Massachusetts Institute of Technology

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Inaugural Events Begin Today

By ROBERT M. BYERS Staff Writer

Amid colorful outdoor ceremonies highlighted by a procession of 700 persons in academic regalia and attended by an audience of 6,000, MIT Friday, Sept. 26, will inaugurate Dr. Paul Edward Gray as its fourteenth President and entrust to him the perpetuation of a charter for a scation, research and public service that dates back 119 years.

It was on April 10, 1861, that the Senate and the House of Representatives of the General Court of Massachusetts adopted an act that authorized 21 leading citizens—a

agriculture, manufactures and commerce..

In Friday's inaugural ceremony, starting at 11am in Killian Court, a leather-bound replica of this charter, in keeping with MIT tradition, will be placed in Dr. Gray's hands and he will be thus invested with the authority, privilege and responsibility of upholding and advancing the charge set forth in the charter language. Following the act of investiture, Dr. Gray will present his inaugural address, setting forth the principles and objectives that will mark his presidency.

The inaugural ceremony will be

The Killian Court Inaugural Ceremony will be moved indoors to Kresge Auditorium only in case of really dire weather, according to Professor Kenneth M. Hoffman, chairman of the inaugural committee. Because of Kresge's limited seating capacity, special tickets which have been distributed will be required. The ceremony will be broadcast on the MIT cable. If weather forces the ceremony inside, the inaugural committee has arranged for the following places to be used as major viewing areas: the Sala de Puerto Rico, West Lounge and Mezzanine Lounge in the Student Center, Rm 9-150, Lobby 7, Lobby 10, Rm 4-231 and Rm 4-270.

so-called Committee on Twenty plus M.I.T.'s first President, William Barton Rogers—to form "a body corporate by the name of the Massachusetts Institute of Technology, for the purpose of instituting and maintaining a society of arts, a museum of arts, and a school of industrial science, and aiding generally, by suitable means, the advancement, development and practical application of science in connection with arts,

the centerpiece of four days of celebratory events marking the investiture of the new President. Starting today (Wednesday, Sept. 24) there will be symposia on computers, on energy, and on food and hunger featuring speakers from this country and abroad who are renowned in their respective fields. There will be concerts tonight and Thursday evening, informal musical interludes by student musical groups at various campus

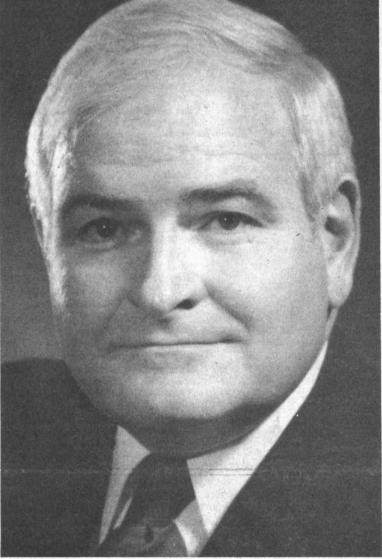
locations today, a four-mile foot race around the Charles River Basin for MIT runners on this afternoon, a light show using

To encourage wide community observance of the inauguration, classes have been suspended on Friday, Sept. 26 from 10am-1pm. Institute supervisors are encourged to release any employees who wish to attend the ceremony, if work loads per-

windows in MIT's 22-story Green Bldg, tonight, and even rides aboard a hot air balloon on this afternoon. President Gray and his family will give receptions for MIT faculty, staff, students, and employees at the President's House (111 Memorial Dr.) 4:30-6:15pm and for inaugural guests Friday afternoon. Speakers at an inaugural luncheon following Friday's ceremonies will include Harvard President Derek C. Bok. New York Times columnist Russell Baker will be a featured speaker Friday evening. The four days will culminate Saturday evening with an Inaugural Ball at the MIT Student Center.

The inaugural ceremony itself on Friday will be perhaps unique in that the four men who have preceded Dr. Gray as President and whose tenures of office span the last 31 years will all be present on stage to participate in the inaugu-

These include Howard W. John-(Continued on page 8)



MIT's 14th President, Paul E. Gray

Energy **Discussed**

Energy's role in food costs plus technological advances in food processing that will alter the way some foods are canned and which could possibly change the conventional tin can into a flexible pouch were discussed by three internationally recognized scientists during the 18th annual Underwood-Prescott Memorial Award Symposium Tuesday, Sept. 23. During an award ceremony and luncheon preceding the symposium, MIT President Paul E. Gray presented the 1980 Underwood-Prescott Memorial award to Albert C. Hersom-research director of Londreco Limited, London, England-in recognition of his pioneering work on new and advanced food thermal processing and packaging methods and his contribution to food microbiology.

Mondale Tickets

Standby tickets are now being issued for the address to be given by Vice President Walter Mondale at 9am Thursday, Sept. 25, in Kresge Auditorium. These tickets are available in the Information Center (Rm 7-121).

Holders of regular tickets will be seated if they are at the door before 8:45am Thursday. Standby ticket holders will be seated after that time on a space available basis.

Because of the demand for tickets, the Arrangements Committee requests anyone holding a ticket that will not be used to return it to the Information Center today. For further information, call the Information Center, x3-4795.

Over 250 food industry executives, scientists and nutritionists attended the luncheon and symposium at which Mr. Hersom, Dr. Rauno A. Lampi and Dr. John Hawthorn presented their conclusions on "Developments and Problems in Food Science and Technology."

Mr. Hersom's lecture, entitled "The Development of a Commercially Operating System for the Aseptic Packaging of Foods Comprising Sauce and Solids," detailed his company's completely

new and successful effort to solve the problem of processing canned foods such as stews that contain large pieces of either meat or fish and vegetables in delicate sauces during high-temperature/shorttime sterilization methods

Dr. Lampi-chief of the food systems equipment division, Food Engineering Laboratory, US Army Natick Research & Development Command-discussed the "Retort Pouch: The Development of a

(Continued on page 3)

Personnel Office to Offer Course In Administrative Procedures

Plans are underway to continue and possibly expand employee development programs that have been offered for the past several years, according to James J. Culliton, director of personnel.

As a first step in this process, the Personnel Office has announced the fall schedule of the program, Introduction to Administrative Procedures at MIT.

Iwo seven-week programs will begin on Monday, Oct. 20, and Wednesday, Oct. 22, respectively. Representatives of administrative and service departments will present procedural information and outline the services their departments offer MIT employees.

The program is open to members of the exempt and support staffs. More than 500 participants have completed the program since it began in 1976.

Instructors for the program are: Accounting-Paul Honiker, Richard May, Robert Sullivan and Ruth Campus Patrol-Chief James Olivieri. Graphic Arts

-James Coleman and Al Paone. Housing and Food Services-H.E. Brammer. Office of Sponsored Programs-James Grayson and Patricia Greer.

Also Payroll-Joseph Cullinane. Personnel-Virginia Bishop, Kenneth Hewitt, Terri Viohl and Kerry Wilson. Physical Plant-Mort Berlan and Howard Miller. Purchasing—Mary Anne Petti and Barry Rowe.

Departments are asked to nominate one or two employees from their area to attend one of the two programs this fall. Employees on the support staff and exempt payrolls should notify their supervisors if they are interested in attending one of the programs.

Course outlines, program schedules and applications can be obtained from departmental administrative officers. Nomination deadline is October 3. Letters will be sent to those selected for each program.

For further information, call Wanda Osborn, x3-1674.

Honeywell Foundation Gift To Aid Computer Research

The Honeywell Foundation, charitable arm of Honeywell, Inc., will provide MIT with a gift of \$500,000 over the five years beginning in 1981 to support research in advanced computer sciences.

Announcement of the gift was made by Edson W. Spencer, chairman and chief executive officer of Honeywell, Inc., and by MIT Presi-

dent Paul E. Gray.

Honeywell, a leading manufacturer of electronic control instrumentation and data processing systems with corporate headquarters in Menneapolis, Minn., has had many years of as with MIT and with MIT faculty. The company is a longtime member of the MIT Industrial Liaison Program and participates in MIT's cooperative work-study program

for students in electrical engineering and computer science. In addition, a decade ago Honeywell scientists collaborated with the MIT Laboratory for Computer Science (then called Project MAC) in developing the large-scale, timeshared MULTICS computer system which now has a major place in Honeywell's standard product

"The Honeywell Foundation has recently made a commitment to expanded support for higher education over the coming years and we are pleased that one of the significant gifts in that larger pro gram will go to MIT," Mr. Spencer said. "We are proud of our long association with the Institute and, through this gift, we hope to make

(Continued on page 8)

50th Anniversary Planned For Sloan Fellows Program

The MIT Sloan Fellows Program, first exeuctive education program established in the nation, will mark its 50th anniversary with a three-day alumni convocation October 2-4.

Between 800 to 900 alumnae/ alumni and spouses are expected to attend the working session which will include a panel discussion, keynote address, and seminars conducted by faculty members of the MIT Sloan School of Management.

The convocation's theme is "Management Challenges in the 1980s." It will open on Thursday,

Oct. 2, with a welcome and report on the school to alumni by Abraham J. Siegel, acting dean; Peter P. Gil, associate dean; and Alan F. White, director of the Sloan Fellows Program.

The MIT Sloan Fellows Program is named in honor of the late Alfred P. Sloan, Jr., former chairman of the board of General Motors Corporation, MIT alumnus, and one of the program's initiators. Men and women in mid-career management positions are sponsored in the program by private and public sec-

(Continued on page 5)

Wanted: Undergraduate Colleagues

(This story was written by Norma McGavern of the UROP staff as a means of introducing new undergraduates to the wideranging program.)

"A student is invited to participate in a project in developing cytofluorographic techniques for the identification and anlaysis of rat lymphocytes...' "An opportunity exists for an undergraduate with a strong interest in the crystal structure of proteins..." "A student is invited to participate in a study concerning the mechanisms of heat damage and repair to the bacterial DNA...

So begin the series of notices now beginning to appear on the bulletin board of the Undergraduate Research Opportunities Program (UROP).

Last year UROP celebrated its tenth birthday. UROP was established in the fall of 1969 as a program which would bring faculty and students together in research collaborations of mutual fascination. Since that time it has become almost commonplace to find students, freshmen or seniors, spending a good part of their time at MIT in a research laboratory.

"The research experience gave me a new perspective on the process called learning," said one recent participant. Another student adds, "My UROP experience

Echoes

September 18-24

50 Years Ago

The MIT Student House, an experimental living group for needy students, was opened this fall through funds from an anonymous donor. The house, at 159 Bay State Road, has sleeping accommodations for 20 men, with a guest room and a room for the hostess who will be in charge of running the house. A cook will be hired for the evening meal, but the men will help in preparing breakfast and will be responsible for doing the dishes, sweeping the floors, making their beds, and generally doing most necessary housework. Each man will pay \$8 per week, to cover the cost of maintenance of the house, and the hostess' salary. The experiment will last one year. If it is successful, the donor may endow a series of similar houses for the use of Institute students.

40 Years Ago

The Technology Peace Federation will have its first meeting of the year next week, when elections will be held to replace resigning officers. The Federation is composed of two representatives from each activity and undergraduate group on campus. Last year the Federation presented two films, "All Quiet on the Western Front," "Grand Illusion" and organized several debates and a Peace Day rally in which President Compton participated. An interesting and stimulating program is expected again this year.

25 Years Ago

The Boston Symphony Orchestra concert to be held in Kresge next week will be the occasion of the first full-length telecast from the auditorium. WGBH-TV will carry the broadcast as the first in a series of classical music television programs. This will also be the first television coverage of the BSO. The concert has been sold out for a week; it is one of the top musical events at the Institute in several years. WGBH-TV began broadcasting in May on TV Channel 2. It is owned and operated by the Lowell Broadcasting Council, a cooperative nonprofit organization, among whose contributing members are MIT, the BSO, and other schools and museums in the

Prepared by Jeanne Duperreault, MIT Historical Collections, x4444.

has been extremely rewarding. I have become part of "the lab" working closely with all the graduate students of the group. Exposure to the current issues in polymer science and engineering through this interaction has increased my interest in my regular courses and focused my career goals."

UROP invites freshmen to participate as fully as upperclassmen. They needn't hold back, feeling unqualified. Often faculty will accept a student who has a great deal of enthusiasm, although lacking in experience, and spend a term training that student with the expectation that he or she will eventually become an increasingly productive research colleague.

Experienced or not, all UROPers may benefit in a tangible way by receiving either pay or credit (or recognition) for their work. Wages funded by UROP have been increased to \$4.50 an hour with a \$600 ceiling imposed on total term earnings. Those hourly and term time limits do not apply to students who received full funding from their faculty supervisor. \$4.50 an hour in those cases become a minimum rate rather than the only rate.

Time spent by students on research during the semester usually ranges from six to 20 hours per week. Summer research is expected to be full time and research continued through the month of January is generally done on a fulltime basis. Participation must run at least one semester, but almost always lasts longer. In fact, most UROPers spend up to two years on a single project.

Although UROP is primarily an on-campus program, it also has an off-campus component and includes projects in local hospitals, industry, government agencies and even foreign countries on occasion. One rule holds firm: each student must collaborate with a faculty member who is actively involved in the project and is willing to be responsible for guiding the intellectual course of the student's research. In the case of an off-campus UROP project, this means that a student will be working with both a supervisor in the off-campus organization as well as with an MIT faculty member.

Freshmen, new transfer students and other students who wish to know more about UROP should consult its 80/81 Student Research Directory available in the UROP Office, Rm 20B-141 and in the Lobby 7 Information Center. The Directory lists research interests of faculty members and includes information about laboratories, award programs and other MIT resources which graduate and undergraduate researchers alike may find useful.

New projects seeking researchers are posted on the UROP bulletin board in the Building 3 main corridor and selected opportunities and notices about proposal deadlines appear weekly in the UROP section of Institute Notices in Tech

Finally, department UROP coordinators and members of the

Electronic **NewsPapering**

"The Future of the Newspaper in the Electronic Age" will be the subject of a talk by Anthony Smith on Friday (Sept. 26) from 4 to 6pm in the Marlar Lounge (Rm 37-252). The seminar is one of a series sponsored by the MIT Research Program on Communications Policy.

Mr. Smith, director of the British Film Institute, has recently published Goodbye Gutenberg: The News Revolution of the 1980's (Oxford University Press) and Newspapers and Democracy (MIT Press). The former describes what the electronic revolution is doing to the press in the United States, and the latter, edited by Smith, compares trends in a number of countries.

UROP staff are always happy to meet students and discuss research possibilities with them. Staff members are:

-Norma McGavern, who negotiates student research proposals requesting funding.

-Clifford Truesdell, who administers off-campus UROP activities, including legal concerns.

-Gregory Smith, who conducts

-Michelle Lamarre, who organizes symposia, special events and assembles the UROP Directo-

-Susan Mitchell-Hardt, who supervises day-to-day office operations and publicity.

-Originator and Director of UROP is Dr. Margaret L.A. MacVicar, associate professor of physical science.

INSTITUTE **NOTICES**

Official Notice**-Classes will be suspended from

Announcements

10am-1pm, Fri, Sept 26, for the Inauguration.

Official Notice for Graduate Students** - Applica advanced degrees in Feburary 1981 m returned to the Registrar's Office, Rm E19-335 by Sept 26, 1980, \$20 Fee after this date

Chivairy is Not Dead! *- Sponsored by the Society for Creative Anachronism. New members meeting Anyone interested in medieval activities is encouraged to come. Thurs, Sept 25, 7:30pm, Rm 4-153.

MIT Women's Chorale Auditio sponsored by the Women's League, membership open to all women at MIT and Harvard. Varied repertoire from medieval to contemporary. Two concerts each semester, rehearsals on Thursday, 7:45pm, Rm 10:340 beginning Sept 25. For informa-tion call Marilee Jones 494-0088 evenings or Ellen McGill 327-9724 days.

Career Paths at MIT -- Panel discussion on career development for women. Sponsored by the Women Administrators' group. Thurs, Oct 2, noon-1: 30pm,

Nightline: Open all Night⇔-A sympathetic ear, a place to relax and talk. We have information of every conclevable kind. Drop by the Campus Room, next to Ashdown or call x3-7840.

Basic Pistol Marksmanship course**-Starts 25 Sept 6pm, Dupont Gym for five consecutive Thursday nights. Course stresses safety, proper handling and maintenance as well as basic marksmanship skills. Fee \$25, includes everything. Info or preregistration: Andy Platais, x8-1419 Draper or Pistol Range,

MIT Undergraduate Physics Newsletter** .-Organizational meeting, Friday, Sept 26, 4pm, Rm 4-339. People interested in helping with writing, art-work and layout should attend. Info: Greg Huber

Club Notes

MIT Juggling Chib**-Juggling practice and gettogether. Beginners, advanced and spectators invited, ndays, 1:30-5:30 pm, good weather, in front of Student Center; bad weather, lobby of Bldg 13.

Women's Rugby Football Club**-All women athletes are invited to play the game of games. Fall practices are held MWF, 5-7pm on Briggs Field. Staff, students, all welcome

can Karate Club*—Rigorous trtaining for physical well-being and self-defense. Classes meet 6-8pm, Tuesdays and Fridays, Varsity Club Lounge, Thursdays, Dance Room. Info: Jim, x3-8148.

involving rigorous training to develop total-body and mind control meetings. Mon, 6-8pm, Burton Dining Hall; Wed, 6-8pm, T-Club Lounge; Fri, 5:30-7pm, Malaysian Students Meeting/Dinner**-Sponsored by the Malaysian Student Association. Dinner and ual general meeting/election of new commit Sat, Sept 27, 7pm, Ashdown Dining Hall. Admission: \$2. For information call 498-6929 or 498-1795

Dance Studio; Sat, 11-1pm, T-Club Lounge. Chung Sun Kang x5-9273 or Byung I. Choi x5-9494 Dorm.

