plasma Fusion Center
R384, Plasma Physics Experimentalist, Plasma Fusion Center
R383, Postdoctoral Associate, Lab. for Nuclear Science
R376, Research Engineer, Energy Lab.
R289, Electro-mechanical applied physicist, National Magnet Lab.

It is evident that the issue, at least as far as the 1982 date is concerned, demands speedy resolution. This resolution need not prejudice any future action the Faculty may want to take to resolve similar issues in the long range. It is in this spirit that the Officers of the Faculty introduce the following motion:

It is moved that Faculty Regulation 2.11 be temporarily amended for the purpose of setting the date for the 1982 Graduation Exercises as May 28, 1982.

The issues have been debated in and out of committee at some length, and arguments for and against the May 28 date, and for and against other conceivable dates such as Thursday, May 27, or Tuesday, June 1, have been made. Both Thursday, May 27, and Tuesday, June 1, present some logistical problems:

a) The Thursday, May 27 date does not give the Registrar and the CAP sufficient time to complete the degree lists. Final exam period is Monday, May 17, to Thursday, May 20, and cannot be advanced by one day. Thus, May 27

is excluded.

b) Tuesday, June 1, is technically feasible, at some cost: The site of the ceremony in Kilian Court would have to be set up on Friday and police coverage assured for three days. Unforeseen logistical problems could not be rectified unless extra Physical Plant staff and outside vendors were retained over the holiday. Tuesday, June 1, thus remains a technically feasible alternative date.

Arguments for and against the May 28 date have raised issues of principle, such as:

a) Those who favor retaining the May 28 date note that it has been printed in and distributed with the Institute catalogue. A change from this date will upset plans already made and may prevent a number of students from attending Commencement. There is concern that a change of date at this point will be construed as an action taken by MIT for reasons inconsistent with the Institute's position as a secular institution. It is also feared that such an action will constitute a precedent that would encourage requests by other

groups, with a divisive effect on the MIT community.

b) Proponents of a change of date have maintained that a move to Tuesday, June 1, would represent a belated recognition of a just request that religious observance by a group of students not be allowed to preclude their full participation in MIT graduation exercises. Commencement is not an event that can be made up by those who miss it. This argument is viewed to outweigh the expense and confusion generated, and the inconvenience that may be imposed on unspecified numbers of other people, by a change of date.

We believe that the question of settling the 1982 Commencement date will not be resolved without generating unease or frustration in some segments of the MIT community, and we deeply regret that this cannot be avoided. It may well be that the Faculty would want to address at a later meeting the question of a long-range solution that would prevent recurrence of similar problems.

With regard to the immediate problem at hand, the Officers of the Faculty consider adherence to the set May 28 date as the wiser course of action, on balance, and offer the proposed motion in that spirit.

NDSL Notice

Students who have received National Direct Student Loans are urged to go to the Bursar's Office-Student Loans, Rm E19-225, to sign their loan notes before October 1. Loans signed by September 30 carry a four per cent interest rate. Beginning October 1, the rate will go up to five per cent.

R284, Research Associate, Materials Processing Center
R241, Technical Associate, Biology
R222, Programmer/Analyst, Mechanical Engineering
R200, Postdoctoral Associate, Lab. for Nuclear Science
R169, Postdoctoral Research Associate, Physics
R137, Research Associate, Materials Science & Engineering
R128, Postdoctoral Associate, Lab. for Nuclear Science
R093, Research Associate, Sloan School of Management
R086, Research Metallurgist or Materials Scientist, National Magnet Lab.
R069, Design Engineer—Superconducting Magnets, Plasma Fusion Center
R039, Sponsored Research Staff, Mechanical Engineering
R023, Postdoctoral Associate, Lab. for Nuclear Science
R006, Research Scientist—Experimental, Plasma Fusion Center

EXEMPT

E083, Administrative Assistant, Nutrition & Food Science
E071, Registered Nurse, Clinical Research Center
E059, Registered Nurse, Clinical Research Center

LIBRARY SUPPORT STAFF

B1307, Library Assistant V, Science Library
B1300, Library Assistant III, Humanities
B1259, Library Assistant IV, Laboratory for Computer Science

SECRETARY/STAFF ASSISTANT

B1293, Administrative Secretary, Mathematics
B1257, Administrative Secretary, Office of the President
B1313, Sr. Secretary, Humanities
B1312, Sr. Secretary, Sloan School
B1310, Sr. Secretary—Technical, Chemistry
B1311, Sr. Secretary, Medical
B1306, Sr. Secretary, Industrial Liaison Program
B1303, Sr. Staff Assistant, Center for Policy Alternatives
B1296, Sr. Secretary, Humanities
B1292, Sr. Secretary—Technical, Mathematics
B1283, Sr. Secretary, Food Service
B1277, Sr. Secretary, Political Science
B1276, Sr. Secretary, Lab. for Computer Science
B1270, Sr. Staff Assistant, Research Lab. of Electronics
B1264, Sr. Secretary, Center for Theoretical Physics
B1263, Sr. Secretary, Alumni Association
B1260, Sr. Secretary, Physics
B1253, Sr. Secretary, Sloan School
B1247, Sr. Secretary, Humanities
B1229, Sr. Secretary, Materials Science & Engineering
B1167, Sr. Secretary, Chemical Engineering
B1157, Sr. Secretary, Sloan School
B996, Sr. Secretary—Technical, Energy and Applied Research Group
B868, Sr. Secretary, Mechanical Engineering
B1299, Secretary, Alumni Association
B1151, Secretary, Lab. for Computer Science

