

Seamans To Give Richards Lecture

Dr. Robert C. Seamans, Jr., newly named dean of the School of Engineering at MIT, will focus on the future of engineering education when he delivers the annual Robert H. Richards Alumni Lecture October 14 at the 1978 MIT Alumni Officers Conference.

Dean Seamans, who is also the Henry R. Luce Professor of Environment and Public Policy, will speak at 11am in Huntington Hall, Rm. 10-250.

More than 500 alumni are expected to return to the campus for the two-day conference that begins October 13.

The program will give alumni an opportunity to renew their acquaintance with three major facets of MIT: engineering education, scientific research and student life.

Dean Seamans will examine the impact of current trends on the future of engineering education as he delivers the second annual Richards lecture, named for the founder of the alumni association.

An engineer noted for his work in the development of guidance and control systems for planes, ships, missiles and space vehicles, Dean Seamans' distinguished career has included several important positions that have called for a blend of engineering with administrative and policy experience. He served eight years with the National Aeronautics and Space Administration, first as associate administrator from September, 1960, to December, 1965, then as deputy administrator until 1968. He was Secretary of the Air Force from February, 1969, to May, 1973, when he became president of the National Academy of Engineering. He held that post until December, 1974, when he became the first administrator of the Energy Research and Development Administration.

The research focus at the conference will be provided by two MIT undergraduates and their faculty supervisors who will discuss projects undertaken through MIT's unique Undergraduate Research Opportunities Program which enables undergraduates to do serious research in collaboration with faculty members and other scientists and engineers.

The projects to be discussed, starting at 2:30pm Saturday, Oct. 14, are an investigation of ways to help patients who have lost their lenses during cataract surgery and a system for collecting sunlight

(Continued on page 8)



SITTING SERENELY, holding the perfect cribbage hand, is Lincoln Group 72 technician John Rogers, who was dealt the beauty in a regular lunchtime game Wednesday, Sept. 27. Mr. Rogers, who has been playing with the group for only about a year, was dealt the jack of hearts and the fives of spades, clubs and diamonds. The cut of the deck revealed the five of hearts, transforming a great hand into a perfect 29. Other players were Tom Cronin, Chester Dickey and Harold Murray, all members of Group 72. According to Professor Richard M. Dudley of mathematics, the odds against such a hand are more than 800,000-1.

300 Expected to Attend Scanlon Plan Conference

More than 300 people—representing 57 companies—will gather at MIT on Oct. 12 and 13 for the 18th Scanlon Plan Conference sponsored by the Industrial Relations Section of the Alfred P. Sloan School of Management.

The program for the biennial conference will have separate agendas for representatives of 27 plants and companies that use the plan and 30 that do not, but are interested.

The Scanlon Plan calls for a common sharing between management and employees of problems, goals and ideas. The plan was conceived by the late Joseph N. Scanlon, a pioneer in the development of plans for management-union cooperation. Mr. Scanlon joined the staff of the Industrial Relations

Section in 1946 and continued in that capacity until his death in 1956.

Co-chairmen of the 1978 conference are Dr. Charles A. Myers, Sloan Fellows Professor of Management, emeritus, and director of the Industrial Relations Section, and Fred G. Lesieur of San Mateo,

(Continued on page 5)

Disabled Students Program Planned

The office of the Dean for Student Affairs now assumes responsibility for coordinating services for handicapped students.

Students with special needs or concerns resulting from physical disabilities, permanent or temporary, should plan to contact Dean Bonny Kellermann in Rm. 7-105, x3-6771. Dean Kellermann is also interested in talking with handicapped students about their experiences on the MIT campus.

A new organization is being formed on campus dedicated to helping handicapped people cope with various aspects of MIT life. Handicapped and non-handicapped students and employees interested in participating in this group should contact Len Evenchick (office: x3-7655, home: 643-4079), Roger Goun (office: x3-6771, home: x5-9239), or Ed Agro (524-2057).

Plant Sale

More than 400 plants will be arrayed on the Student Center steps tomorrow (Thursday, Oct. 5) as the MIT Women's League opens its popular annual plant sale.