MIT Tiddleywinks Association**—Meetings every Wednesday at 8pm in Rm 473 of the Student Center.

Wu-Tang Chinese Martial Arts Club*-Practice, Saturdays, 10am-2pm, Rm 491, Student Center. Bring shorts, T-shirt and sneakers.

ACM Microcomputer Chub**—There will be a general organizational meeting on Mon, Sept 29, 4: 30pm, Rm 4-163.

MFT Chess Club**-Meets Saturdays, 1pm, Rm 491, Student Center. Speed chess, bughouse and analysis for all levels of players. Info: Brad, x3-7554 or

MFT/DL Bridge Club**-ACBL Duplicate Bridge. esdays, 6pm, W20473. Info: Arthur, x8-1414 Draper

Hobby Shop**-Complete facilities for woodwork ing, metalworking, and darkroom. Mon-Fri, 10am-6pm, and Wed, 10am-9pm, W31-031. Fees, \$12/term students, \$20/term, community. Info: x3-4343.

Religious Activities

The Chapel is open for private meditation 7am-lipm

Tech Catholic Community - Sunday liturgies: 9am, 12noon and 5pm; weekdays, Tuesdays and Thursdays, 5pm; Fridays, noon, MIT Chapel. Prayer Group and Potluck Supper, Mondays, 6: 30pm, info: Bob Simon, x3-1858.

STC4Jewish Religious Services*-Friday: Orthodox services at sundown, Kosher Kitchen; Conservative/Reform group, 5pm, basement, 312 Memorial Dr. Saturday: Conservative/Egalitarian services, 9: 15am, MIT Chapel; Orthodox services, 9am, Bush Rm, 10-105. Info: x3-2982 or x3-2987

Lutheran Episcopal Ministries* - Interdenomina tional service of Holy Communion, Wednesdays, 5:10-pm, MIT Chapel. Supper follows in the base ment of 312 Memorial Drive.

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

ship meeting: prayer, singing, sharing bible teach ing. All are welcome to join. Meets on Friday. 7:30pm, Rm 1-236. Info: Fred Hickernell x3-7826.

United Christian Fellowship*-Large group fellow-

Vedanta Society*-Meditation and discourses on the Gita by Swami Sarvagatananda of the Ramak-Vedanta Society of Boston. Fridays Chapel. First meeting October 3, topic: Mahetma

Noon Bible Study**-Eveny Wednesday, noon, Rm 3-465, bring your lunch, all welcome. Ralph Burgess

Cheder Classes in Jewish Studies**-Small relaxed informl classes with little or no homework required. Hillel and its Cheder teachers have prepared several exciting courses. For more information call Hillel x3-2982. Registration fee: \$5.

Graduate Studies

Hertz Foundation Fellowships**-The Fannie and John Hertz Foundation awards graduate fellowships to students of outstanding potential in the applied physical sciences. The fellowships may be used at one on 15 institutions, including M.I.T. Applicants must be U.S. citizens, or have documented proof of intent to acquire it. The proposed field of graduate study must be concerned with applications of the physical sciences to human problems, broadly construed. High previous scholastic performance is expected of all applicants, including at least an Aaverage during the last two years of undergraduate work. Contact the Graduate School Office, Room 3-136, for further information. Application deadline November 15, 1980.

UROP Listings

For more detailed information on UROP opportunities listed, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Room 20B-141, x3-5049 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the

Mineral Resources Undergraduate Research Awards Sea Grant Undergraduate Research Awards -Grants of \$750 each are available from the MIT

Mining and Mineral Resources Research Institute e research o resources engineering and management in the United States, and from the Sea Grant Program for fall term undergraduate research related to ocean studies and ocean resources. These Awards will also be granted spring term, 1981. Students who successfully complete term-time work may also be eligible to apply for summer grants of up to \$2500 each. All interested students should contact the UROP Office for more information. The deadline for receiving

-An undergraduate is invited to study some of the biochemical functions of vitamin A. The research would require isolation of microsomes from rat liver and a study of the effect of vitarnin on the biosynthe sis of oligosaccharides bound to lipids, as catalyzed by the microsomes. Pay available. Contact Dr George Wolf, 56-213, x3-6781.

Cognitive Psychology
—Students are invited to participate in various cognitive psychology research projects in such as areas as psycholinguistic research, imagery, music perception, memory and reading. Prior experience in cognitive psychology not necessary, through background with statistics and computer programming useful. Credit or pay. Contact Prof M. Potter, E10-032, x3-5526, Prof M. Garrett, E10-034C, x3-5767, Dr. E. Walker, 20D-105, x3-4963, or Susan Petrick, E10-016, x3-5774.

Numerical Analysis of Surface Cracks

-A student is invited to participate in the continuing development of a line-spring model for surface flaws, a relatively new method for analysis of surface cracks in structures. Experience in FORTRAN programming and interest in mechanics analy fracture desired. Pay available. Contact Prof. D. Parks, 3-366, x3-1630.

Evaluation of Text Editors

-The Office Automation Group of the Laboratory for Computer Science invites a student to help develop tutorial materials for a pair of state-of-theart display editors and to teach this material to new users. Contact Prof Hammer, NE43-217, x3-5840 or Michael Good NE43-224, x3-5877

Support Tools for Multi-Person Office Activities
—Students are invited to participate in the design and implementation of calendar subsystems, as well as other office support tools. Some programming experience and an interest in implementation and modification of experimental systems in response to user feedback is desired. Contact Prof I. Greif, NE43-202, x3-5987

Construction and Testing of Underwater Welding Equipment for Divers —A student is invited to participate in a research

project involving the construction and testing of prototype underwater welding systems. Some experience working in a machine shop and the use of a care desirable. Contact David Schloerb, 5-007, 876 7317 or leave message with Muriel Morey, x3-6820.

Cognitive Psychology
—Students are invited to assist in research in Visual
Perception and Attention. Students will participate in designing experiments, testing subjects on a min-icomputer, and analyzing data. Backgroud in Psychology and some experience in programming helpful. Credit or pay. Contact Dr. Yehoshua Tsal, 20D-101, x3-2618.

Dent of Nutrition and Food Science

udents are invited to participate in a research project involving the use of experimental animals. The design of the study will include everything from mixing diets to minor surgical techniques. Contact Dr. P. Newberne, x3-6243, E18-611, Dr. K. Nauss, x3-6111 or x6230, E18-670A or Tony Clark, x3-6230.

Recovery of Uranium from Seawater

-Students are invited to participate in a research project involving the evaluation of recently developed ion exchange materials which should prove to be a highly successful means of recoverinfg ura-nium from seawater. Experimental, analytic or computer-oriented projects are available in areas ranging from process design to the assessment of environmental impact. Contact Prof. Driscoll, NW13-200, x3-4219 or Dr. Best, NW13-242, x3-5044.

Engineering Project in Neuropsychology

—A student of engineering is invited to participate in a research project involving the building of an instrument to measure the threshold for pricking pain. This instrument, a dolorimeter, houses a 100 watt bulb that when focused by lens on the skin produces a radiant-heat stimulus. Contact Suzanne Corkin, Ph.D., E10-003A, x3-5793 or Nancy Hebben, Ph.D., E17-442, x3-3095.

New Subjects

21.441 Far Eastern History: China. Covers the history of Chinese civilization from the Shang dynasty through the nineteenth century. For information call the History Office, Department of

21,402 Establishment of the American Eepublic

1790-1850. Room and time change: course will now meet MWF, 11am, Rm 4156.

Other Opportunities

King Trust -- Applications for 1981 postdoctoral research fellowships in the bio-sciences or community health are due by October 10, 1980 for grants beginning on or after February 1, 1981. Fellowships provide \$16,000 for one or two years to biomedical researchers who have already completed two or three years of postdoctoral research. Copies of cement available in the Development Office, Rm 10-277, x3-3839. Info: G. Rodger Crowe or Janet E. Brown, Rm 10-277, x3-3839

The Medical Foundation, Inc. and The Charles A.

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CABLE TELEVISION SCHEDULE

WEDNESDAY, SEPTEMBER 24

Channel 8 12n-12: 30pm WBZ NOON NEWS 12: 30-2: 30pm THE ITHACA VIDEO FESTIVAL 34pm COMPUTER AND PEOPLE: FUTURE PARTNERSHIP OR CONFLICT?—Inaugural slum live from 10-250. 7:30-11:30pm THE ITHACA VIDEO FESTIVAL

THURSDAY, SEPTEMBER 25

Channel 8 11-1pm NEW LARGE SCALE ENERGY SUPPLY TECHNOLOGIES: PROSPECTS AND PROBLEMS-Inaugural symposium live from 10-250. 2: 30-4: 30pm THE OTHER ENERGY CRISIS: FOOD AND HUNGER-Inaugural symposium live

8-9pm PHYSICS 8.01 LECTURE-Recorded Wednesday, Sept 24. 9-11pm THE ITHACA VIDEO FESTIVAL

Live from Killian Court.

7: 39-9: 30pm POLITICS, TELEVISION, AND THE NEWS—Ed Diamond with a special guest to be announced. Live from 9-150.

FRIDAY, SEPTEMBER 26 Channel 8
11-2pm THE PRESIDENT'S INAUGURATION—

SUNDAY, SEPTEMBER 28 Channel 8
8-9pm PHYSICS 8.01 LECTURE—Recorded Fri-

day. September 26.

MONDAY, SEPTEMBER 29 Channel 8 12-12: 30pm WBZ NOON NEWS

12: 30-4: 30pm THE ITHACA VIDEO FESTIVAL

TUESDAY, SEPTEMBER 30

12-12: 30pm WBZ NOON NEWS 12: 30-4: 30pm THE ITHACA VIDEO FESTIVAL 8-9pm PHYSICS 8.01 LECTURE-Recorded Sep-

9-10: 30pm PHYSICS 8.01 HELP SESSION—Call x3 7212 and tutor Lawrence Krauss will assist you with your questions.

-The sixth annual Ithaca Video Festival is a touring exhibition, presenting a selection of the finest indepent video produced in the United States. -There will be two special showings with wine-

/cheese receptions on Thursday, September 25, and on Friday, September 26, 7:30pm, M.I.T. Film/Video Section, 275 Mass. Ave. The video tapes will also be available for private small-group showing. For showing reservations and additional information call Educational Video Resources x3-7431.

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Energy Costs Of Food

(Continued from page 1)

Basic Packaging Concept in Today's High-Technology Era." Sometimes called "flexible cans," retort pouches consist of laminated plies of polypropylene, aluminum foil and polyester. Their envelopelike configuration greatly reduces the time needed to sterilize their contents, thus cutting energy consumption and improving quality.

Professor Hawthorn—head of the Department of Food Science and Nutrition at the University of Strathclyde, Glasgow, Scotland—spoke on "Energy Considerations in Food Systems." He focused on the implications of rising energy costs for the food industry and indicated that only those foods which are energy-efficient will be affordable in the future.

Mr. Hersom detailed the difficulties associated with his company's development of its revolutionary new aseptic canning method for food products that contain large pieces of meat or vegetables. In this process, foods are sterilized prior to being placed in a can or bottle, rather than after as is done in conventional food processing systems. The complex control problems of the process were solved only by the addition of computers and microprocessors, according to Mr. Hersom.

Dr. Lampi noted that the technology for the retort pouch is already commerically available and is, in fact, being extensively used in other parts of the world, particularly Japan. In the United States the primary users of the process are food manufacturers packing for the military and for outdoors enthusiasts. He further noted that while the retort pouch is an improved packaging system for many foods, it has encountered resistance from most segments of the US food industry because filling rates are slower for pouches than for cans and there are major capital costs associated with a changeover.

Dr. Hawthorn examined and detailed the energy factors involved in growing, processing and transporting the world's food supply. He noted that present and proposed food production and processing systems must be audited for their total energy demands and that only those which are efficient can survive in the long run. As an example he cited the energy costs of a process that manufactures protein from mineral oil through fermentation. He noted that, when all of the energy requirements were calculated, the process was economically unacceptable.

The Underwood-Prescott Award and Symposium are in memory of William Lyman Underwood, grandson of the founder of the Wm. Underwood Co., and Dr. Samuel Cate Prescott, the first dean of the School of Science at MIT. In one of the first industry-university partnerships, they proved—in 1895—that spoilage of canned foods was due to bacteria. Together they developed the initial time and temperature guides for thermal processing and thus established the scientific basis of the modern canning industry.

Mr. Hersom was selected for the award by a faculty committee of the MIT Department of Nutrition and Food Science. Members of the committee are Dr. Gerald N. Wogan, head of the department and Underwood-Prescott Professor of Nutrition and Food Science; Dr. Marcus Karel, professor of food engineering; and Dr. Samuel A. Goldblith, professor of food science and vice president for resource de-

velopment.
The Underwood-Prescott Memorial Lectureship Committee cited Mr. Hersom's contributions to food science in general and particularly his leadership in food microbiology and canning technology.

Mr. Hersom has been associated with Londreco Limited since 1968, first as research manager and, since 1976, as research director. Londreco Limited is a research and development company of its parent firm, Nestle S.A. of Switzerland, and is responsible for

international canning research for Nestle. Prior to joining Londreco, Mr. Hersom was senior microbiologist, laboratory manager and later research manager of Crosse & Blackwell Limited.

Mr. Hersom, who holds a degree from London University, is a Fellow of the Royal Institute of Chemistry, a Fellow of the Institute of Food Technologists, and a member of the Society of Applied Bacteriology. He also served on various committees of the Food Manufacturers' Federation and the Campden Food Preservation Research Association.

Mr. Hersom is co-author, with E.D. Hulland, of the book, Canned Foods: An Introduction to their Microbiology, which is now in its sixth English edition and which has been published also in American and Japanese editions. Mr. Hersom holds four patents—two on sterilization of particulate solid materials, one on heat treatment of fluid products, and one on containers and closures.

Dr. Hawthorn has been professor and head of the Department of Food Science and Nutrition at the University of Strathclyde since 1958. From 1950 to 1958 he was first a lecturer in food science and then principal lecturer in food science at the Royal College of Science and Technology, Glasgow.

Professor Hawthorn has served on numerous government and professional committees. He has been chairman since 1962 of the Scottish Food Hygiene Council and a member since 1977 of the Agricultural Advisory Panel of the British Council. He also serves as scientific adviser to the British Food Manufacturing Industries Research Association.

He has served as chairman of the United Kingdom Council for Food Science and Technology and as president of the United Kingdom Institute of Food Science and Technology. He has been president of the International Union of Food Science and Technology and a member of the Triticale Working Group of the International Development Research Centre, Ottawa. Dr. Hawthorn holds undergraduate and PhD degrees from Glasgow University.

Since 1966 Dr. Lampi has supervised package and equipment engineering developments at the US Army Natick Research and Development Command, first in packaging and, for the last four years, in food systems equipment.

Professional and advisory groups in which Dr. Lampi has been active include the Packaging Institute, the Institute of Food Technologists, and the Association of the US Army. He is research and development advisor to the Department of Defense Food Service Facilities and Equipment Planning Board.

Dr. Lampi's achievements have been recognized by several awards, including the Rohland Isker Award of the Research and Development Associates, the Senior Award of the Institute of Electrical and Electronics Engineers, and the Industrial Achievement Award of the Institute of Food Technologists. Dr. Lampi holds undergraduate and advanced degrees in food technology from the University of Massachusetts.

Dining Hours

Because of inaugural activities, there are several changes in dining service hours this week.

Morss Hall in Walker Memorial will be closed for dinner Wednesday, Sept. 24. It will be closed all day Friday, Sept. 26, and open all day Saturday, Sept. 27 (Commons served).

Lobdell will be closed all day Saturday, Sept. 27, (Commons will be served in Walker). Twenty Chimneys will be open 8am-7pm.

Four New Faculty Residents Named

Three residence halls at MIT, Baker House, Bexley Hall and Random Hall, have new faculty residents this year, and faculty residents have been appointed for 500 Memorial Drive when the building is completed in 1981.

They are Professor Harald A.T. Reiche and Mrs. Irene Reiche, Professor Judah L. Schwartz and Mrs. Ellen Schwartz, Professor Irwin Pless, and Professor William L. Porter and Mrs. Lynn Porter.

Professor and Mrs. Reiche are in residence at Baker House. He is professor of classics and philosophy in the Department of Humanities. His teaching includes ancient history, Greek philosophy and science, and Greek language and literature. He came to MIT in 1953 as Carnegie Fellow in Humanities, and joined the regular faculty as assistant professor in classics and philosophy in 1955. He was appointed associate professor in 1960 and professor in 1966. He was appointed associate professor in 1960 and professor in 1966. Professor Reiche is author of several books in the areas of Greek philosophy and science, and in 1963-64 was awarded a Guggenheim Fellowship, and in 1967-68 was Ford Visiting Professor at the Technical University in Berlin. He was a consultant for LIFE magazine's series on Greek civilization in 1962-63 and produced a series of presentations on Greek civilization for educational television in Munich, West Germany in 1964.

Mrs. Reiche was born in Nice and raised in Paris, France, where she studied ballet. After raising four children in Concord, Mass., she has returned to teaching ballet and gymnastics in a professional

Professor and Mrs. Schwartz are in residence at Bexley Hall. Professor Schwartz is professor of engineering science and education in the School of Engineering and in the Division for Study and Research in Education at MIT. He has the BA degree from Yeshiva University, the MA degree from Columbia University and the PhD from New York University, all in physics. His particular research interests are in the use of computers to augment human intuition; in the process and substance of undergraduate and continuing education, and in cognitive development with respect to the learning of mathematics and problem solving.