TECHNICAL SUPPORT STAFF

B1328, Technical Assistant, Office of the President
B1271, Technical Artist, Plasma Fusion Center
B1223, B1248, Account Representative, Information Processing Services Operation

OFFICE ASSISTANT

B1308, Sr. Office Assistant, Artificial Intelligence Lab.
B1281, Office Assistant, Sloan School
B1268, Sr. Office Assistant, Information Processing Services
B1261, Sr. Office Assistant, MIT Press
B1230, Sr. Office Assistant, Nutrition & Food Sciences
B1227, Clerical Assistant, Undergraduate Chemistry Office
B1164, Sr. Word Processing Operator, Word Processing Facility
B1133, Office Assistant, Student Financial Aid

SERVICE STAFF

H448, H449, Dormitory Maintenance Mechanic, Campus Housing
H466, Carpenter, Physical Plant
H465, Heat & Vent Mechanic, Physical Plant
H423, HVAC Designer/Draftperson, Physical Plant
H411, Technician A (Radiation Protection), Environmental Medical Services
H370, Machinist A, Physics
H278, Technician A (Electronic), Aeronautics & Astronautics
H230, Machinist A, Materials Science and Engineering

Alumni officers conference is coming

By ROBERT C. DI IORIO
Staff Writer

More than 500 alumni and their guests are expected to be at MIT September 25-26 for the annual Alumni Officers Conference.

Alumni Association President Angus N. MacDonald '46 says the conference will be a working one—but there will be the traditional time out for awards and for a look at MIT today.

Events include special Friday workshops for alumni involved in fund-raising activities, Alumni Relations Activities and for those who are members of the Educational Council; the annual Robert H. Richards Alumni Lecture and the annual business meeting of the Alumni Association, both on Saturday morning, and a special Saturday afternoon forum by MIT faculty members on biomedical technology in Huntington Hall.

Dr. Paul E. Gray '54, president of MIT, will speak at a banquet and reception that begins at 6pm Friday in duPont Gymnasium.

The Robert H. Richards Alumni Lecturer will be Dr. James B. Reswick, ME '43, special assistant to the director of the National Institute of Handicapped Research in Washington, D.C. Dr. Reswick's speech, "Contributions of Technology to the Handicapped," will be given at 11am in Rm 10-250. It will follow the Alumni Association's business meeting at 9:45am, also in Rm 10-250. Mr. MacDonald will report on the Association Activities and Joe F. Moore '52, chairman of the Alumni Fund Board, will report on the Fund's activities at the meeting.

The Richards Lecture honors the founder of the 73,000-member Alumni Association. The lecturer is chosen from the ranks of those with close ties to MIT who are active in public service. An underlying theme of the lectureship is the responsibility of MIT alumni to speak out on public issues.

On Friday, a daylong program is scheduled at Endicott House for alumni involved in fund-raising programs. Joseph S. Collins, director of the Alumni Fund, will conduct the program.

The Alumni Relations Workshop, held in the Bush Room, will address the question of further education opportunities at MIT for Alumni.

Also on Friday, the Education Council will offer several workshops for educational counselors. The workshops, all to be held in the Student Center, will be headed by Admissions Director Peter H. Richardson, Educational Council Director Bonny Kellerman, and Len Gallagher, director of student financial aid.

The Educational Council also will show the film "MIT Today" to its members at 3:30pm Friday in the Sala de Puerto Rico.

A special forum on biomedical technology will begin at 2:30pm Saturday. Dr. Francis E. Low, MIT provost, will welcome the alumni to the forum which will be moderated by Dr. Kenneth A. Smith, associate provost. Faculty members who will speak at the forum and their subjects are:

Dr. Clark K. Colton, C.H. '69, Bayer Professor of Chemical Engineering, "New Therapies with Artificial Devices."

Dr. Phillip A. Sharp, professor of biology, "Genes and the Synthesis of Their Products."

Dr. Christopher T. Walsh, professor of chemistry and biology, associate director of the Whitaker College and Uncas and Helen Whitaker

Professor, "New Strategies in the Rational Design of Drugs."

The AOC weekend will come to a close with a President's Reception at the home of Dr. and Mrs. Gray, starting at 5pm.