Students who need something green to decorate their rooms will be able to select from a wide variety of houseplants priced from 50¢ to \$5.00. The sale will be open from 9am until it is sold out.

cance and breadth.

Faculty members interested in having their names submitted for nomination by the December 31 deadline should contact their department heads or Dean A. Horn, director of the Sea Grant Program which administers the chair.

Selections will be made by a committee which includes the provost, the dean of the School of Ocean Engineering and the director of MIT Sea Grant following an initial review by the Sea Grant Policy Committee. The relevance of the research to current ocean utilization issues, potential

applicability of the results to problem resolution and the anticipated benefits of the proposed work are the criteria used for choosing the Doherty Professors and providing them with support equivalent to full salary and employee benefits for the academic year.

Professors Alician V. Quinlan, Department of Mechanical Engineering, Ole S. Madsen, Department of Civil Engineering, and Francis Noblesse, Department of Ocean Engineering, hold the chairs through June 30, 1979.

MIT, Cambridge Plan Novel Learning Center

MIT and City of Cambridge officials have announced the receipt of a three-year, \$318,000 grant from the US Department of Health, Education and Welfare to design and put into operation an experimental computer-based information and learning service for public use at the Cambridge Public Library.

The program will be carried out by the MIT Division for Study and Research in Education in cooperation with the Cambridge Public Library and the City of Cambridge's Office of Community Development. The grant was made by HEW's Fund for the Improvement of Postsecondary Education, a part of the HEW Education Division.

Principal investigator is Dr. Roy Kaplow, professor of education in the MIT Division for Study and Research in Education as well as professor of materials science in the MIT Department of Materials Science and Engineering. Participating with Professor Kaplow in the program are Joseph G. Sakey, director of the Cambridge Public Library, and David Vickery, assistant city manager for community development in Cambridge.

An initially formed advisory committee with representatives from diverse community organizations has participated in the development of the proposal. The group

(Continued on page 5)

Four MIT Press Authors to be Featured at Book Fair

Four of the MIT Press's authors—Edwin Diamond, Lois Craig, Roger Kaufman, and Irving Louis Horowitz—are scheduled as speakers at the Globe Book Fair, Friday through Sunday, Oct. 6-8 at Hynes Auditorium, Boston.

The author of the newly-released *Good News, Bad News*, Ed Diamond is no newcomer to the Globe Book Fair (he was a featured speaker there when *The Tin Kazoo* was published three years ago), nor is he to the MIT community. A senior lecturer in the Department of Political Science, Mr. Diamond established the News Study Group, whose research into media cover-

age of Watergate and the impeachment process formed the basis of *The Tin Kazoo: Television, Politics and the News* (1975, hardback, \$9.95; paperback \$4.95). The News Study Group's analysis of the 1976 presidential campaign is included in *Good News, Bad News* (published in October, 1978, \$12.50). Diamond's new book also explores changes in television and in print journalism.

Ed Diamond will address the Globe Book Fair audience Saturday afternoon (Oct. 7) at four o'clock.

As director of the Federal Archi-
(Continued on page 5)



SOVIET DELEGATION from the US-USSR Joint Committee on Cooperation in the Field of Housing and Other Construction visited MIT Tuesday, Oct. 3, and saw the Architecture Machine, above, and MIT's solar house. Explaining the Architecture Machine are Guy E. Weinzapfel, research associate in the Department of Architecture; Dr. J. Michael Gerzso, visiting engineer in the department; and Dr. Richard A. Bolt, a research associate, left to right in the upper right background.

HRIBU Votes to Accept Contract

According to James Fandel, manager of labor relations, on Wednesday, Sept. 27, members of Local #26 Hotel, Restaurant, Institutional Bartenders' Union (HRIBU) at the Faculty Club and in the Food Services Dining Halls voted to accept the terms of a new three-year agreement.

As with Local #254 of the Service Employees' International Union, the terms agreed to include a seven per cent increase for each of the three years, pension improvements to include early retirement

at age 62 and 20 years of service with no actuarial reduction, changes in sick leave and vacation accrual and clarification of funeral leave and leave without pay practices.