Mrs. Schwartz is a 1956 graduate of Queens College and studied design at the Yale Drama School. Her interests lie in design and in choral music, and for five years, she taught English and art in the New York City school system. She is a member of the Concord Chorus, and is active in community theater in Lincoln, Mass. For the past three years she has been a graphic designer in the Education Development Center in Newton.

Professor Pless is in residence at Random Hall. A professor of physics at MIT since 1964, he came to

Video Festival Airs This Week

MIT Educational Video Resources (EVR) is hosting this week the exclusive Massachusetts showing of the Sixth Annual Ithaca Video Festival, a touring exhibition of the work of 19 artists.

Two special showings, with wine and cheese receptions, are planned Thursday, Sept. 25, and Friday, Sept. 26, at 7:30pm at the MIT Film/Video Section at 275 Massachusetts Ave. Part I will be shown Thursday, Part II, Friday.

In addition, the entire Festival will be broadcast on the MIT Cable daily through Tuesday, Sept. 30. Consult the cable schedule for specific times. The tapes will also be available for private, small-group showings. For showing reservations or other information, call EVR. x3-7414.

The Festival is dedicated to promoting professional video artists and their work through public exhibition in museums, galleries and libraries. It is a program of Ithaca Video Projects, an independent, nonprofit media production center.



New faculty residents for three MIT residence halls gather on the steps of Building 5. They are (left to right) Professor Harald A.T. Reiche, Professor Irwin Pless, Mrs. Irene Reiche, Professor Judah L. Schwartz and Mrs. Ellen Schwartz. Professor and Mrs. Reiche are in residence at Baker House, Professor Pless at Random Hall, and Professor and Mrs. Schwartz at Bexley Hall.

the Institute in 1956 as instructor, became asisstant professor of physics in 1958, and associate professor in 1961. He has the SB and SM degrees in mathematics and the SM and PhD in physics, all from the University of Chicago. He is a member of Sigma Xi, the American Physical Society and the American Association of Physics Teachers.

Professor and Mrs. Porter will take up residence at 500 Memorial Drive when the new residence hall at that address is completed in 1981. Professor Porter has been dean of the MIT School of Architecture and Planning since 1971. He is stepping aside from the deanship at the end of the calendar year, and after a leave of absence, plans to resume teaching in the school's Environmental Design Program. He will also continue his involvement in the Aga Khan Program for Islamic Architecture jointly administered by MIT and Harvard.

Mrs. Lynn Porter has the BS degree in art from Skidmore College. She is a jeweler, who has exhibited at the Museum of Contemporary Crafts in New York City, and has maintained her own shop since 1955. She is also a volunteer teacher in the Concord Public



Dean William L. Porter and Mrs. Lynn Porter, who will be faculty residents for the residence hall under construction at 500 Memorial Drive. The Porters will move in when the building is completed in 1981.

Schools, and is visiting artist at the Carroll School in Lincoln, where she serves as part-time teacher.

Though It's Still September, IAP Planning is Underway

For the next Independent Activities Period, January 5-28, the IAP Policy Committee plans to highlight practical, hands-on activities reflecting the Institute's motto, Mens et Manus—the mind and the

Departmental coordinators will meet at a luncheon on Monday, September 29, to receive information about organizing programs for kers at will be Professor Frank E. Perkins, Associate Provost; Professor David Halperin, Department of Humanities; Professor Edward Merrill, Department of Chemical Engineering; Professor Woodie Flowers, chairman of the IAP Policy Committee, and Mary Enterline, manager of IAP. Louis Menand III, chairman of the IAP Planning Committee, will be mod-

Usually considered the kickoff of IAP, the luncheon will be held a week later than usual to avoid conflict with inaugural events.

Although it continues to support and encourage every type of activity, the IAP Policy Committee has decided to feature one type of activity—as it did for the first time last year with the successful focus on energy.

By drawing attention to hands-on activities, the Committee hopes to remind participants of the value of knowing how to do things for themselves—from building to repairing—and how the mechanics that sup-

port our highly technological environment work."

Professor Flowers, chairman of the Committee, elaborated, "As a mechanical engineer, I am particularly aware of the need to understand the mechanics that support our highly technological environment, to know what goes on inside those black boxes."

A logo showing a woman holding a book and a man wielding a tool will appear in the Guide to designate hands-on activities.

IAP Announcements and Guidelines are being distributed to all faculty. The Guidelines explain the rules and regulations governing IAP; and the Announcement contains directions and a form for listing an activity in the IAP Guide. Copies of the Announcements will also be available from departmental coordinators next week, while the Guidlines will be available in the IAP office, Rm 7-108. The deadline for submitting activities to the first IAP Guide is October 15.

To help people finance activities the Institute has established a fund of \$15,000 which is allocated by the IAP Activities Fund Committee. Requests for funding should be made to Edward Gaudiano, chairman of the funding committee, Rm 56-524, x3-6715, by October 17.



September 24 through October 5

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).

Inaugural Events

Wednesday, September 24:

2-4pm, Rm 10-250--Symposium "Computers and People: Future Partnership or Conflict?" Speakers will be: Prof Daniel Bell, Henry Ford II Professor of Social Sciences, Harvard University; Dr. Marvin L. Minsky, Donner Professor of Science, Electrical Engineering and Computer Science and Professor Michael Rabin, Albert Einstein Professor of Mathematics at Hebrew University of Jerusalem; chairman: Dr. Michael L. Dertouzos, director of the Laboratory for Compu-

4:30-6:15pm--President and Mrs. Gray's Reception for the Community, President's House, 111 Memorial Drive.

4: 30-6: 30pm--McDermott Court Festivities.

6: 30-President Gray will present a trophy to the winner of the MIT Classic Road Race, McDermott Court.

8pm--First performance of the Inaugural Concert by the Roumanian String Quartet with Professors John Buttrick, piano, and Marcus Thompson, viola. Kresge Auditorium

Thursday, September 25:

11am-1pm, Rm 10-250-Symposium "New Large-Scale Energy Supply Technololes: Prospects and Problems." Speakers will be: Dr. Pierre Algrain, French Secretary of State for Research; Dr. John M. Deutch, Arthur C. Cope Professor of Chemistry and former US Under Secretary of Energy and Dr. Charles J. Hitch, president emertius of the University of California; chairman: Dr. Francis E. Low, MIT provost and Karl Taylor Compton Professor of Physics.

noon-2pm--Performances by Campus Music/Dance Groups. Presently scheduled are: Lobby 10--Student Art Association exhibit. Lobby 7--Songs from HMS Pinafore by the MIT Community Players. Student Center Plaza-Demonstrations by MIT Juggling Club and Unicycle Club. Lobby 13-Karate demonstration. A more complete schedule will be listed next week.

2: 30-4: 30pm, Rm 10-250-Symposium "The Other Energy Crisis: Food and Hunger" Speakers will be: Sir William Henderson, former Secretary of the Agricultrual Research Council, and chairman of the Genetic Manipulation Advisory Group to the Secretary of State for Education and Science of the United Kingdom; Dr. John Hawthorn, head of the Department of Food Science and Nutrition at the University of Strathclyde, Glasow, Scotland, and Dr. David Pimentel, professor of Insect Ecology and Systematics, Cornell University; chairman: Dr. Nevin H., Scrimshaw, Institute Professor and director of the International Nutrition Program and of the Clinical Research Center

8pm, Kresge Auditorium---Second performance of the Inaugural Concert by the Roumanian String Quartet with Professors John Buttrick, piano, and Marcus Thompson, viola.

Friday, September 26:

11am, Killian Court--Investiture of Dr. Paul Edward Gray as 14th President of MIT and inaugural address.

8pm, Rm 26-100-New York Times columnist Russell Baker reading from his autobiography

Saturday, September 27:

8: 30pm, Sala de Puerto Rico and Lobdell--Inaugural Ball with music by Tiffany and

Seminars & Lectures

Wednesday, September 24

Aspects of Macromolecular Transport Across the Intestine of Developing Animals*... Dr. John Udall, Ph.D., M.D., assistant pediatrician, Massachusetts General Hospital. Clinical Research Center Seminar, 9am, Rm E17-415.

Special Meeting for Applicants to Medical School*--Sponsored by the Harvard University-MIT Division of Health Sciences and Technology, noon, Rm 66-160.

Application of Quasielastic Light Scattering to Biophysical Problems*.-Prof S.H. Chen, nuclear engineering. Applied Radiation Seminar, 4pm, Rm 24-115. Good food. Everyone welcome.

Hormonally Regulated Protein-Phosphorylation of RAT PC 12 Pheochromocy toma Cells*--Dr. C. Richter-Landsberg, Stanford University Medical School. Program in Neural and Endocrine Regulation, Nutrition Department Seminar, 4pm, Rm 66-168.

New Phosphaneborane Chemistry *-- Prof Dr. Hubert Schmidbaur, Anorganisch-Chemisches Institut der Technischen Universitat Munchen. Arthur D. Little Lectures, Department of Chemistry, 4pm, Rm 2-190.

Shear Thinning and Flastic Effects in Die Entry* - D. Boger, Monash University Australia. Polymer Seminar Series, 4pm, Rm 66-110. Coffee served at 3: 30pm. For further information call Prof R.C. Armstrong x3-4581.

Recent Progress in Regional Modelling for Ocean Dynamics*--Dr. D. Haidvogel, W.H.O.I. Seminar on Applied Mathematics and Numerical Analysis, 4pm, Rm 2-338. Refreshments served at 3:30pm.

A Newtonian Development of the Schroedinger Equation*-- Prof David Frisch, Undergraduate Physics Colloquium, 4: 15pm, Rm 4-339. Social hour follows

Overview of Fusion Research at MIT*--Prof Ronald Davidson, Undergraduate Physics Colloquium, 4: 15pm, Rm 4-339. Social hour follows.

The Iliad of Homer*--H. Reiche, Masterpieces of Western Literature, a lecture series sponsored by The Literature Section, Department of Humanities, 7pm, Rm 4-149.

How to Study at MIT** -- Seminar series given by upperclass and graduate students. Efficient studying, time management, study environment, concentration, identify ing goals, setting priorities, 7pm, Rm 1-136.

How to Study at MIT** -- Getting the most out of classes, preparation, note-taking, review, 8pm, Rm 1-136.

Thursday, September 25

An Exploratory Study of Complexity in Axiomatic of Design*.- David Wilson, doctoral thesis presentation, Department of Mechanical Engineering, 2pm, Rm 35-520.

The Changing Structure of Short-Haul Air Transportation*-- Alan Stephen, vice president-operations, Commuter Airline Association of America, Washington, D.C. Flight Transportation Laboratory Seminar, 2-3: 30pm, Rm 37-232. Free Discussion of problems and opportunities confronting commuter airlines as a direct consequence of Federal Government deregulation policies.

Implications of Modern Theories of Motor Control for Design of Powered Arm Prostheses*-Neville Hogan, assistant professor, mechanical engineering. Seminar on Rehabilitation Engineering Research and Practice, 4-5: 30pm, Rm 1-114.

The Unexpected Role of Phosphorus Ylides in Inorganic and Organometallic Chemistry*--Prof Dr. Hubert Schmidbaur, Anorganisch-Chemisches Insitut der Technischen Universitat Munchen. Arthur D. Little Lectures, Department of Chemistry, 4pm, Rm 4-370.

Probability Theory with Fuzzy and Fuzzy Sets*--John F. Buoncristiani, Statistics Seminar, 4pm, Rm 2-338. Refreshments at 3: 30pm, Rm 2-349.

Zero Group Velocity Instability and Blocking*--Lee-Or Merkine, Technion-Israel Institute of Technology. Department of Meteorology and Physical Oceanography Seminar, 4pm, Rm 54-915. Refreshments served.

Psychology of War*--Disarmament Study Group presentation, 5: 30-pm, Rm 26-217.

Special Problems in Environmental Art: The Artists Speak**--Presentation by Aldo Tambellini, 8pm, C.A.V.S.

Friday, September 26

Electrically Conducting Polymers: Characterization and Chemical Modification of Polyacetylene*--Prof G.E. Wnek, materials science and engineering. Materials Science and Engineering Polymeric Materials Group Seminar, 2-4pm, Rm 8-314.

High-Beta Experiment on ISX-b: A Theoretician's Account*-- Prof D.J. Sigmar, fusion energy division, Oak Ridge National Laboratory. Plasma Fusion Center Seminar, 3: 30pm, Rm NW14-2209. Coffee and cookies served.

The Future of the Newspaper in the Electronic Age* -- Anthony Smith, director, British Film Institute. Research Program on Communications Policy, 4-6pm, Rm

Subsong in Birds: Its Role in Vocal Learning*--Prof Peter Marler, Field Research Center for Ecology & Ethology, The Rockefeller University. Psychology Colloquium, 4: 30pm, Rm E10-013. Coffee at 4: 15pm.

Toxic Wastes: A Hidden Legacy*--Prof Ken Geiser, planning, Tufts University. Lecture on toxic wastes, particularly in Woburn, Mass. SACC lecture, 8pm, Rm

Chemical Engineering Seminars*--Glenn Hong, Phase Equilibrium Predictions from the Peng-Robinson Equation, 2pm. Michael Serio, Secondary Reactions Tar in Coat Pyrolysis, 3pm. Rm 66-110.

Saturday, September 27

How to Study at MIT*--Seminar series presented by upperclass and graduate students, preparing assignments, problem solving, paper-writing, 10am, Rm 1-136.

How to Study at MIT*--Efficient test-taking skills, preparing for exams, taking exams, 10: 45am, Rm 1-136.

How to Study at MIT* -- Resources, getting help!, 11: 30am, Rm 1-136.

How to Study at MIT*--Getting the most out of classes, preparation, note-taking, review, 9pm, Random Hall. Refreshments served 8:30-9pm.

Monday, September 29

Values and Markets in Higher Education* -- Prof Martin A. Trow, Graduate School of Public Policy and director, Center for Studies in Higher Education, University of California, Berkeley. DSRE Seminar, noon-2pm, Rm 20C-117.

Eniwetok--History and Status*--LTC. W. Mcgee and Tom Jeffers, Defense Nuclear Agency. Sponsored by the American Nuclear Society, Student Branch. Nuclear Engineering Seminar, 3pm, Rm NW12-222. Coffee and doughnuts served.

Approximate Analytic Solution of a Model of Biological Immune Responses Incompanies of the Control of the Contr porating Delay*-Andrew Fowler, instructor, applied mathematic. Applied Mathematics Colloquium, 4pm, Rm 2-338. Refreshments at 3: 30pm, Rm 2-349. Diarrhea and Malnutrition .- Dr. Lincoln Chen, International Health, Harvard

School of Public Health. Sponsored by the Internation Food and Nutrition Policy Program (IFNP) Seminar, 4pm, Rm 16-310.

Ocean Wave Measurements by Radar Altimeter* -- Dr. Norden E. Huang, NASA, Wallops Flight Center, Virginia. Water Resources and Environmental Engineer ing Seminar, 4-5pm, Rm 48-316.

Sea Grant Seminar: The London Centre for Marine Technology .- Dr. Stephen R. Montgomery, research fellow, mechanical engineering, will describe the Centre's objectives and current offshore design and construction projects, 4pm, Rm E38-302. Refreshments at 3:30pm.

A Theoretical Model for the Dispersion of Negatively Buoyant Vapor Clouds*-Jacob Rosenzweig, research assistant, Mechanical Engineering. Fluid Mechanics Seminar, 4-5pm, Rm 5-234.

Tuesday, September 30

Modelling Turbulence in Ocean Surface Layer Using Altimeter Data*--Dr. Norden E. Huang, NASA, Wallops Flight Center, Virginia. Water Resources and Environmental Engineering Seminar, Ilam-noon, Rm 48-316.

MOS Semiconductor Memory Technology: The View From Texas Instruments* Dr. Mohan Rao, Texas Instruments Fellow MOS Memory Division, Texas Instruments, Inc., Houston, Texas. Discussion of the various features and generations of dynamic RAMS, static RAMs and APROMs. TI-59 had calculator will be given away as a door prize. Sponsored by the Industrial Liaison Office, 7: 15pm, Rm 10-105. Refreshments served at 6:45pm.

Towards an RNA Polymerase Model*-- Dr. Leslie E. Orgel, Chemistry, University of California, La Jolla, California. Biology Colloquium, 4:30pm, Rm 6-120. Coffee served 4pm, Vestibule, 5th, Bldg 56.

Quasars and the X-Ray Background*.-Dr. Harvey D. Tananbaum, Smithsonian Astrophysical Observatory. Astrophysics Colloquium, 4: 15pm, Rm 37-252. Coffee

Rydberg Atoms in Strong Static Fields*--Myron L. Zimmerman, Seminar on Modern Optics and Spectroscopy, Regional Laser Center, MIT Spectroscopy Laboratory and Research Laboratory of Electronics, Il-noon, Rm 37-252. Coffee served at

GaAs Integrated Circuits for Ultra High Speed LSI/VLSI*-Richard C. Eden, Rockwell International, VLSI Seminar, 4pm, Rm 16-310.

Trenched Rotor Tests on the Cambridge Oxford Rig*--Mr. J. Anderson, aeronautics and astronautics. Gas Turbine and Plasma Dynamics Laboratory, Aeronautics and Astronautics Weekly Seminar, 4:15pm, Rm 31-161. Refreshments at 4pm.