Joseph J. Martori, associate secretary of the Alumni Association, is coordinating arrangements for the

Hart Curator W. A. Baker

William A. Baker, 69, of Hingham, designer of the *Mayflower II* and dozens of other replicas of historic ships and boats, died Tuesday, Sept. 8, at his home following a lingering illness.

Mr. Baker was curator of the Francis Russell Hart Nautical Museum at MIT from 1963 until his retirement earlier this year when he became consultant to The MIT Museum and Historical Collections. He was also a part-time lecturer in the Department of Ocean Engineering and at the Munson Institute in Mystic Seaport, Conn.

Mr. Baker began his independent work with the 1949 design for the restoration of Amundsen's *Gjoa*, the first vessel to make the Northwest Passage, for which he received St. Olav's Medal from Norway. Other designs included those for a large-scale model of *Brilliant*, a 1775 Virginia-built tobacco ship, for the Smithsonian Institution; *Essex*, a 1799 US frigate, developed from the Fox papers in the Peabody Museum of Salem, and *Pilgrim Shallop*, a boat of 1620, now afloat in Plymouth Harbor. Mr. Baker also designed the sail plan and rigging for *Beaver II*, a Baltic trader converted in 1972 to represent the brigantine *Beaver* of Boston Tea Party fame.

Most recently Mr. Baker was curator for selection of the exhibit, "Gateway to the Sea," developed for Boston's Jubilee 350, which is now

Professor Cecil G. Dunn

Word has been received of the death of Dr. Cecil G. Dunn, associate professor emeritus of industrial microbiology in the Department of Nutrition and Food Science. Professor Dunn, who was 77, died August 12 in Tucson, Ariz., following a long illness.

A 1930 graduate of MIT, Professor Dunn received the PhD degree in biology in 1934. After serving on the department's staff for several years, he was appointed to the faculty in 1939. Professor Dunn's research centered on the industrial use of bacteria, yeasts and molds in the formation of products such as alcohols, acids, antibiotics, enzymes and fermented foods. Following his retirement, he continued working in the field as a consultant to the Carnation Company.

During World War II, Professor Dunn served in the Office of the Quartermaster General, retiring as

Professor S. Curtis Powell

Dr. Shannon Curtis Powell, a professor of naval architecture and marine engineering at MIT from 1948 to 1976, died August 28 in Phoenix, Ariz.

Professor Powell, known for his teaching and research in the area of propeller design for marine propulsion systems, was 66. He retired from MIT in June 1976 and had lived in Phoenix for six years.

He received the SB degree in naval architecture and marine engineer-

AOC. He is working with an alumni committee chaired by James K. Littwitz '42. Committee members are Bradford Bates '59, William A. Bayer '63, Alan J. Lazarus '53, Gail B. Marcus '68, James A. Moody '75, Robert P. Pinckney '52, Robert P. Ramers '67 and John S. Spencer '57.

housed at the Museum of Transportation. The old photographs, etchings and maps present a chronological montage of Boston Harbor history.

A native of New Britain, Conn., Mr. Baker received the SB degree in naval architecture and marine engineering (now ocean engineering) from MIT in 1934. He was employed by the shipbuilding division of the Bethlehem Steel Company for 30 years where he had experience in all phases of merchant and naval ship design, conversion and repair.

Mr. Baker was the author of a number of books including *The New Mayflower: Her Design and Construction, A Maritime History of Bath, Maine, and the Kennebec River Region and The Engine Powered Vessel*, and numerous papers for journals.

Last fall Mr. Baker was made an honorary member of the Society of Naval Architects and Marine Engineers, an organization which he had served as a regional officer several times. He was also a trustee of Plymouth Plantation, Inc., and a fellow and trustee of the Pilgrim Society of Plymouth, an honorary member of the Boston Marine Society and a member of the editorial board of *American Neptune*.

Mr. Baker is survived by his wife, Ruth Stuart Baker; a sister, Alyson B. Anderson of Pacific Grove, Calif., and a niece.

a colonel. He later was commander of the 101st Army Reserve Research and Development Group.

Professor Dunn was the author of the revised edition of *Industrial Microbiology*, of which he had been the original co-author with the late Dr. Samuel C. Prescott. He also served for several years as associate editor of *Food Technology*.

Professor Dunn was a Fellow of the American Association for the Advancement of Science and the American Academy of Microbiology, and a Fellow and Life Member of the American Public Health Association. He was also a member of Sigma Xi and a founding member of the MIT chapter of Pi Tau Sigma.

He is survived by a son, Ronald of Arizona; a daughter, Elizabeth Pringle of Nevada; four brothers and two sisters; three grandchildren and one great-grandson.

ing from MIT in 1937 and the doctorate in naval engineering and mechanics from the University of Genoa in 1938. For the next decade he was with Bethlehem Steel Company's shipbuilding division in Quincy. From 1944 until 1948, when he joined the MIT faculty, he was in charge of engineering research at the shipyard.

Professor Powell, who never married, is survived by his mother, Mrs. Nita Powell, and his brother, Clinton Powell of Orinda, Calif.