Negotiations continue with the Independent Union of Plant Protection Workers (IUPPE) at Lincoln Laboratory. Meetings at the Federal Mediation Service continue with the Research, Development and Technical Employees' Union (RDTEU).

Sea Grant Seeks Doherty Nominations

The MIT Sea Grant Program has asked department heads to submit nominations for the fifth awarding of the Henry L. Doherty Professorships in Ocean Utilization.

The two-year professorships are open to all assistant professors and non-tenured associate professors from an academic department concerned with marine resource development and management. They are supported by the Henry L. and Grace Doherty Charitable Foundation to encourage junior faculty members to undertake the study of a key marine-related problem of importance, signifi-

Fall Foliage Tour

The annual Fall Foliage Tour sponsored by the MIT Women's League will be a trip to Newport, R.I., on Saturday, Oct. 14, including a visit to "The Breakers," famed former summer home of Cornelius Vanderbilt.

Tickets for the all-day trip are \$7 for adults and \$3.50 for children and are available daily in the Foreign Student Office (Rm. 3-107) and in the Maclaurin Lobby from 11am-1pm Thursday, Oct. 5, and Friday, Oct. 6. Tourers are to bring their own picnics, but the trip includes an afternoon snack.

INSTITUTE NOTICES

Announcements

Conversation Exchange**—The MIT Wives' Group has compiled a list of international women interested in exchanging foreign language conversation for English conversation. Contact: Karen Devine, x3-2916.

Danforth Foundation Fellowships**—Offered to college seniors who wish to pursue graduate study leading to careers in college or university teaching. MIT is permitted to nominate up to 3 students for award beginning September 1979. Seniors who wish to apply should submit a brief (1-2 page) account of their plans for graduate study and academic career in university teaching to Jean Richard, Associate Dean of the Graduate School, Rm 3-136, by Oct 20, 1978. On the basis of these essays, applicants will be scheduled for personal interviews with the MIT Danforth Fellowship Committee on Oct 28, 1978.

Library Schedule, Columbus Day, Oct 9, 1978—All libraries on regular schedule except Aeronautics and Astronautics, Archives, Chemistry Reading Room, Historical Collections, Microreproduction, NASIC, and Von Hippel Materials Center Reading Room, which will be closed. Rotch Visual Collections will be open from 9-5.

Off-Campus College Work Study Program**—For undergraduate and graduate students for 1978-79 academic year. Off-campus public and nonprofit organizations are eligible for CWSP participation. Needy students can receive 80% of their wages from CWSP with matching of 20% from the off-campus organization. Nelson Armstrong at Student Employment, Rm 5-119, x3-4973, will accept applications from students on a first come, first served basis until funds run out.

Seniors**—Seniors who wish to apply for graduate work in the Department of Electrical Engineering and Computer Science during 1979 are urged to apply by November 1. Applications available in Rooms 38-444 and 3-103.

Club Notes

Association for Women Students*—Letter signing to Senators to support extension of the ERA deadline, October 4-6, Lunch Hour, Lobby 10.

ACM Student Chapter Meeting**—Final plans for lectures, discussion of joint activities with other area chapters, Wednesday, Oct 18, 4pm, Rm 8-314. Info: Bill Wehl, d15-7546.

MIT Baha'i Association*—Discussion Series. October 17, 7:30pm, Student Center West Lounge, "Equality of Men and Women." Info: Laura, x3-3521.

Beginning Sailing Instruction**—every Monday and Thursday, 5:15pm, through November, at MIT Sailing Pavilion.

MIT Bridge Club*—ACBL duplicate open pairs game Thursdays, 7pm, Rm W20-473. Info: 494-8593. Admission .25.

MIT/DL Bridge Club**—ACBL Duplicate Bridge, Tuesdays 6pm, Rm W20-473.

EECS Student-Faculty Committee**—Meeting, Oct 3, 4pm, Jackson Room (38-466). New-comers welcome, refreshments.