Wednesday, October 1

Picosecond Pulses and Solitons in Optical Fibers*--L.F. Mollenauer, Bell Laboratories. Electrical Engineering and Computer Science and RLE Seminar Series on Optics and Quantum Electronics, Il-noon, Rm 36-428.

Lower Hybrid Wave Experiments on Act-1*-- Dr. King-Lap Wong, senior experimental research scientist, Princeton Plasma Physics Laboratory. Plasma Fusion Seminar, 3pm, Rm NW14-2209. Refreshments served

The Challenge of New Markets and International Opportunities*.-Kingston Fletcher, International Vice President, The Procter & Gamble Co. International Students Career Seminar, 3: 30pm, Rm 9-150.

Computational Fluid Dynamics and Laser Fusion*-- Dr. Robert McCrory, Laboratory for Laser Energetics, University of Rochester. Seminar on Applied Mathe-Page 4, Tech Talk, September 24, 1980 date to the second second numerical Analysis, 4pm; Rm 2-338. Refreshments at 3:30pm.

Gabaculine Enhances Striatal Turnover of Dopamine*--Dr. B. Glaeser, Program in Neural and Endocrine Regulation, Nutrition Department Seminar, 4pm, Rm

Collective Phenomena at Different Length Scales* -- Prof Nihat Berker, Undergraduate Physics Colloquium, 4: 15pm, Rm 4-339. Social hour follow

Between Photographs*-Alen MacWeeney, Creative Photography Laboratory Seminar, 4: 30pm, 120 Mass Ave., 3rd Floor, Camb., Mass. Free.

How to Study at MIT** -- Seminars presented by upperclass and graduate students. Preparing assignments, problem-solving, paper-writing, 7pm, Rm 1-136.

Sophocles' Oedipus Rex*--P.S. Donaldson, Masterpieces of Western Literature, a lecture series sponsored by The Literature Section, Department of Humanities, 7pm, Rm 4-149.

Hope is Not a Method*--Women and Health, a series of lectures and discussions, film and discussion on contraception with Barbara Merrifield, medical department, 7:15pm, Burton House

How to Study at MIT**--Efficient test-taking skills, preparing for exams, taking exams, 7:45pm, Rm 1-136.

How to Study at MIT**--Resources, getting help!, 8:30pm, Rm 1-136.

Thursday, October 2

The Dating Game with a Tandem Electrostatic Accelerator*-- Prof H.E. Gove. University of Rochester. Physics Colloquium, 4pm, Rm 26-100. Tea served 3: 30pm,

Design and Fabrication of a Myoelectrictrically-Controlled Arm Prosthesis: Lecture and Demonstration*--Wally Williams, project director of Mechanical Development, Liberty Mutual Insurance Company, Hopkinton. Seminar on Rehabilitation Engineering Research and Practice, 4-5: 30pm, Rm 1-114.

Rigor, Rondomness and the Conduct of Operations Research*--David M. Bood man, vice president, Arthur D. Little, Inc. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies will be served after the seminar.

Waves, Currents and Langmuir Circulations*--Jerry Smith, postdoctoral associate and E. Mollo-Christensen. Department of Meteorology and Physical Oceano graphy Seminar, 4pm, Rm 54-915. Refreshments served:

nen's Issues in the 1980 Election*.-Prof Patricia Hanratty, political science, Holy Cross College. A talk followed by discussion on issues concerning women in the upcoming election, 4-6pm, Rm 3-310.

A Psychiatric Model Towards Ending the Arms Race*--Dr. Henry Abraham, physicians for social responsibility. Disarmament Study Group Seminar, 5pm-7pm,

Shakespeare and Brrecht in Easts Germany*--Heinz--Uwe, Director of the Institute for Theater Directing in East Berlin. Foreign Languages and Literatures, Department of Humanities Seminar, 7: 30pm, Rm 10-105. Refreshments served.

Special Problems in Environmental Art: The Artists Speak*--Presentations by Christopher Janney and Mark Mendel, 8pm, C.A.V.S.

Friday, October 3

South Africa: Is It Really Changing? *-- Percy Quboza, editor, Johannesburg Post; editor in residence, Washington Star, African Luncheon Seminar, Center for International Studies Seminar, 12: 45-2pm, Rm E38-762, 292 Main Street, Cambridge.

Economics of Offshore Production Systems**.-H. Bazerghi, nuclear engineering. Graduate Seminar in Energy Assessment, 1-2:30pm, Rm 24-112.

Molecular Motions in Solid Polymers*--Dr. Albert F. Yee, Polymer Physics Unit, General Electric Corporate Research and Development Center. Materials Science and Engineering Polymeric Materials Group Seminar, 2-4pm, Rm 8-314.

Economic Performance in Transport Systems*--Prof Richard A. Rice, Carnegle-Mellon University. Mechanical Engineering Seminars, 3pm, Rm 3-133.

Chemical Engineering Seminar*--Raymond Cwiklinski, title to be announced, 2pm. Guest speaker: Dr. Ronald Thomas, Xerox Research Center, The Applica-tions of Surface Science in Materials Research, 3pm, Rm 66-110.

Community Meetings

Wives' Group**--Wed, Sept 24, tour of MIT, 3-5pm, Mezzanine Lounge, Student Center. Babysitting provided Rm 473, Student Center. All women in the community

Women's Get Together**.-Come meet new and old graduate and undergraduate students. Thurs, Sept 25, 4-6pm, 3-310.

Speed Chess Tournament ** -- Sponsored by the Chess Club. \$3 entry fee with all money returned as prizes. Sat, Sept 27, 1:30pm, Rm 491, Student Center. Information: Brad 494-0263 or x3-7554. Refreshments served.

The Older Teenagers--Is There Life Beyond Pizza*--Judith Wurtman, Ph.D. research associate, Nutrition and Food Science Department. Mon, Sept 29, noon-1pm with an additional half hour for questions, Rm 8-314.

Medical Advisory Board First Meeting '80-81**-- Mon, Sept 29, noon, 3rd floor conference room, Infirmary W5. For information call x3-1316.

Bioelectrical Engineering Open House**.-Talks by faculty members and tours of laboratories. Wed, Oct 1, 3-6pm, Rm 36-428. Refreshments served.

Wives' Group**--Wed, Oct 1, "Program on Nutrition", presented by Nancy Stutzman, Middlesex County Extension Services, 3-5pm, West Lounge, Student Center. Babysitting provided, Rm 473, Student Center. All women in the community cor dially invited.

sor will speak. Wed, Oct 1, 5pm, Rm 10-105. Refreshments served. For information call Allison 524-4886.

Society of Women Engineers Meeting** -- Prof Sheila Widnall, SWE Faculty Advi-

Registration Still Open for Following Courses** -- Sponsored by the Student Art Association. Drawing from still life and the model; painting; Tues night-open life drawing; parent-tobbler art; photo; calligraphy; Chinese calligraphy and brush painting; and stained glass, 1-5pm, Rm 429 Student Center.

Alcohol Support Group**--Sponsored by the Personal Assistance Program, Medical Department. 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. Coffee and doughnuts served.

Social Events

Prime Rib Night ***-- Prime rib, baked potato, salad bar, glass of wine, \$8.95 tax Wed, Sept 24. For reservations x3-4896.

Potluck Dinner*--Sponsored by the Gays at MIT. Enjoy an evening of dinner and conversation. Sun, Sept 28, 6pm, Rm 50-306. Admission: \$1.50 or bring food. Information: call x3-5440.

Muddy Charles Pub .- Open Monday through Friday, 11: 30am-2pm and 4-8pm. Located on the first floor of Walker, facing the Charles. Beer, wine and snacks

Faculty Club***--Open Monday through Friday. Luncheon served noon-2pm; dinner served 5:30-8pm. Happy hour: Monday through Thursday, 4:30-6:30pm.

Movies

Jules et Jim**--Department of Humanities Film Series. Wed, Sept 24, 7pm, Rm 66-110. Free.

Das Brot des Backers**--Sponsored by the Foreign Languages and Literatures Section, German film by Erwin Keusch. Thurs, Sept 25, 3: 30pm, Rm 16-142,

eaking Away**-LSC Movie. Fri, Sept 26, 7 & 9:30pm, Kresge Auditorium. dmission: \$1, MIT or Wellesley ID required.

GETSU*--LSC Classic Films. Fri, Sept 26, 7:30pm, Rm 10-250. Admission: \$1.

seing There**-LSC Movie. Sat, Sept 27, 7 & 10pm, Rm 26-100. Admission: \$1, MIT or

Charonda**--Sponsored by Sangam. Hinoli film with English subtitles, starring mol Palekar. Sun, Sept 28 1: 30pm, Kresge Auditorium. Admission: \$1.

he Magic Flute**--LSC Movie. Sun. Sept 28, 6: 30 & 9: 30pm, Rm 26-100. Admission:

Chinese Film: Gone as the River*.-Sponsored by the Chinese Students' Club. China n the thirties and forties -- the story of a romance with English subtitles. Sun, Sept 28, 1-5pm, Rm 26-100. Admission: \$2. Tickets at the door. Refreshments served.

acque Preveit**--Department of Humanities Film Series. French w/English sub itles. Tues, Sept 30, 7pm, Rm 6-120. Free.

n the Town**--LSC Classic Films. Fri, Oct 3, 7: 30pm, Rm 10-250. Admission: \$1.

e After Time **-- LSC Movie. Fri, Oct 3, 7 & 10pm, Rm 26-100. Admission: \$1 MIT or Wellesley ID.

the Goodbye Girl**--LSC Movie. Sat, Oct 4, 7 & 9: 30pm, Rm 26-100. Admission: \$1 MIT or Wellesley ID.

ne French Connection**--LSC Movie. Sun, Oct 5, 6 & 9:30pm, Rm 26-100. Admis-

Exhibits

rt Exhibition and Sale*--Sponsored by the Student Art Association. Pottery, phoography, drawing, paintings. On view Thur, Sept 25, 1-4:30pm, Lobby 10. For

aintings and Etchings by Ruth Boyce Milne and Photographs by Barry M. oyce*--On view daily, Mon-Fri, Faculty Club, October 1 through October 31

listorical Collections Permanent Collections*-- A unique collection of scientific nstruments, architectural drawings, portraits, photographs and memorabilia hat illustrates M.I.T.'s history and development in 19th century technology. On ew Mon-Fri, 9am-5pm, 265 Mass. Ave., 2nd floor, Cambridge. Information call

istorical Collections*--Solar Energy, Bldg 8, main corridor, Samuel Cate Presott, main corridor, Bldg 4. Rogers Building Exhibit, Bldg 4. Norbert Wiener, and arl Taylor Compton, Bldg 4. Laboratory for Physical Chemistry, Bldg 6. Cominity Service Fund, main corridor Bldg 4. Ellen Swallow Richards, Bldg 4. ociety Sigma XI, main corridor Bldg 8.

IT 1846-1980*--On view Mon-Fri, 9am-5pm, outside corridor, Margaret Hutchinn Compton Gallery. Information call Historical Collections x3-4444.

The Presidential Portraits*--On view through October 1. In a formal gallery setting, portraits of all of the presidents of MIT are exhibited in this permiere showing, which includes 15 oil portraits and eight busts. Mon-Fri, 9am-5pm, Rm 10-150, Margaret Hutchinson Compton Gallery. Free. Information: call Historical Collec-

Manuel Alvarez Brave/Alen MacWeeney*--Two-person/two country show will offer a metaphorical representation of Bravo's Mexico and MacWeeney's Ireland. On view through Oct 15, Monday-Friday, 9am-10pm; Sat. 10am-6pm; 6pm, Creative Photography Gallery, 120 Mass Ave, 3rd floor, Camb, Mass. Free For information call x3-4424.

The Past as Prologue: Planning & Building at MIT*-On view through Oct 5, 10am-4pm; Wed evenings, 6-9pm, 160 Memorial Drive, Camb, Mass, Hayden Corridor Gallery. Free. For information call x3-4400.

List and Stratton Student Loan Collections* -- On view through Sept 26, 10am-4pm; Wed evenings, 6-9pm, 160 Memorial Drive, Camb, Mass, Hayden Gallery. Free For information call x3-4400.

New Records*--Music Library, Rm 14E-109. Exhibit of record jackets of recent Library purchases.

The Outdoor Collection* -- There are many fine pieces of contemporary sculpture displayed on the MIT campus, including works by Alexander Calder, Louise Nevelson, Pablo Picasso, Henry Moore, Tony Smith, Jacques Lipschitz, Isaac Witkin, and Michael Heizer. For information and guides to the campus, call the Information Center x3-4795

Science Fiction Society*--Come and visit the world's largest leading science fiction library. Hours posted on door, Rm W20-421.

Balloons and Airships*--Institute Archives and Special Collections, Rm 14N-118. Selections from the Vail collection of prints of balloons, airships and flying machines.

Strobe Alley*.-High speed photographs by Harold E. Edgerton, Institute Professor and Professor of Electical Measurement, Emeritus, Bldg 4, 4th floor,

Hart Nautical Museum* -- Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

Wellesley Events

Wellesley College Museum*--Continuing exhibitions include: "Faces of the Twentieth Century"; "The American Painter as Printmaker: 1750-1950"; "Paintings, Drawings and Sculpture from the Wellesley College Collection". On view Mon-Sat, l0am-5pm; Sun, 2-5pm; weekly gallery talks Sundays at 3pm. Wellesley College, Wellesley, Mass. For information call 235-0320, ext 314.

Music

Guest Artist Series: The Empire Brass Quintet*--Fri, October 3, 8pm, Kresge Auditorium, 8pm. Free.

"Seraphim" -- Presents an evening of chamber music for violin, cello and harpsichord. Sat, October 4, 8pm, Kresge Auditorium. Free.

Theater

Lecture and Slides: Theatre in China* -- Dr. Mark Hall Amitin recently completed a tour of China, he will speak on the state of arts of contemporary Chinese and western theatre in China. Sponsored by the Chinese Students' Club and the Drama Program, Humanities Department. Sat, Sept 27, 1-3pm, Rm 10-250. Refreshments

Dance

MIT Dance Workshop**.-Directed by Beth Soll. Regular classes meet Mon and Wed, 3-5pm and Thurs, 1-3pm, T-Club Lounge, duPont Center.

Hatha Yoga--Japanese Zen Yoga*--Taught by Cynthia Friedman, small class in Indian and Japanese yoga with concertration on affirmation, creative visualiza-tion, relaxation and postures. Beginning Fri, Sept 26, 10:15am, location to be announced. Information: x3-4981, Mon-Thurs, 1-4pm

Cha-Cha Styling Workshop*--Sponsored by the Ballroom Dance Club, Sun, Sept 28, 1-2:30pm, Sala de Puerto Rico, Student Center. Admission: \$.75 non-members or \$.50 members. Information: x5-8586 or Tony x5-8158 Dorm.

Tango Workshop for Beginners*--Sponsored by the Ballroom Dance Club. An opportunity for beginners to learn. Sun, Sept 28, 3-5pm, Sala de Puerto Rico, Student Center. Admission: \$.50 members, \$.75 others. Information: x5-8586 or

Women's League Yoga Classes*--Starting dates, Mon, Sept 29, 7:15pm; intermediate, Mon, Sept 29, 5:45pm; lunchtime yoga, Thurs, Oct 2, 12:05-12:55pm, Rm 10-240. Information: I. Turchinetz 862-2613.

Sports

Home Schedule*--Wed, Sept 24: Field Hockey, Nichols, 3: 30pm; W Volleyball, Brandeis, 3pm; Thurs, Sept 25: M Tennis, Brandeis, 3pm; Fri, Sept 26: M Tennis, Maine, 4pm; Sat, Sept 27: Baseball, St. Anselm's (2), noon; W Sailing, Man-Labs Trophy, 9: 30am; Sun, Sept 28: W Sailing, Man-Labs Trophy, 9: 30am; Tues, Sept 30: Baseball, Mass. Bay Community, 3pm. Junior Varsity Volleyball vs Simmons

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, October 1 through Sunday, October 12 to Calendar Editor Rm 5-113, before noon, Friday, September 26.

Term Bills Pressing, So Fire Engine Must Be Sold

By CHARLES H. BALL Staff Writer

FOR SALE: '53 fire engine; 12 K; runs fine; pumps work. \$3,000 firm.

That ad, running in last week's Tech Talk, was placed by an MIT graduate student who finally achieved a lifelong ambition-owning a real fire en-gine-and is now looking for someone who perhaps had similar dreams.

William Daniel "Danny" Hillis II bought his fire engine a few months ago because, he said, "I've wanted one ever since I was a kid."

He has driven it to school virtually every day-attracting a certain amount of attention, as one might imagine—but now needs money for the new school year and is looking for a buyer.

"It makes a good commuting vehicle," said Danny, who lives in the Chinatown section of Boston, a few miles from the MIT campus."I get a lot of respect from traffic, and I can pretty much park it anywhere-at least for short periods-without worrying about get-ting a ticket."

Does that mean in front of hydrants, too?

"Oh, no, I wouldn't do that,"

Danny said.

Danny found his fire engine-a 500-gallon pumper-in Auburn, .H., after spotting an ad listing it for sale.

The town of Auburn sold him the 1953 pumper-manufactured by Edward Moody & Son, Inc., of Nashua, N.H., and mounted on a Ford truck chassis-for \$3,000.

"It's mechanically sound and everything works on it," Danny said, "and it's only gone 12,000 miles. I guess they don't have many fires in Auburn."

The vehicle, however, has had considerably more wear than the mileage would indicate, he added, because the motor had to be kept running at fires to power the pump. What gasoline mileage does he

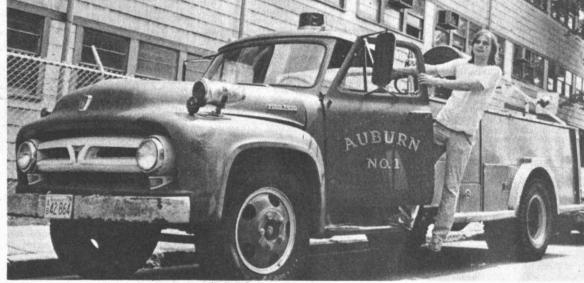
"Better than 10, worse than 15," he answered.

Danny had to remove the fire truck's flashing red light in order to pass inspection, but the apparatus is complete in most other

The main problem Danny has with the pumper is finding space to park it-it's about as long as a school bus-in the crowded Chinatown section. At MIT, the pumper usually can be seen parked on Vassar Street, near Main Street.

Danny, 23, a native of Baltimore, Md., received the SB degree in mathematics from MIT in 1978 and is a doctoral candidate in electrical engineering and computer science.

His unusual taste in vehicles is matched somewhat by his life-



Danny Hillis climbs aboard his fire truck. The red light atop the cab is usually kept inside the vehicle; it had to be removed to have the truck pass inspection. —Photo by Calvin Campbell

for "water fights."

He said he lives with "a bunch of people" in what he describes as "a giant, 4,000 square foot room," a loft converted to living quarters.

Danny is able to carry quite a few of his friends in the open back of the pumper.

He also takes advantage of some of the other special features of his acquisition.

When it comes time to wash the fire engine, for example, all he has to do is unreel the hose and use the water in the tank.

"With anyone else who owns a fire engine, of course," he replied.

Water Polo Team to Meet **National Competition**

taste of national competition when they meet UCLA at 5pm Thursday in Blodgett Pool on the Harvard campus. UCLA, runners-up in the NCAA championships last year, had a tournament cancelled in Arizona and then decided to arrange games with both MIT and Harvard before competing in a tournament at Brown this week-

"We're looking forward to playing UCLA," said MIT coach John Benedick. "They're the best in water polo and we're going to try and play our best against their fine

MIT, ranked third in New England the past three years, opened its season last Friday with an exciting 12-10 win over Harvard. Junior Dave Erickson led the way with four goals. Saturday, the Engineers face Bucknell and Washington & Lee at the Brown tourney...

MIT's soccer team opened its campaign losing two games to topranked New England squads Harvard (4-1) and defending national Div. III champion Babson (2-1). Senior Bill Uhle and freshman Mihai Manoliu had goals for the Engineers while goalie George

Kraynak stopped 24 shots in the two contests. MIT plays at Trinity this Satruday...

Senior Julie Neuringer scored all three goals Monday as the MIT women's field hockey team opened its season with a 3-1 win over Pine Manor. Coach Debbie Clum's squad hosts Nichols at 3:30pm this afternoon in Steinbrenner Stadi-

MIT's cross country team finished second in a triangular meet Saturday, beating WPI and losing to RPI. The Engineers had three runners in the top 10-Bob Collins (3rd), Pat Hamilton (4th), and Paul Neves (7th). Tech faces Coast Guard there this Saturday...

In sailing, MIT's men's squad finished sixth out of 11 teams in the Nevins Trophy at Kings Point. Dave Kuller (who finished only nine points out of first after 11 races) and Penn Edmonds were MIT's top skippers. Another MIT squad finished second among nine schools in the Dartmouth Invitational. Coach Hatch Brown's team is off to a fine start this fall-earlier this year, they finished second in two regattas at MIT and Harvard.

Sloan Fellows 50th Anniversary Planned

(Continued from page 1)

tor organizations from the US and around the world.

On Friday, Oct. 3, alumni will be greeted by Howard W. Johnson, chairman of the MIT Corporation, and hear from President Paul E. Gray about "New Directions at MIT."

Paul A. Samuelson, Institute Professor and professor of economics, will chair a panel discussion in the Friday morning session. Panel members will be Willard C. Butcher, president of the Chase Manhattan Bank and member of the Sloan School's Visiting Committee; Oliver C. Boileau, Jr., Sloan Fellow '64, and president of the General Dynamics Corporation; Robert F. Calman, Sloan Fellow '67, and vice chairman of the IU International Corporation; Wayne L. Horvitz, Sloan Fellow

'53, and director of the Federal Meidation and Conciliation Service; and William S. White, Jr., Sloan Fellow '58, chairman and chief executive officer of the American Electric Power Company, Inc.

Discussion groups to follow up on the panel's remarks will be led by MIT Professors Henry D. Jacoby, Robert B. McKersie, Edward B. Roberts, Richard D. Robinson and Lester C. Thurow.

At 3:30pm, "Discovering the Role of Face-to-Face Skills in Implementing Change" will be the topic of a major address by Edgar H. Schein, Sloan Fellows Professor of Management. Professor Schein, renowned for his work in human resource management and career development, will draw on and summarize his experience as a teacher and researcher, as well as consultant, to focus on the im-

portance of face-to-face relations in realizing change. In the context of the convocation's theme, Professor Schein's talk will address the issue not of what the challenges are, but how they can be met.

On Saturday, Oct. 4, alumni and spouses will attend at the school three seminars of their choice, among many offered by the management faculty. The topics will include The Chinese Conection -Entry Strategies of US Business; Regulatory Reform: Myth, Message or Meaningful Change; Inflation-Confusion, Causes and Control; Trends in Profitability and Capital Costs in the US Economy; and Strategic Management and Risk/Return Questions.

The celebration by alumni and spouses will also include an anniversary reception at the Copley Plaza Hotel on Friday evening, Oct. 3rd.

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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-ll3, and presenting Institute identification. Ads may be telephoned to x3-3270 or mailed to Rm 5-ll3. Deadline is noon Friday before publication.

For Sale, Etc.

Stereo & sprks, \$100; W 10-spd \$80; couch \$38; rug \$14; bed \$20; coffee tble, \$15; assort chrs.

3 bikes for sale.-Schwinn 2 spd; Raleigh 3 spd & other 1 spd, all nd work, \$10 ea. Dave 577-3422 days.

Emerald w/diamonds engagement ring, \$350; old rabbits fur coat, gd cond, prc nego. Call 661-0578 before 6pm.

Yamaha FG-200 stl string guitar w/case, exc cond, \$190. Joel x3-4533.

Dble bed matt & box sprng, \$25. Call 924-1957.

Polaroid camera, hrdly usd, less than yr old, "One Step" mod, \$35 or best. Sharrhan x3-4379.

Nw W fur coat, \$35; stand lamp; 2 sets of lamps, 6 way, \$15; bean bag qu sz, \$5; hooded hair drier, \$2; iron, \$5; childs bike 16", \$10. Call 876-4931.

K set & LR furn incl: slp sofa; match couch & chr; coffee tble; lamps; wall unit; vy gd cond, best. Call 646-9261 aft 7pm.

Convert couch, slps 2, qu sz slip covers incl, \$125. Call 325-8742 eves.

Fuji Royal M bike, 12 spd, 25" frme, blue, 6 mos old, customized tools also for sale, \$300 or best. Call Deborah x3-4492.

Recliner, br & gold check also gr couch w/slate top match end tble, best. Call 924-0264.

Vega wheels, perf for snows to avoid fall & spring change over, \$10 pr. Kim x7418 Linci.

Pr LR chrs; tble; lamp; oil painting. Call x3-6150 or 696-6295.

Cylinders & rack for sm gas welding outfit, nw \$170 ask \$130. Hank x3-2237.

Black vnyl Castro convert couch, gd cond, \$300 firm; G78-15 whitewall tire, \$15; F78-14 tire w/rim, \$25; D78-14 rad tire w/rim, \$10; pr C78-14 snows, \$20; pr F78-14 snows w/rims, \$40. Call J. May x8-2843 Draper or 492-1403.

Royal standard typewrter port w/carry case, exc cond. \$25. Marie x7423 Lincl.

Vnyl love seat & oversized chr, \$200, exc cond; bkshelf \$10. Ting x3-5851 or 628-2556 aft 5pm.

Royal standard typewrter, port w/carry case, exc cond, \$25; Rosemount ski boots w/cushions, sz 8, exc cond, \$25 or best. Marie x7423 Lincl.

Gd Columbian 20'' boys bike, gd cond, tires gd, ask \$12, customer pick-up. Charles x443 Linci or

Qu sz hide away beds, '78 Boston, \$225. Call

247-1438 aft 6pm.

Brnd nw carpet l2x4 1/2', dk br, deep shag, \$36.

Tom x3-3578.

3x1' willow logs, \$.5 ea. Call x8256 Lincl Leonard

Dual 1019 trntble, \$25. Call Leslie x3-4625.

W shoes sz 9M, lk nw, pr Bass russet dress shoes; Nike beige running shoes, \$15 ea pr or \$25 both. Call Sean x3-5792 AM or 876-7347 eves.

Wd firm dbi bed w/matt & box srng, \$75; Parkway nylon II wetsuit, almst nw, \$120; 24mm Pentax wide angle lens, brnd nw, \$125. Steve x3-5310.

Sofa, gold, \$60: swivel chr. \$35: dresser, \$12; table dron legs, \$15; bar chr, \$14; shives, cinder blocks & boards, \$12; end tble, \$4. Call 277-4816

Pr 60 series 15" rad tires, brnd nw, \$109, sell \$100. Call x498 Lincl.

HP-67 Hewlett Packard deluxe handheld programmable calculator w/built-in mag card reader, etc, ask \$250, \$320 at Coop. Neil 661-7681.

M 21" 10 spd Columbia bike, 6 yrs old, completely record w/new deraillers & brks, ask \$150. Call John x5832 Lincl.

c 1920 inlaid light wd mah BR set, dble bed, dresser w/beveled glass minor, huge hope chest, armoire w/full length beveled glass mirror, super cond, \$600 or best. Call Pat x3-1648.

Qu sz waterbed, airfrme, platform, pedestal, htr, silk sheets, yr old, under wrrnty, insured, exc cond, best. Call x5-8483 Dorm, 7-9pm.

9" South Bend lathe w/bench & attachements

plus Drills & Reamers, gd cond, \$2000. Call x3-2720.

Pr Delta radial snows ER78-14, \$35; Pr General rads T195/75R 14, \$20; pr Kelley Springfield C78-14, \$20. Craig x7803 Lincl.

Rossignol Jr skils w/Salomon bindings 140 cm, lk nw, \$40; x-country skiis 150 cm w/bindings & poles, \$15; white cab w/doors, 18x4|x1/2x27x1/2, suitable for hifi, etc, \$35; K wall cab, \$10-35; 6 house drs, 30x6'5', \$10 ea. Call x3-6085.

Sm radio AM/FM GE \$20; dishes; glasses; pots & pans, \$10; desk lamp, \$5. Pls call Traudel x3-6726.

JAF Dura Shake clapboard siding, 3/8" thick x9 3/4x48", Harvest red, 24 sz equals 2400 sq ft. Dave x3-2546.

Zenith 21" port TV, plus stand, A-1 cond; TV FM rabbit ears in org carton; Rōyal typewrter stand; GE toaster white, nw; med sz Turkish towels, 2 for \$1; dinner plates, other dishes, planters, Call 787-1457.

Stereo Pioneer recvr man trntable, \$350. Helen x3-2334 aft 12

Full sz matt & box sprng, fair cond, \$30. Call 933,1561 eves

Swift 7x35 binoculars w/case, \$40; extra-firm full sz bed w/frme, gd cond, \$50; Sigma Folk guitar w/rose wood back & sides, \$90; pr mod lounge chrs, \$20 ea. Call x3-3821 or 491-3762 eves.

Bunk beds metal frme w/wd platform may be usd separately \$75. Rae x3-1734.

Studio couch, \$350; Italian style chandelier w/blue & white flowers, \$35; golf bag cover, \$15; golf clubs, bag & cart \$100; complete Ludwig drumset \$800; "75 Vega wg, best offer, "77 Chevy pick-up w/cap, best offer. Call x8-1418 or 862-5955.

Couch w/blue slip cover, \$20; wood bed frme, tw sz \$10; exercise bike, \$15. X3-1996.

6x10 steel garden shed, best. Wayne x3-7216.

2 sets of wall mounted shelf units, incl standards, brackets & unfinished shelves, set of 4 shelves, \$20, set of \$3-15. Call 646-0879 eves or wkends.

Convert sofa, \$125; 10x12 carpet \$50; blocks & boards, \$10; BIC 920 trntble, \$35; lamps, \$2 ea; W bike, nw, \$60; color TV, lk nw, \$175; elect fan \$10; blender multi-spd, \$10; mixer \$8; mirror, \$5; shopping cart \$5; port crib, \$6; high chr; linen; K utensils, misc hsehold items. Call 661-6063.

A/C Westinghse, 5000BTU, 7.2 EER, less than 10 hrs usd, \$85 or best. David 354-6403 aft 5pm.

Pr snows H78-15, studded, Firestone Town &

27" 10 spd bike, yr old, \$50. Luigi x3-4765.

Country, \$20 ea. x8-1365 Draper.

10 spd Schwinn, 24" frme, center pull brks, quick release hubs, nw Suntour deraillers & freewhl, Kryptonite KY lock, tools, \$125 or best. Bill 623-5073.

Desk 34x42" glass top, 1 drawer missing, \$30. Peter x188-2810 Woodshole.

Pitan II accordion 120 bass, exc cond. Call

Selectric II/O typewrtr, currently interfaced to a microcomputer, \$300. John x431 Lincl.

GE stereo phonograph w/2 spkrs, fine cond, compact, has gd quality of sound, \$50. Lee 354-6740 eves.

2 arm chrs, \$8-15; 2 blankets, dble sz \$5-7.50; stroller, \$35; sngl bed & matt, \$40. Call 494-8424 or x3-3211.

Beckett oil burner, 1 1/2 yrs old, \$100. Randy x3-7210.

Sngle matt, box sprng, \$40; 1/4 cord firewood, \$45, will deliver. Call 484-7490 or x3-2580.

Refrig 2 dr, Whirlpool, copper color, frost-free A1 cond, \$400. Call Carol x3-4765.

Vehicles

'61 Nash Metropolitan, 140K, gd mech cond, no rust, \$950 or best. Call 494-0460 eves.

'66 Jeep exc cond, navy blue w/white canvas top, strereo & Craig spkrs, just painted and in top cond, \$1895. Judi 9-1 M-F x3-2686.

'67 Dodge, 4 dr wg, gd cond, runs well, \$300. Johnson x3-2952.

'68 VW Squarebk, nw paint, nw br, starter, gen, reblt eng, gd gas mlg, ask \$600. Call x498 Lincl or 391-6706 am.

'70 VW Bug, gd rblt eng, AM/FM, runs well, bdy shot, \$300. Call x3-7727 wkdays, 436-7177 eves.

'71 Cadillac flly loaded runs ok, \$800 or best.

'71 Mercedes 220, 4 dr sedan, org owner, 65K, nr prefect in & out, \$4500 or best. Ann x3-6416 or (1) 834-7593.

'71 Pinto, 1600cc, 4 spd, runs well, some rust, \$500 or best. Call 933-9538 or x3-5952.

'72 Ply st wg, V8, AC, PS & PB, 80K, mny new parts, gd cond, ask \$400. Call 494-9020.

'72 Pontiac LeMans Delux, 4 dr hardtop w/PS & PB, A/C, exc cond, \$800 or best. Ken Haskell x8-1609 Draper or 862-8541 aft 6pm.

'73 Montego MX reg gas, A/C, 4 dr, auto & radio, exterior gd, mech exc, 82K, \$895 or best. Irv x5781 Lincl or 862-7041.

'74 Datsun 710 wg, 4 spd, lks gd, runs great, 35mpg, \$2400. Call x3-5041 or 254-4069 aft 6pm.

'74 For Maverick 2 dr, hdtop, PS & bucket seats, gd tires, & set snows, nw mech work, approx \$1400. Joe x8-4424 Draper.

'75 Trumiph Spitfire conv w/removable hdtop, AM/FM, best offer. John x8-3608 Draper.

'75 VW Bus, exc cond, \$3500, 47K, nw motor installed at 24K, under wrrnty. Call 332-7482.

'76 Camaro silver gray, 46K, no rust, exc cond, PS & PB, lv the country, \$3000. Spiro x3-5062 or 547-2128.

'76 Honda Civic hatchback, auto trans, org owner, gd cond, reg gas, 28city, 37 highway, nw tires, new brks, garaged, \$2200; 4.12' Honda Civic blackwall tires, gd cond, all 4 for \$35. Denise x3-5792.

'76 Fiat 128, AM/FM 8 track, stereo, exc cond, no rust, '76 Grad Torino, blue, 61K, vy gd driving cond & exterior, offer \$1800. Call x3-5720 or 494-8525

'76 22' Lark motor home, Dodge Chassis, low mig, slps 5, filly equipped, 1 owner, mst see. Call 322-8303 anytime ask for Ed.

'76 Pinto, 3 dr Runabout, 41K org mi, mint cond, no rust or dents, custom paint w stripes, wire wheels, nw ww tires plus snows, Concord AM/FM csstt stereo w/Jensen Coaxials, dual air horns, tack sport mirrors, anti-theft alarm, digital clock, auto trans, a steal at \$2650. Dick x3-6351 or 484-0770 eves.

'76 Opel 50K gd cond, \$2450; '73 Olds Delta 88, 69K mi, A/C, snows, best. Cynthia 625-1039 or x3-2624.