Graduate Student Council**—Housing and Community Affairs Committee meeting, Tuesday, Oct 3, 5pm, Rm 50-210. Activities Committee meeting, Thursday, Oct 5, 5pm, Rm 50-210. Info: x3-2195.

MIT Go Club*—Regular meetings, games, instruction, lessons and books on strategy and tactics, Mondays and Thursdays, 8pm, Rm 7-102.

Hobby Shop**—Mon-Fri, 10am-6pm, Rm W30-031. Fees: \$10/term for students, \$15/term for community. Info: x3-4343.

MIT Judo Club*—Practice every Monday, Wednesday and Friday, 5-7pm, duPont Exercise Room (2nd fl.). Beginners welcome. Info: Lance, x3-1570.

MIT Juggling Club*—Thursdays 7:30-11pm Rm 491 Student Center; Sundays 1-4pm Kresge Oval. Visitors welcome.

MIT Motorcycle Research Association*—Monthly meetings, first Tuesday of each month, 7pm, Muddy Charles Pub (Rm 50-110). Info: Rm 13-5146, x3-6924.

MIT Pershing Rifles***—Commando Platoon meetings every Tuesday, 8pm, Rm 20E-017, monthly field training exercises. Drill Platoon practice every Monday, Wednesday and Friday, 7:30am, duPont Rifle Platoon, range firings every Thursday, 6-8pm, duPont Range. Info: Rm 20B-101, 623-0233.

MIT Pistol and Rifle Club**—Beginners Pistol Course starts Oct 5, 6:30pm, du Pont Pistol Range for five consecutive Thursdays, stressing safety and proper handling as well as basic marksmanship. Fee \$20. Info: Andy Platias, 8-1419 (Draper).

MIT Women's Rugby Club**—Practice every Friday 5:30-7:30pm. Games alternate Saturdays. Any woman with athletic card welcome. Info, call Sharon x3-6825.

MIT Rugby Football Club*—Practice Tuesdays and Thursdays, 5pm, Briggs Field. Games every Saturday. Beginners welcome. Info: Joel Lederman, 738-1662, Bruce Glaeser, x3-6733.

MIT Tiddlywinks Association*—Weekly meetings, practice, coaching, preparation for tournaments and strategy sessions, Wednesdays, 8-11pm, Student Center West Lounge or W20-473 if pre-empted.

Undergraduate Math Club**—Meets Sundays, 4:30pm, Rm 4-182. All undergraduates welcome. Info: d15-8439.

Women's Cross Country Club**—Official practice every Monday and Wednesday, 5:15pm, at the track. All women welcome. Info: Leslie Chow, 262-6844; Bill Brace, x3-3319.

Wu-Tang, MIT Chinese Martial Art Club*—meets Monday, 8-10pm, W20-407, Wednesday, 8-10pm, W20-491, and Saturday, 1-3pm, W20-491. Learn physical and mental discipline through practice of Kung-fu, also Northern Praying Mantis and Tai Chi. Beginners welcome. Info: Chen-dao Lin, d15-9640.

Religious Activities

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

Tech Catholic Community*—Sunday masses: 9:15am, 12:15 and 5:15pm. Weekday masses: Tuesdays and Thursdays, 5:05pm, Fridays, noon, in the Chapel.

Interdenominational—Worship and holy communion, Wednesdays, 5:05pm, Chapel, sponsored by Lutheran-Episcopal Ministry.

MIT Islamic Society*—Weekly Friday prayers, 1pm, Kresge Auditorium, Rehearsal Room B. Weekly Quranic Study Class, Fridays, 6:30pm, Rm 4-153.

Christian Service*—Sundays, 10:30am, Chapel. All invited.

Jewish Religious Services*—Traditional services, daily 8am Rm 7-102. Friday night, Sundown Kasher Kitchen, 50-005. Saturday, 9am, Bush Room 10-105. Mincha and Seudah Shlishit, info: 3-2982. Conservative Services, Saturdays, 10am, 312 Memorial Drive. Reform Services, Fridays 6:30pm, Chapel. Schedule, Hillel Office.