'76 TR7 37K, A/C, stereo-csstt, \$3300. Call 484-4835.

'76 Volare Premier wg, roof rack tow hitch, AM/FM, snows on rims, 47K, exc cond, \$2875. Call H. Miller x3-2837.

'78 Chevette, 4 dr hatchbk, auto, nw brks, 35K, ave 29 mpg, exc cond, ask \$3700. Call 489-0585.

'79 VW Rabbit Deluxe exc cond, 19,500mi, nd money for school, \$5400 or best. Bruce 494-8935.

'80 Yamaha 750, mostly black, exc cond, low prc. Paula x432 Lincl.

Housing

Bedford Ig mod 8 rm hse for rent, wooded acres, 4 BR, 21/2B, fam rm 2 frpl, 2 car gar, avail Oct 15, \$795/mo. Call 275-8710 eyes.

Chelmsford, 6 rm ranch 1 1/2 B, lg fam rm, util & workrm, l car gar, screened porch, ww, frpl, mod eat-in K, on acre of land, \$625/mo plus ht & elect. Bea x5306/7.

For sale, vy sunny, Harvard Sq condo, formal DR, plant rm, working frpl, hardwd fls, many closets, 1BR, low maint charges, \$67,240. Call x3-7857.

SE Vermont, renting now for Fall & Winter, contemp ski chalet overlk West River Valley, completely furn, all mod cons, slps 6, \$250/wk. Call x3-7078 or 734-9187.

Studio 5th fi mod brick & stucco bldg, \$280 unht, quiet area North End conv to T. Call 665-3295.

Hse for sale 2 family, nr MIT. Call x3-1869 or 547-1887

Westwood for sale, brick ranch, 3BR, mint cond, move right in \$70's. Call 329-4420 bet 9am-5pm.

Vermont chalet, 2 master BR, 2 bunk rms, 8 beds, 1g deck, golf, hiking, tennis, skiing, etc, fall & winter wkends, wk or season. Judy x3-8032.

Animals

Mom & kitten B&W, spayed shots, litter trained, nd home. Call x3-2285.

Help! overcrowded cats nd gd homes, not enough rm, money or attention for all the cats; tiger 3 yr old F tabby; Soot yr old spayed F black w/chestnut highlights; Smoky yr old M, grey striped. If you can adopt an unhappy cat call Marion x3-4709 or 623-1221.

3 yr old part-airdale M dog free to loving home, well trained, gd w/children. x3-7729.

Lost and Found

Found Sept 18, West gar, eyeglasses. Call Bob

Lost: golden criterion digital watch & brn wallet w/O.W.S monogrammed on it. Oliver x5-6270 Dorm.

Wanted

Riders wanted to & from, Brkline 9 & 5pm Helen x3-2710.

Experienced cellist wanted for amateur string quartet. Heldi 431-1375.

Person to care for infant in Back Bay home salary commensurate w/exp refs preferred.

Bike & refrig. Call x5-6519 Dorm.

Ride needed for 2 mos, Nov 4 thru Jan 4, Central Sq area to 50 Ames St, 9-5pm, pay \$15/wk. Callx3-4492.

2 BSO tickets for Sept 25 concert. Ron x3-5923.

A/C in gd work cond, \$100-\$175. Call aft 7pm 247-1970.

Roommates

F 27 plus to shr 6 rm apt w/F artist, 2 dogs, prefer non-smoker, porch, garden, shr hse in Burlington 2 spaces avail \$200 & \$250/mo. Sheri x3-7310.

Carpools

Vanpool from Derry NH to Lincl, stop at Londonderry, Windham, Salem, Methuen, Lawrence Phil x7546 Lincl.

Start carpool Iv Norwood R/R station at 7:45am arrive 8:30am MIT Iv MIT 4:45pm, interested call Bill x3-2777.

Would lk to shr driving or expenses from Danvers Peabody area, 8 to 4:30pm. Lucille x3-2961.

Miscellaneous

Plan ahead put your thesis on a word processor, either learn the processor yourself or have it done for you. Call 491-6650.

Guitar instruction, classical, pop, jazz, finger picking, folk with pro reasonable rates, free trial lesson. Walter x3-5923 or 497-1461 eves.

Be good to your plano! experienced plano technician will tune, regulate, repair, dryer weather will cause planos to go flat, so call now. Margie x3-6763 or 738-7874

Pro quality thesis & manu, typing, including tech typing, reasonable rates. Margie x3-6763 or x3-4366.

Chimney sweep clean pro service, free chimney safety inspection. Call Ellen x3-2675.

Take electric bass & guitar lessons from experienced music grad, jazz, funk, rock, anything you want. Mike 491-8243 aft 3pm.

Moving, if you need small truck & driver at cheap rates call Joe 876-6436 eves whends.

Wl type thesis manu, term papers, etc, on IBM Correct. Themla x3-8139.

Typing IBM Select Correct thesis, term papers, resumes, etc. Angela x3-7173 9-5pm.

Carpentry work wanted plyrms, panel, cell-

ings, interior remodeling, porches, roofing & gutters, free estimates, vy reasonable rates. Norm Berube x3-5332, 8 to 4pm.

Parking Stickers

Note to parking sticker swappers: please remember to inform your supervisor and the Campus Patrol of the exchange you have made so that their records accurately relect your new parking area.

Have a 19 State St. parking sticker, will swap

Surplus Property

The following Excess Property is available for transfer through the Office Facilities Mangement System.

Case #605 Singer Printing calculator, mod Friden 1.54, S/N, #27468, MIT #164000004, gd cond. A.B. Dick Mimeograph machine; miscellaneous office equipment. The items may be inspected at the Equipment Exchange. Bldg NW30, 224 Albany St, bet 10am & lpm, Mon, Wed, & Fri.

Case #608 216 Auditorium chairs w/tablet arms, mfg. H.J. Harwood, gd cond, some recond. Items may be inspected at Rm E19-429, contact Earl C. Fuller x3-2776.

Case #612 Recordak microfilm sys including Lodestar reader-printer, Miracode control unit & 4 file consoles; items may be inspected at Room E20-130. Contact Gail Garfield x3-5788 Rm E10-238.

Case #613 BTV Engineering compact furnace, mod 3D220-2W-1WH-P2, MIT #809840006.

POSITIONS AVAILABLE

This list includes all nonacademic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Klosk in Building 7, outside the offices of the Special Assistant for Women and Work (10-215) and Minority Affairs (10-211) and in the Personnel Office (E19-239).

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

Persons who are NOT MIT employees should call the Personnel Office on extension 3-4251.

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

2.0

Pat Williams

Susan Lester			3-1593
Philip Robinson			3-4261
Appointments:	Janet Moore		3-4270
Virginia Bishop	NEW AND SHOPE IN		3-1591
Richard Cerrate		1	3-4266
Ken Hewitt			3-4267
Appointments: 1	Marsha Gens		3-4268
Sally Hansen			1-4275
Vera Ballard			-4277
Kathleen Rick			1-4269
Appointments: 1	Etsuko Kumai		3-4274
			4000
Dick Higham		10475498	3-4278
Anne Whitman		KIN AUDFURT	3-6510
Ann Perkins		3/13/Substille: 2	3-6511
Appointments:	Tertia Perkins		3-6513

Administrative and Academic Staff

develop safety programs to conform with federal, state and local regulations and implement them for the prevention of accidents and conservation of property at the Institute. Will perform audits, surveys and inspections of Institute buildings and facilities for conformance to established safety and/or fire regulations; review and analyze safety aspects of planned and ongoing experiments, and advise researchers and students on improved safety conditions

and devices; assure Institute compliance with all safety regulations; supervise training of Safety Engineering Assistants and Department Safety Coordinators, and other related activities. Requires Bachelor's degree in engineering or science or an equivalent combination of education and experience. Considerable experience in industrial; insurance, university or hospital safety program administration necessary. Certificate as a Safety Professional is also necessary; with registration desirable. A80-64

Admin. Staff. Technical Writer. Information Proc

essing Services Operations. Will help prepare documentation for users of IP's IBM and Honeywell computer systems (CMS, OS/VS1, TROLL

and Multics). Depending on interests and abilities, position may also involve teaching and consulting on word processing. Position offers room for advancement. Requires Bachelor's degree or equivalent experience, strong writing ability and some knowledge of computing. Preference given to candidates with programming or technical writing experience. A80-63

4dmin. Staff. Assistant to the Administrative Officer. Nutrition and Food Science. Primary responsibility will be for accounting area of centralized department, including overseeing the preparation and review of monthly projection with individual faculty members; supervising five accounting clerks; preparing payroll doc-

uments from projections; reviewing requisi-

tions and invoices for correctness of accounts;

maintaining check register; preparing budgets for research proposals; interpreting sponsor

and Institute policy as needed. Requires BA

2-3 years' on-the-job experience. Must be able to deal with a variety of individuals and a pres-

with either academic training in accounting or

sured situation. A80-62 Admin. Staff, Systems Analyst, IPS/BSD, to prepare, design, and develop external specifications for both new computer applications and modifications of existing applications. May perform analysis of defined user information tems problems to determine alternatives to solutions; develop solutions to problems for approval of superior and/or user as directed; prepare design and/or detailed external speci-fications suitable for implementation by an applications programmer; develop test data for insuring that the application performs to specifications; develop user manuals for im-plemented systems and assist users in use of systems; participate in design of new or modified systems under direction of more senior systems analysts; may act as an application programmer. Requires Bachelor's degree or equivalent and some experience in above. Know-ledge of COBOL, PLI, CMS, VS1 desirable

Admin. Staff. Systems Analyst, IPS/BSD, will analyze user information systems problems and develop viable solutions, respo nsible for external design and implementation of computer systems in an assigned area of responsibility. May analyze client/user systems to determine needs; develop external specifications for new computer programs or modifications and/or enhancements to present systems to meet needs ensure testing of new or modified programs and release documentation according to prevailing standards: prepare scheduling and time loading estimates for tasks assigned and assure proper execution; direct development or updating of all manuals for implemented plans of changes to new or modified systems. Requires Bachelor's degree or equivalent and reason ble experience in above. Knowledge of COBOL PLI, CMS, VS1 desirable. A80-59; A80-60

Administrative Staff, Applications Programmer. IPSO/Admin. Computing Services, to translate external program specifications into computer programs. May translate external specifications into internal program specifications for new or modified programs; prepare logic diagrams and data flow; program, test and debug computer programs; document new programs or changes in existing programs within prescribed standards; assist users with program problems and answer questions; attend classes, seminars and the like to develop and maintain know-how in programming. Requires an Associate's degree and reasonable experience in computer programming. Knowledge of COBOL,

PLI, CMS, VS1 desirable. A80-58 Sponsored Research Staff

Spons. Res. Staff, Research Associate, Materials Processing Center, to perform study of heat transfer in molten weld pools using advanced spectrographic techniques. Will be required to set up, organize and maintain an experimental laboratory, supervise graduate students in laboratory work, prepare technical progress reports as well as perform individual research. Should have at least 5 years' experimental laboratory experience, ability to monitor accounts, select and order equipment, and work well with others. Familiarity with flux chemistry, gas-liquid reaction kinetics and thermodynamics as well as PhD in metallurgical engineering required.

s. Res. Staff. Technical Assistant. Nuclear Engineering Dept., in bio-medical engineering. to perform full-time laboratory assistance in animal tumor therapy research and mixedfield radiation dosimetry studies. Work involves diverse responsibilities, including handling of animals (assisting in growth/health monitoring, CT head scanning procedures, and some pos sible involvement in tumor innoculation and therapeutic procedures), participation in preparation of animal tissue samples for both whole body and high resolution neutron-induced autoradiographic studies, and experimental phantom dosimetry studies to determine mixed field components for therapy using techniques such as gold foil activation and thermoluminescent dosimetry. Studies involve the use of facilities at several institutions. Past experimental experience, particularly with animals, desirable but not essential. BS required in technical field. R80-283

Spons. Res. Staff. Research Scientist (Temporary seven months). Ocean Engineering, will work on damage assessment portion of MIT Oil Spill Economic and Regulatory Model, providing biological and economic input for computer program. Responsibilities include: review of toxicological literature for damage potentials of oil constituents; research on assessing the values of losses of marine and coastal resources, recreation use, property damage, and other effects; participation in overall model development. MS or higher degree in environmental or resource economics, or environmental impact assessment preferred. Background in marine biology or coastal processes, and knowledge of Fortran desirable. R80-282

is. Res. Staff. Research Specialist. Artificial Intelligence Laboratory, will provide technical support to VLSI Design research project under the direction of one associate professor and one principal research scientist. Specific duties include documenting LISP Machine hardware and software support systems, maintaining and extending hardware and software in the support of ongoing VLSI design research, imple nting sophisticated graphics packages for LISP Machine systems, aiding in the develop ment of novel computer architectures, and making use of macroscopic and microsco parallelism for Artificial Intelligence and VLSI applications. Requires Bachelor's degree in a field directly related to the work or a combina tion of related education and substantial experience. Must be familiar with LISP Machine structure, design philosophy, and details and must understand design philosophy for VLSI program. AI background required. R80-281

ns. Res. Staff. Technical Assistant. Biology Dept., responsibilities include maintenance of cells in tissue culture; performance of routine immunological assays and procedures, and super vision of a mouse colony and laboratory facility Minimum of 3 years related experience and BA or MA and one year related experience in field of cellular immunology and/or immunochemistry. Expertise in cell culture preferred.

Spons. Res. Staff. Technical Assistant (Part-time Temporary). Laboratory of Architecture and Planning, for experienced, responsible individual with knowledge of social survey metho-dology. Duties include editing, collating research and possible interviewing. Project deals with research on elderly housing. Available through 12/31/80 and is subject to continuation, pending continuation of federal funding. Requires social survey research methology experience or knowledge. 20 hours/week. R80-279

Spons. Res. Staff. Technical Assistant. Nutrition and Food Science, will care for and maintain records on experimental animals in research nonclinical laboratory studies; administer chemical or other experimental treatments to the animals and perform necropsies on them under supervision of professional personnel. Will also perform biological, radiochemical or immunological studies on the experimental animals or tissues from them. Requires college degree in science or equivalent experience, and at least one year of work experience in a scientific laboratory. R80-278

ons. Res. Staff, Systems Programmer, Center for Cognitive Science, for PDP-11/44. In charge of software development and hard ware design for multiuser computer facility Specify and order equipment, installation and maintenance of miscellaneous electronic apparatus. Requires extensive exper ence in all aspects of laboratory computer use Background in PDP 11 system, electronics design and construction, particularly interfacing computers and laboratory equip-ment; working knowledge of experimental procedures, RSX-11, RT-11 systems development

Res. Staff. Technical Assistant, Biology Dept., involves research on the molecular struc ture of nucleic acids and proteins using X-ray diffraction techniques. Will work with X-ray diffractometers, crystals and computers. Will make crystals, collect diffraction data, process the data, interpret that data and keep the instruments performing properly. No previous experience with these techniques is required, as Dept. will train person for their specifically tailored techniques, but person should have understanding of handling instruments and be able to understand the scientific research involved. Must be able to work without supervision and have innovative problem-solving abilities. Bachelor's degree in science or equivalent required. R80-271

Exempt

Heat and Vent Shift Supervisor (Exempt). Physical Plant, will be responsible for mechanical operations on the second shift. Will supervise several trades and be responsible for the attend ance and labor distribution records. Must have sufficient knowledge of mechanical systems to be able to react to changes in operations caused by equipment malfunctions, scheduling conflicts and/or weather changes. Must be able to evaluate situations that might develop during the shift and take appropriate actions, including, if necessary, the decision to call for additional hourly and/or supervisory assistance. Will also be required to provide weekend coverage of mechanical operations on a rotating basis. Requires 3-5 years' experience repairing and maintaining building heating, ventilating and air conditioning systems; 3-5 years' as mechanical supervisor; and technical training in HVAC. E80-44

Library Support Staff

Library Assistant III (Serials Assistant). Libraries of an assigned portion of current journals and serials, including: recording and processing materials on visible files; claiming outstanding materials; processing invoices; and circulating sample issues for acquisition decisions Answers telephone inquiries on receipt of serials and journals. Sorts incoming serials on assigned days. Also responsible for searching all periodicals and serials which cannot be identified on the regular serials files, including checking OCLC terminals. Drifts unidentified material to appropriate library/file. Undertakes special projects when necessary. Requires high school graduation or equivalent and a minimum of one year direct/related experience. Knowledge of foreign languages desirable. Basic typing skills required. Neatness, accuracy and capac

ity for detail essential. B80-602

Library Assistant II. Humanities Library, (Interlibrary Lending Assistant), responsible under the Associate Humanities Librarian, for the centralized Interlibrary Loan Service, which lends MIT materials to other libraries, and includes: daily processing and verification of requests received via air mail, telephone and the OCLC online ILL subsystem; procuring from and returning to the appropriate MIT library those items requested; maintaining relevant files, correspondence, and billing; compiling monthly statistics; and coordinating workflow of student messenger(s). All staff members participate in the Reference/Information Service on an average of 1-2 hours per day, answering telephone and in-person ques-tions. Requires minimum of 2.5 years direct/related experience; 1-2 years of college pre-

ferred. Good clerical skills (including accurate typing); excellent interpersonal and organizational skills, and capacity for detail important.

Secretary/Staff Assistant

Administrative Secretary. Treasurer's Office, will perform many duties of an administrative assistant in this high level secretarial position. Individual should have ability to grasp principles of insurance and various fields of law, as well as legal terminology. Should also be able to acquire substantial working knowledge of insurance and other legal and business matters. Additional duties include filling out of reports, checking of accounting statements, reception work, paying of bills, summarizing work flow and ordering supplies. Will administer many meetings, coordinate filing systems, supervise part-time secretary, aid in presenta-tion of more than a dozen budgets, do research in above fields, edit supervisor's reports, prepare reports on a variety of subjects. Requires secretarial skills of very high standard (shorthand optional), with prior experience (preferably in a legal setting), and excellent interpersonal skills. 37.5 hrs/wk. B80-605

puter Science, entails highly skilled secretarial and administrative support for senior faculty member: typing manuscripts and correspondence; making travel arrangements; handling complicated appointments and scheduling problems. Will also reconcile faculty files to those of department, work with computer system for text-editing, and maintain extensive contact with entire MIT community relating to computational resources. Requires willingness to accept exacting direction in office procedures; ability to take initiative and exercise good judgement; excellent typing and or al communication skills; willingness to learn compu ter system. Some college preferred. B80-582

4dmin. Secretary (Temporary), to the Chemical Engineering Department Head. Will coordinate graduate seminar series; coordinate faculty search process; regularly schedule meetings, luncheons, dinner events and receptions and carry out details of these events; coordinate annual projects such as alumni reception, faculty picturebook, awards ceremony and departmental listings; and perform a variety of other general secretarial and administrative office duties, including the typing of technical material and machine dictation. Requires a minimum of 4.5 years' direct/related experience with good interpersonal skills, shorthand and use of dictating equipment. Should be willing to put in additional or irregular hours occasionally. Familiarity with the organization of the Institute preferable, B80-581

Administrative Secretary, to Director and two Assistant Directors in the Office of Facilities Management Systems. Will draft and edit correspondence, proposals and reports; maintain calendars. Is responsible for all support staff, hourly, student and voucher payrolls. Will supervise functionally as well as administratively the department secretaries. Will supervise main tenance of monthly accounting function for the department and monitor actual versus budgeted expenses on all department accounts. Will assist in annual update of proposals for consortium members, including calculations on proposal billings on a quarterly basis. Responsibilities include personnel function and records, including handling all confidential correspondence. Will serve as primary source of information on departmental policy and procedure Requires excellent communication and organ izational skills; experience with machine dictation or shorthand; excellent typing skill; good command of English. B80-574

retary. Medical Dept., will provide secretarial support to a Health Care Team, Responsibilities will include answering telephone scheduling appointments, patient triage, medical transcription, routine typing of correspondence and reports, ordering and coordinating patient medical reports/test results, mainte nance of office files, and other routine secretarial functions. May be assigned other projects as required. Must be a very good typist with the ability to transcribe medical terminology. Some college or secretarial school training preferred. with previous experience in a responsible secretarial position. Must possess good judgment and organizational skills. 37.5 hrs/wk. B80-604

Sr. Secretary, Lab for Computer Science, provides secretarial and administrative support to Laboratory's associate director, who heads Office Automation group. Individual performs standard secretarial tasks, and must be able to anticipate group's needs. Will participate in research through text-editing, preparing and editing research material for papers, and drafting office automation material for group leader. Will direct activities of part-time clerk for typing and filing. Will act as liaison and assist in managing study between associate director and 6 outside firms. Requires excellent organizational skills, ability to meet deadlines and outer system, B80-587

Sr. Secretary, Lab for Computer Science, will provide secretarial and administrative support for 3 faculty members, 2 of whom are research group leaders. Will prepare manuscripts and course work on computer system; compile and prepare information for reports and correspondence; schedule meetings, make travel arrangements and handle considerable ne contact. Requires excellent organizational'skill: willingness to deal with supervision from diverse sources; good written communication skills; and willingness to learn text-editing on computer system. B80-586

Sr. Secretary - Technical. Chemistry Dept., will serve as secretary to one organic chemistry faculty member (another may be added at a later date). Duties include typing correspon dence, technical manuscripts and grant proposals, arranging seminar meetings, answerng telephones, arranging travel, monitoring monthly research accounts and other general duties. Position requires effective interpersonal skills and ability to set priorities and organize work without detailed supervision. Experience with dictaphone required. A minimum of 2.5 years' direct/related experience also necessary

Sr. Secretary, Energy Laboratory, to work with Advanced Energy Technology research group. Will type technical reports and correspondence, etc., from handwritten material; work with word processor (65% of time); oversee research accounts; arrange travel and meetings; main-

tain files; and perform other general secretarial tasks. Requires good typing and command of written English; technical typing ability or willingness to learn; 1-2 years' experience working with word processor or willingness to learn; good organizational skills; and at least 2.5 years applicable experience. Non-smoker pre-

Sr. Staff Assistant, to faculty members and re searchers in the Research Laboratory of Elec-tronics. Will prepare technical manuscripts, ndence and handle other general secretarial duties. Ability to establish priorities and organize several activities simultaneously important. Must be willing to learn computer editing for reports and manuscripts. Good typing skills required, as is 2.5 years' direct/related experience. Experience in technical typing helpful. B80-576

Secretary Receptionist. Nutrition and Food Science, to work directly for Administrative Assistant in Headquarters Office. Will also perform all general secretarial functions for one lecturer. Will function as receptionist and backup secretary for Department Head. Will be responsible for departmental phone and some departmental facilities. Must be willing to learn word processing equipment. Will assume primary responsibility for publication of weekly Departmental Newsletter. Excellent typing skills, and one or more years' direct/related experience necessary. Should have good interpersonal skills and ability to work with a variety of people and with constant interrup-tions. Some basic bookkeeping skills preferred. B80-606

Secretary, Dept. of Materials Science and Engineering, will provide secretarial support to one faculty member, one administrative staff member and an administrative assistant. Duties include covering phones, typing course materials, technical manuscripts, duplicating materials, and general office work. Must be flexible in moving from one assignment to another. Should have the ability to get along well with people; requires good typing skill, and a minimum of one years' related expe rience or combination of education and experience. B80-596

Secretary. Department of Civil Engineering, in the Transportation Systems Division. Individual should have a strong background in general and technical typing, development of filing systems and record keeping. Will maintain inventory of office supplies, assist the Senior Secretary in scheduling appointments, meetings, travel and answering phone. Individual would working in the Divisional Headquarters which has much interaction with faculty, staff and students in a friendly environment. Requires a minimum of one year of experience or combination of education and experience. B80-589

Receptionist (part-time, temporary), Psychology Dept., will answer phones, type, order and pick up supplies, and perform other general office duties. Will also help on colloquia mailings and coffee set-up. Requires good typing skills and excellent communication/interpersonal skills. 25 hours/week (10 a.m. 4 p.m., M-F). Tempor ary, 3 months. B80-588

Research Secretary (part-time), Psychology Dept., will serve as secretary for a research project, performing library work, typing, screening phone calls, screening subjects, performing errands, maintaining reprint files, ordering supplies, and, after training, assisting in data analysis. Must be fast, very accurate typist and good at proofreading/correcting own errors. Requires meticulous accuracy in detailed work. (17.5 hours/week) Schedule flexible, to include some afternoons and/or evenings. B80-573

Office Assistant

Sr. Staff Assistant, Dept. of Nuclear Engineer ing, will support two or more engineering faculty members. Duties include technical typing of reports, proposals, class notes, manuscripts, and correspondence from handwritten drafts; routine office work (i.e., filing, telephone coverage, travel arrangements, and handling of mail). Requires good typing and communica-tion skills; experience with technical typing desirable but not required; knowledge of gen eral office procedures; ability to establish priorities and work independently with good judgment and minimum of supervision. Also requires a minimum of 2.5 years' direct/related experience or combination of education and experience. B80-597

Sr. Staff Assistant (part-time), Career Planning and Placement-Alumni Career Services, will be responsible for the production of a bi-weekly newsletter summarizing job opportunities for experienced MIT graduates. This involves reducing position descriptions to capsule form, composing and typing 6-page newsletter. Interface with printer to assure timely publication and distribution of newsletter. Will also process job descriptions; log positions in office records, copy openings for office job books, and route information to other offices at MIT as appropriate. Will assist visitors and develop job listings. Must pay close attention to detail and be willing to strive for perfection in producing newsletter for public distribution. Should be good typist (accuracy more important than speed). Should be comfortable with technical and managerial terminology. 17.5 hrs/wk. (3.5 hrs/M-F preferred) B80-592

Sr. Office Assistant. Medical Dept., will be assigned to first floor main appointment desk and be responsible for handling the appointment making process for Medical Clinic. This will involve answering telephone, scheduling appoint ments either in person or via telephone, patient triage, maintaining appointment sheets, order ing patient's medical charts, securing required patient information and necessary forms, and directing patients to consultation rooms. May also relieve at other reception desks during lunches, sickness and vacation periods. Must be mature and responsible and able to deal effectively with patients and medical staff. Previous work experience is required in a setting where individual has demonstrated success with dealing with the public in a demanding situation. 37.5 hrs/wk. B80-603

Sr. Office Assistant. Dept. of Nutrition and Food Science, will handle accounts payable for large centralized department with budget in excess of \$10 million/yr. Duties will include contact with vendors, staff, preparation of requests for payment, assisting with purchasing and travel, handling petty cash, filing of account information, some reconciliation of accounts. Requires 1-3 years' experience and ability to work under

deadlines and with constant interruptions.

Administrative Assistant, will serve as an assist ant to corporations analyst in Resource Development, Development Office. Responsibilities include providing various types of information on corporations to the Senior Officers and others at MIT for fund raising purposes; clearing companies to person or program for approach for funding purposes; reading, heading up and preparing mail for posting; assisting Analyst with written and telephone requests. Requires ability to interact well with many people; pleasing telephone manner; accuracy in content and performance of work; flair for tact and diplomacy; willingness to explore in scope and in depth the corporations area. Also requires excellent typing, filing and organizational ability. B80-584

Office Assistant, Research Laboratory of Elec tronics, will perform clerical and accounting duties in Headquarters Office. Will process stock slips, invoices, property records; type transfer vouchers; handle office supplies; maintain photocopy machine and other duties as needed. Requires one year of direct/related experience or combination of education and experience and 40 wpm typing. Messenger work will also be required. B80-607

Office Assistant. Credit Union, will type share withdrawal checks and general correspondence; provide information on Credit Union rules and regulations to current and potential members: issue receipts for cash or checks: take withdrawal requests, and issue share and loan checks. Will handle telephone requests Requires good typing skill; facility with fig ures. Must be able to use adding machine. Ability to interact well with many people both in person and on the telephone important. B80-601

Receptionist/Office Assistant, Center for Policy Alternatives. Research center doing research in areas of science, technology and public policy, industrial innovation, environmental and occupational health and many other areas of interdisciplinary policy analysis seeks individual to function as the information person for Center personnel, answer phones and greet visitors, sort mail, handle routine requests for information, route phone calls, type correspondence from written materials and tapes, and be responsible for ordering office supplies Requires good typing skill, flexibility, initiative, and organizational skill. Also requires a minimum of one years' direct/related experience or combination of education and experience, 40 hours/wk, B80-598

Office Assistant, Graphic Arts Service, will per form general clerical duties for the Illustration Department. Talks with customers on the phone and in person regarding varied services of Illustration Department; proofreads materials. Must have knowledge of technical illustration work and terminology. Should be able to work independently under general supervision. Requires high school graduation and a minimum of one years' experience or combination of education and experience. B80-595

Office Assistant (Accounts Payable). Comptroller's Accounting Office, will audit vendor invoices, do the extension and discounting of involces, post invoice payments to purchase orders, properly code invoices for payments, monitor monthly purchase order commitments, batch processed invoices, and occasionally review vendor statements. Requires ability to work with figures, proficiency on adding machine and a minimum of one years' direct/related experience or combination of education and experience, B80-594

Office Assistant, Registrar, will assist in the reg istration of students, maintenance of student permanent records, use of record-keeping terminals (IBM), handle student requests, registration corrections (drops/adds), typing of form letters, and filing. Person should be versatile and be able to work in a busy environment. Requires good typing, accuracy with figures and ability to handle detail work. College expe rience, either as a student or employee, is desirable. B80-591

Office Assistant Receptionist, Personnel Office will share responsibility for providing services related to the employment process: provide information on job status, specifications, application procedures, etc., to applicants and oth ers; assist persons in completing applications; refer general inquiries to other Institute offi ces: and on occasion perform filing of large volume of applications. Will operate word processing equipment to maintain resume acknowledgment process and work on other projects as necessary. Applicants should be able to grasp routine procedures and recognize unusual situations and respond to them appropriately. Requires the ability to monitor several situations at once (phones, applicants, etc.). Accurate typing is necessary. Office experience with some type of public service capacity preferred. Familiarity with word processing equipment desirable; willingness to learn necessary. 37.5 hours/wk. B80-590

Service Staff

Service Staff, Waiter/Waitress (part-time), Faculty Club, will take members' orders, serve food using banquet trays; serve banquets, clear and reset tables, and perform other side work relating to dining room service. No experience neces sary. Requires ability to read and speak Eng lish. Must be 18 years of age. Schedule: On call, 12-15 hours/wk., 5-9 p.m., M-F. H80-210

Service Staff, Engineer, Third Class, Physical Plant, requires Massachusetts Third Class Stationary Engineer's license or higher grade. Minimum of one year operating experience on high pressure boilers, oil and gas fired with automatic combustion controls required. Must be willing to work any and all shifts and do any and all kinds of work, consistent with self sufficiency of the Central Utilities Plant. Experience required on turbine and motor driven refrigeration equipment. Rotating shift. H80-208: H80-209

Service Staff, Lab Aide (part-time), Biology Dept. will wash glassware (chemical apparatus) daily in laboratory; keep lab work areas clean as needed. Position involves staying on one's feet most of the morning. Hours: 7-11 a.m. (18 hours/week). Schedule flexible. H80-204

Service Staff. Technician (Electro-Mechanical). Energy Laboratory, will perform electro-mechanical assembly, checkout and maintenance work

on various combustion and small power gener-

ation test facilities. May be called upon to assist in other test facilities, occasionally work varying shifts and possibly some weekend work. Should demonstrate aptitude in light pipe fitting, welding and brazing, machining and fabrication, soldering, cable fabrication, basic elec tronic ability and instrument hookup. Knowledge of handling and machining of ceramic type insulators is desirable. Knowledge of basic FORTRAN, computer, and computer interfacing equipment desirable. Must have ability to work and communicate with others, as position assists faculty, staff and students in experimental program. H80-195

rvice Staff, Technician C (Radiation Protection). Environmental Medical Service, will perform a variety of tasks associated with the EMS radiation protection program, including: assist ing higher grade technicians in performance of their job functions, such as transportation of radioactive material, radioactive waste handling, radioisotope-laboratory surveys, decontamination operations, and setting up radia tion shielding. Will also perform miscellaneous intermittent tasks, such as delivering pack ages, and maintaining good housekeeping in Radiation Protection Office laboratories. Re quires Mass, driver's license and physical capacity for handling heavy objects. High school graduation or equivalent with courses in chemistry or physics also necessary. Preference given to candidate with previous job experience with radioactive materials. H80-189

Service Staff, Mechanic B. Plasma Fusion Cen ter, requires 3 years' experience in repair, overhaul and adjustment of machinery and equipment, plus experience in the use of all common hand tools and power tools. Under direction of others, will perform a variety of duties primarily related to the servicing, main tenance and repair of equipment associated with a 220MW alternator. Included in these duties are: cooling systems and pumps, lubrication systems and pumps, mechanical automatic controls, manual and automatic valves and other related duties. Should be willing to work overtime. H80-185

The following positions were still available at Tech Talk deadline. Complete descriptions of these jobs and other available positions are posted in the Personnel Office (E19-239), and at locations listed at the beginning of Positions Available section

ADMINISTRATIVE STAFF:

A79-81, Admin. Staff, Applicatons Programmer, Information Processing Services Of-A80-4. Admin. Staff. Sr. Systems Program-

mer, IPSO A80-25, Admin. Staff, Director, Technology

Based Educational Marketing, Ctr. for Adv. Engineering Study A80-35, Admin. Staff, Systems Programmer

IPSO A80-37, Admin. Staff, Director of the MIT Educational Council, Admissions Office

A80-45, Telecommunications Analyst, Physical Plant

A80-47, Systems Analyst, IPSO A80-48, Coordinator, Alumni Assoc.

A80-49, Programmer, IPSO A80-50, Assistant Director, Development A80-52, Admin. Staff, Acquisitions Editor,

MIT Press A80-53, Admin. Staff, Legal Assistant, Pat-

ent, Copyright & Licensing A80-54, Admin. Staff, Assoc. Director of the

Council for the Arts at M.I.T. A80-57, Admin. Staff, Programmer Analyst,

RESEARCH STAFF:

R79-225, Spons. Res. Staff, Research Associate, Materials Science and Engineering

R79-250, Spons. Res. Staff, Sr. Shift Supervisor, Nuclear Reactor Laboratory.

R79-336, Spon. Res. Staff, Research Scientist,

Lab for Computer Science R79-342, Spons. Res. Staff, Res. Associate,

Center for Trans. Studies in Freight Demand Analysis R79-363, Spons. Res. Staff, Mechanical En-

gineering R80-6, Spons. Res. Staff, Res. Scientist,

Plasma Fusion Ctr. R80-8, Spons. Res. Staff, Res. Scientist,

Plasma Fusion Ctr. R80-9, Spons. Res. Staff, Res. Engineer, Elec.