Bible Study*—Friday afternoons 1-2pm, Rm 20E-207. Bible class, music, guest speakers. Miriam R. Eccles, founder-director, Alpha and Omega Missionary Society.

MIT Vedanta Society*—Meditation and discourses on the Gita by Swami Sarvagatananda of the Ramakrishna Vedanta Society of Boston. Fridays, 5pm, Chapel.

Jewish High Holiday Services*—*Yom Kippur Services*: Traditional—Tues, Oct 10, beginning 5:30pm in the Mezzanine Lounge of the Student Center; Wed, Oct 11, beginning 8:30am in the Mezzanine Lounge of the Student Center; Mincha and Neila, Oct 11, beginning 4:30pm in the Mezzanine Lounge of the Student Center; Conservative—Tues, Oct 10, beginning 5:30pm in the Sala de Puerto Rico in the Student Center; Wed, Oct 11, beginning 8:30am in the Sala de Puerto Rico in the Student Center; Mincha and Neila, Oct 11, beginning 4:30pm in the Sala de Puerto Rico in the Student Center; Reform—Tues, Oct 10, beginning 6:00pm in the MIT Chapel; Wed, Oct 11, beginning 9:00am in the MIT Chapel.

Placement

The following companies will be interviewing during the time period covered by the current Institute Calendar. Those interested may sign up in the Career Planning and Placement Office, Mon-Fri, 9am-3pm, Rm 12-170, x3-4733.

Oct. 4—Mostek Corporation
Oct. 5—Council for Opportunity in Graduate Management Education (COGME); School of Electrical Engineering, Georgia Institute of Technology

Oct. 11—ACTION/Peace Corps/Vista; Univ. of Chicago/Graduate School of Business; Ford Motor Company; Intersil, Inc.; Jet Propulsion Lab; J. Ray McDermott & Company, Inc.; Northern Research and Engineering Corp.; The Quaker Oats Co.

New 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, Ext. 3-5049 or 3-4849 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.

Awards
A number of special awards are available to students working on UROP projects or about to begin a research project; these are a sampling; also check the UROP 78/79 Directory: Sigma Xi Research Awards. Two awards of \$750 each for research support are offered to undergraduates pursuing their own research

ideas in either science or engineering. Investigate further at the UROP Office. Deadline October 16, 1978.

Sigma Xi. Sigma Xi offers support for materials and supplies for worthwhile projects in the field of applied science. Proposals may be submitted any time.

James McCormack Memorial Fund. This fund provides wage and materials support for students doing work in areas relating to technology and its applications to social issues. Proposals are welcome any time.

Uniroyal Undergraduate Research Awards. Eligibility for Uniroyal Awards is limited to beginners who are starting their first project in the physical, chemical, and engineering sciences. Requests for personal support and/or materials are accepted at any time.

Software Documentation

TROLL is a large interactive computer system for modeling and statistical analysis. Two positions are available for qualified undergraduates to organize, write, or edit TROLL documentation. Students will work with economists, statisticians, systems programmers, and technical writers at Sloan School's new Center for Computational Research in Economics and Management Science, and at IPS. Requirements: minimum commitment 10 hours/week; strong interest in computer programming; writing proficiency as shown in sample of recent work. Contact John Kirsch, 14E-310D, x3-7821 or x3-8403.

Computer Music

Opportunities exist for participation in an artificial intelligence project for the study and simulation of musical intelligence. 1) Software to translate music entered in a composition-oriented format into a basic format for manipulation by the computer. 2) Software interface to a sheet music graphics package. 3) Software interface to a microcomputer-controlled music generator, capable of producing 12 independent voices. 4) Z-80 software to produce the music in real time. The first three projects require a general knowledge of the AI programming environment; the fourth requires familiarity with the Z-80 assembler language and preferably some knowledge of hardware. Preference given to students with musical knowledge. Contact David Levitt, NE43-921, x3-6765, home: 661-4718; or Marvin Minsky, NE43-820, x3-5864.

Department of Nutrition and Food Science

There is an opportunity for a student to participate in a microbiological research project in the use and improvement of thermophilic cellulose-utilizing anaerobic bacteria. This project is for credit. Contact Prof. Gomez, 16-210, x3-5108.