Power Systems Lab R80-11, Spons. Res. Staff, Res. Lab of Elec-

tronics

R80-23, Spons. Res. Staff, Postdoctoral Assoclate, Lab for Nuclear Science

R80-39, Spons. Res. Staff, Mechanical En-

gineering Dept.

R80-43, Spons. Res. Staff, Postdoctoral As

sociate, Lab for Nuclear Science R80-57, Spons. Res. Staff, Software Engineer,

Laboratory for Computer Science

R80-69, Spons. Res. Staff, Design Engineer Superconducting Magnets, Plasma Fusion Cen-

R80-74, Spons. Res. Staff, Research Asso-R80-88, Spons. Res. Staff, Magnet Design En-

gineer, National Magnet Lab.
R80-93, Spons. Res. Staff, Research Asso-

ciate, Sloan School of Management's CISR R80-97, Spons. Res. Staff, Logic Designer (temp.), Plasma Fusion Cente

R80-105, Spons. Res. Staff, NMR Spectrosco pist, National Magnet Lab

R80-111, Spons. Res. Staff, Technical Specialist, Earth and Planetary Sciences

R80-122, Spons, Res. Staff, Research Scientist/ Engineer, Nuclear Reactor Lab

R80-126, Spons. Res. Staff, Electronic Engineer, NEROC Haystack

R80-128, Spons. Res. Staff, Postdoctoral Associate, Lab for Nuclear Science

R80-129, Spons. Res. Staff, Research Assoclate, Physics Dept.

R80-134, Spons. Res. Staff, Electrical/Digital Design Engineer, Lab for Computer Science R80-137, Spons. Res. Staff, Research Asso-

ciate, Materials Science and Engineering R80-146, Spons. Res. Staff, Postdoctoral As sociate, Lab for Nuclear Science

R80-149, Applications Programmer, LNS R80-157, Extension Agent Specialist-Marine Engineer, Sea Grant

R80-161, Spons. Res. Staff, Technical Assistant, Biology R80-169, Spons. Res. Staff, Postdoctoral Res

Assoc., Physics

Tech Talk, September 24, 1980, Page 7

















Inaugural Events Begin Today

(Continued from page 1)

son, now Chairman of the MIT Corporation, who, by virtue of that office, will preside over the inaugural ceremonies and will invest the new President with the charter. Mr. Johnson was MIT's 12th President, serving in that office from 1966 to 1971. Also participating as a principal in the ceremony will be Dr. Jerome B. Wiesner, who was MIT's 13th President serving from 1971 until his retirement from that post last June 30. Dr. Gray has succeeded Dr. Wiesner who remains as a member of the Corporation and an Institute Professor.

In addition, on stage as other principals will be Dr. James R. Killian, Jr., the Institute's 10th President serving from 1949 to 1959 (for whom the court is named), and Dr. Julius A. Stratton, the 11th President serving from 1959 to 1966 (for whom the Student Center building is named). Dr. Killian and Dr. Stratton are presently emeriti members of the Corporation. Dr.

Killian is a former Chairman of the Corporation. He will present remarks during the inaugural ceremony.

The invocation at the start of the ceremony will have special meaning for Dr. and Mrs. Gray. The oldest of their four children, Mrs. Virginia Wilson Gray Army, a graduate of Wesleyan University and now a student at the Yale Divinity School, will offer the prayer that will commence the ceremony following conclusion of the academic procession into Killian Court.

Completing the party that will be seated on stage as principals or guests of honor will be Professor Sheila E. Widnall, Professor Paul A. Samuelson and Cambridge Mayor Francis Duehay. Dr. Widnall, professor of aeronautics and astronautics and chairman of the MIT faculty, will be marshal of the academic procession and will carry the four-foot golden mace that is symbolic of MIT's academic authority. Dr. Samuelson, Institute Professor and professor of economics, as most senior professor in years of service (he joined the faculty in 1941), will be marshal for the principals and guests of honor during the procession. Elements in the procession will

be 50 members of the MIT Corporation led by their marshal, Dr. James B. Fisk, a Life Member of the Corporation and the retired president of Bell Telephone Laboratories, Inc.; 350 members of the faculty led by their marshal, Dr. Francis E. Low, Karl Taylor Compton Professor of Physics and the Institute's Provost; 120 delegates from sister universities throughout the world, led by their marshal, Institute Professor Walter A. Rosenblith, MIT's immediate past Provost; delegates from private and government organizations led by their marshal, Dr. Albert H. Bowker, Assistant Secretary for Postsecondary Education in the US Department of Education; memebers of MIT academic research staff led by Dr. Thomas F. Jones, MIT Vice President for Research; alumni led by Harl P. Aldrich, Jr., of Cambridge, President of the Institute's 72,000-member Alumni Association; graduate students led by Dr. Kenneth R. Wadleigh, Vice President and Dean of the Graduate School; and undergraduates led by Dr. Shirley M. McBay, Dean for Student Affairs. Closing the procession will be Professor Richard L. Cartwright of linguistics and philosophy, associate chairman of the faculty, carrying a shepherd's crook, symbol of the authority of the chairman of the faculty

Some 30 members of Dr. Gray's own Class of 1954 at MIT will return for the inauguration of their classmate and serve as ushers at the Killian Court ceremony. In addition, some 900 officers of MIT alumni organizations throughout the US and in several foreign countries will be on campus for the inauguration and will attend an Alumni Awards Breakfast starting at 7:30am in Walker Memorial the morning of the inauguration. Awards will be presented to individual alumni and alumni organizations for outstanding service to the Institute.

Music for the inaugural ceremony will be provided by the MIT Concert Band conducted by John Corley, the MIT Brass Choir conducted by Herbert Philpott, and the MIT Choral Society conducted by John Oliver.

The inaugural luncheon following the ceremony will be held in MIT's new Athletics and Special Events Center where Mr. Johnson will preside. Harvard's President Bok will present greetings from sister academic institutions on the occasion of the inauguration of the new President. Greetings from the faculty will be given by Professor Widnall. Charles P. Markham, a senior in management from Tampa, Fla., and president of the undergraduate student body, will present greetings from the undergraduates and Ms. Sharon H. Lee, a graduate student in urban studies and planning from Cambridge, and president of the graduate student organization, will present greetings from graduate students. Mr. Aldrich, the alumni president, will speak on behalf of alumni. A reception for delegates from sister institutions will be held immediately following the luncheon and a second reception for inaugural guests will be held later Friday

Mr. Baker will speak in the Karl Taylor Compton Lecture Hall (Rm 26-100) at 8pm Friday evening. Noted for his columns of humorous commentary in the New York Times, Mr. Baker is the author of a new book, So This Is Depravity. He will read excerpts from his autobiography in progress. Mr. Baker's appearance as part of the inaugural will launch a series of readings at MIT by famous authors during the fall term. The series is sponsored by the MIT Writing Program and the Department of Humanities and authors who will appear in the series later include John Updike, John Irving, Anne Beattie, and, tentatively, John Cheever.

Upwards of 2,000 persons are expected for the Inaugural Ball Saturday Evening, which will take place in the Sala de Puerto Rico, Lobdell Dining Hall and duPont Gymnasium. Music will be provided by three bands-Tiffany, Dick Johnson's Swing Shift and Peter Gordon. All three played last weekend at Boston's Jubilee 350 Grand Ball in Copley Square.

The inaugural events will begin today with a symposium on "Computers and People: Future Part-nership or Conflict?" beginning at 2pm in Huntington Hall (Rm 10-250). Speakers will include Daniel Bell, Henry Ford II Professor of Social Sciences at Harvard; Marvin L. Minsky, Donner Professor of Science at MIT, and Michael Rabin, Albert **Einstein Professor of Mathematics** at Hebrew University, Jerusalem, Israel. Chairman will be Michael L. Dertouzos, director of the MIT Laboratory for Computer Science.

A second inaugural symposium will be presented starting at 11am Thursday in Huntington Hall on "New Large-Scale Energy Supply Technologies: Prospects and Problems." Speakers will include Pierre Aigrain, Secretary of State for Research in the Office of the Prime Minister of France; John M. Deutch, Arthur C. Cope Professor of Chemistry at MIT and former US Under Secretary of Energy; and Dr. Charles C. Hitch. president emeritus of the University of California and a former US Assistant Secretary of Defense. MIT Provost Low will be chair-

The third inaugural symposium on "The Other Energy Crisis: Food and Hunger"-will be held in Huntington Hall starting at 2:30pm Thursday. Speakers will be Sir William Henderson, former Secretary of the Agricultural Research Council, and chairman of the Genetic Manipulation Advisory Group to the Secretary of State for Education and Science of the United Kingdom; Dr. John Hawthorn, head of the Department of Food Science and Nutrition at the University of Strathclyde, Glasgow, Scotland, and Dr. David Pimentel, professor of Insect Ecology and Systematics. Cornell University. Chairman of this symposium will be Dr. Nevin H. Scrimshaw, Institute Professor.

All of the symposia will be open to the public.

Wednesday afternoon also will be a special period of fun for the people who live and work at MIT. There will be the foot race, balloon rides, hot dogs and other refreshments, the reception by President and Mrs. Gray, informal musical presentations and the Wednesday evening light show achieved by turning lights on and off in the Green Bldg. The light display will be visible from Memorial Drive in Cambridge and Storrow Drive and the Back Bay area in Boston.

The Wednesday and Thursday evening concerts in MIT's Kresge Auditorium will feature pianist John Buttrick and violist Marcus Thompson, both members of the MIT music faculty, in performance with the Roumanian String Quartet.

Planning for the inaugural period has been under the charge of an Institute-wide committee headed by Kenneth M. Hoffman, professor of mathematics and former head of the Department of Mathematics.

The MIT Corporation, at its meeting in October, 1979, elected Dr. Gray to succeed Dr. Wiesner as President effective July 1 of this year. President Wiesner had earlier announced his desire to retire from the presidency, having reached the age of 65.

President Gray, 48, has spent his entire professional and academic career at MIT and is widely known as an innovative leader in engineering education and university administration. He was Chancellor of the Institute during the years President Wiesner was in office and served as the deputy to the President in the general management of MIT.

A native of Livingston, N.J., President Gray entered MIT as a freshman in 1950, receiving the SB degree in 1954, SM in 1955 and ScD in 1960, all in electrical engineering. An authority on electronic circuits and semiconductor devices, he was instructor 1957-60, assistant professor 1960-64, associate professor 1964-67, and became professor in 1967. He served as associate dean for student affairs 1965-67, assistant provost 1967-69, associate provost 1969-70, dean of engineering 1970-71 and was elected chancellor in 1971 when Dr. Wiesner was elected president.

Honeywell

(Continued from page 1)

a significant contribution to the continued strengthening of the Institute's resources in areas of common technological interest."

President Gray expressed MIT's gratitude for the gift and said the funds will support research programs underway in the Laboratory for Computer Science, headed by Professor Michael L. Dertouzos.

The Honeywell gift comes at a particularly advantageous time," President Gray said. "Emerging new technologies and new concepts promise to bring about major changes over the next decade in the way society employs computing systems and networks and in the impact such systems and networks are likely to have on social organizations.

"Professor Dertouzos and his associates at the Laboratory for Computer Science are in the forefront of this changing field and support of the kind provided by the Honeywell gift will help assure their continued leadership.

The funds will be used primarily for research in Computer Science. A portion will be used for work through the MIT Department of Electrical Engineering and Computer Science on research in microcircuits—so-called very large scale integrated (VLSI) circuits—which promise to have extensive applications in computers in the future.

R80-172, Spons. Res. Staff, Research Scientist Engineer, NRL R80-186, Spons. Res. Staff, Res. Associate,

Dept. of Aero & Astro. R80-187, Spons. Res. Staff, Electrical Engi-

neer-Control and Power Systems, LNS R80-193, 194, Spons. Res. Staff, Postdoctoral Res. Associate, Space Plasma Group

R80-196, Spons. Res. Staff, Res. Specialist, Cell Culture Center

R80-200, Spons. Res. Staff, Cell Culture Center R80-218, Res. Associate. Mat. Sci. & Eng. R80-222, Prog. Analyst, Mech. Eng.

R80-223, Prog. Analyst, Mech. Eng. R80-224, Postdoctoral Assoc., Mathematics R80-225, Experimental Condensed Matter Physicist, NML

R80-227, Experimental Research Scientist, Plasma Fusion Center

R80-229, Scientist, Center for Space Research R80-230, Programmer/Research Associate, Center for Computational Research in Eco-nomics and Management Science

R80-231, Engineer, Energy Lab's Sloan Automotive Energy Lab

R80-234, Research Associate, Center for Policy Alternatives

R80-236, Research Specialist, Dept. of Earth and Planetary Sciences

R80-241, Research Associate, Biology Dept R80-242. Research Metallurgist or Materials Scientist, National Magnet Lab

R80-243, Programmer/Engineer, Div. for Study and Research in Education R80-249, Technical Assistant, Biology Dept. R80-254, Research Scientist, Energy-Lab

R80-260, SRS, Psychology Dept. R80-262, Spons. Res. Staff, Tech. Assistant,

Ctr. for Cancer Res. R80-263, Spons. Res. Staff, Tech. Assistant,

Ctr. for Cancer Res. R80-268. Research Associate, Earth and

C80-9, Academic Admin. Staff, Sr. Clinical

Veterinarian DI.AM C80-11, Physician's Assistant, Medical

C80-13, Marketing Rep., Medical C80-14, Coordinator, Medical C80-15, Postdoctoral, Meteorology C80-18, Instructor, Mathematics Dept

C80-20, Assistant Director for Collection Management, Libraries C80-21, Postdoctoral Researcher, Dept. of Meteorology and Physical Oceanography C80-22, Librarian, D.O.T. Liaison Librarian,

part-time C80-23-26. Postdoctoral Associate, Biology

EXEMPT

E80-28, Supervisor, Food Service E80-30, Engr. Asst., Nat. Mag. Lab E80-31, Inventory Auditor, Off. Facil. Mgmt E80-33, Data Analyst, NEROC Haystack

Observatory E80-37, Pediatric Staff Nurse, Clinical

Research Center

SUPPORT STAFF: B80-185, Sr. Secretary, National Magnet Lab B80-281, Sr. Secretary, Industrial Liaison Program

B80-309, Sr. Secretary, Mech. Engineering B80-318, Secretary/Staff Assistant, Graduate School Office

B80-326, Admin. Assistant, NML B80-348, Office Assistant, Medical Dept. B80-373, Sr. Secretary, Alumni

B80-396, Secretary, Plasma Fusion Center B80-408, Sr. Office Assistant, Health Sci. &

H80-193, General Cook, Food Service Page 8, Tech Talk, September 24, 1980

B80-415, Sr. Secretary, Poli. Sci. B80-417, Secretary, Resource Development B80-437, Sr. Secretary, Medical

B80-445, Secretary, part-time, Nutrition and Food Sci.

B80-449, Office Assistant, Registrar B80-452, Sr. Secretary, Mech. Eng. B80-456, Secretary, Energy Lab B80-461, Sr. Office Assistant, Development

B80-463, Sr. Staff Assistant, Man Vehicle Lab B80-467, Staff Assistant, Center for Policy

Alternatives B80-477, Sr. Secretary - Technical, Dept. of

Nut. & Food Sci. B80-483, Sr. Secretary, Physical Plant B80-488, Sr. Secretary, Ocean Engineering

B80-493, Tech. Assistant V, part-time, Psychology

B80-497, Sr. Secretary, Sloan School B80-498, Staff Assistant, Center for Policy Alternatives B80-499, Sr. Staff Assistant, Center for Policy

B80-509, Sr. Staff Assistant, Center for Policy

B80-514, Keypunch Operator, Purchasing and B80-516, Library Assistant III, Lindgren

B80-517, Sr. Secretary, Biology Dept.

B80-518, Sr. Secretary, Harvard-MIT Div. of Health Sciences and Technology B80-525, Secretary, Medical

B80-526, Sr. Secretary, Civil Engineering B80-528, Sr. Secretary, Earth and Planetary

B80-529, Sr. Secretary, Harvard-MIT Div. of Health Sciences and Tech. B80-530, Administrative Assistant, Civil

Engineering Dept. B80-536, Sr. Office Assistant, Student Accounts

B80-539, Computer Operator, IPSO/Admin. B80-540, Sr. Secretary, Energy Lab

B80-543, Library Assistant IV, Psychology 44, Office Assistant, R B80-548, Library Assistant IV, Barker Library

B80-549, Office Assistant, Medical B80-550, Staff Assistant, Libraries

B80-551, Office Assistant, Industrial Liaison B80-554, Sr. Secretary, IPSO

B80-555, Sr. Office Assistant, Provost's Office B80-556, Sr. Secretary, Science Library B80-557, Sr. Office Assistant, Libraries B80-558, Sr. Secretary, Political Sci. B80-561, Sr. Secretary, Civil Eng. B80-562, Sr. Staff Assistant, Urban Studies

B80-567, Secretary, Sloan School B80-568, Receptionist, Sloan School

B80-564, Data Clerk, CSR

H79-33, Service Staff, Technician A (Electronic), Chemistry H79-200, Service Staff, Technician A (Electro-

Mechanical) H80-60, H80-61, H80-62: Service Staff, Design Drafter, Plasma Fusion

H80-127, Service Staff, Engineer, Third Class H80-143, Gardener, Physical Plant H80-162, Sr. Technician (Electronic), Plasma

Fusion Center H80-165, Heat & Vent-Mechanic, Physical

H80-172, Service Staff, Technician A-Electronic, Haystack H80-175, Machinist A, Nuclear Reactor Lab

H80-176, Machinist A, Nuclear Reactor Lab H80-187, Swimming Pool Attendant, Physical