Blood-Brain Barrier and Neurochemistry in Diabetes

This project involves working with a medical endocrinologist on a series of experiments investigating transport of metabolic substrates across the blood-brain barrier in streptozotocin-diabetic rats. The neurochemical alterations seen in diabetic animals will also be studied. Students will be responsible for learning how to make animals diabetic, do a variety of biochemical assays, collections of specimens and insulin treatment of animals. Some small animal surgery and handling of radioisotopes will be involved in the blood-brain barrier transport studies. Contact Dr. Richard J. Wurtman, 56-245, x3-6732, or Dr. Anthony L. McCall, 56-237, x3-6733.

Kinetics and Mechanism of a Sustained Release Polymer

A sustained release polymer for clinically interesting macromolecules has been developed in our laboratory. This study will be focused on the factors affecting the release of bovine serum albumin and other proteins. Efforts will be made to figure out the mechanism of the release. This project will be carried out at Boston's Children's Hospital. This project will be interesting for pre-med students. Those who have background in biochemistry or physical chemistry are preferred. Credits offered. Contact Prof. Robert S. Langer, 16-309, x3-3107.

Graduate Studies

Rhodes Scholarships**—Awarded for two years of study in any field at Oxford University. Applicants must be US citizens, unmarried, between ages of 18 and 24, who have received bachelor's degree before beginning of program year at Oxford. Emphasis placed on character as well as intellect. Application information from Prof. Lester Thurow, Rm E52-252D. Application deadline, late October.

Woodrow Wilson Women's Studies Research Grants**—Research grants to encourage original and significant research about women. The grants, which average \$1,000, are awarded to students in doctoral programs in any field of study at graduate schools in the US. Applicants must have completed all pre-dissertation requirements. Info: Graduate School Office, Room 3-136. Application deadline: November 1, 1978.

NSF National Needs Postdoctoral Fellowships**—NSF plans to award 130 fellowships for postdoctoral research and study on scientific problems related to national needs. The fellowship provide a stipend of \$1,000 per

month for up to 12 months of tenure. Applicants must be US citizens or nationals who will have earned a doctoral degree in the mathematical, physical, medical, biological, engineering or social sciences by the beginning of their fellowships tenure. Preapplications and further information are available in the Graduate School Office, Rm 3-136. Application deadline: November 3, 1978.

NATO Postdoctoral Fellowships**—Approximately 40 NATO Postdoctoral Fellowships will be offered for further study in the sciences at institutions outside the US. Applicants must be US citizens or nationals who have demonstrated ability and special aptitude for advanced training in the sciences and who will have, by the beginning of the fellowship tenures, earned doctoral degrees in any of the qualifying fields of science. The stipend is \$920 per month for up to 12 months of tenure. Fellows are also provided with dependency allowances. Info: Graduate School Office, Rm 3-136. Application deadline: November 3, 1978.

Churchill Foundation Scholarships**—Approximately 10 scholarships awarded annually to US citizens between ages of 19 and 26 for the study of engineering, mathematics or science at Churchill College, Cambridge University. Applicants must have taken the Graduate Record Examinations (aptitude and advanced) no later than Oct 20, 1978. Application deadline: Nov 10. Info: Graduate School Office, Rm 3-136.

German Academic Exchange Service (DAAD) Scholarships**—For graduate study in any academic field in the Federal Republic of Germany. Candidates must be between 18 and 32, must hold bachelor's degree at time of award, and should be fluent in German. Application deadline, Nov 10, 1978. Info: Graduate School Office, Rm 3-136.

NSF Graduate Fellowships**—Three-year graduate fellowships for study leading to master's or doctoral degrees in the mathematical, physical, medical, biological, engineering and social sciences. The fellowships provide a cost-of-education allowance in lieu of tuition and required fees, plus a stipend of \$325 per month. Applicants must be US citizens or nationals at the time of application and must not have completed postbaccalaureate study in excess of 12 semester hours, or equivalent, in any field of science, engineering, social science or mathematics. Preapplications and info: Graduate School Office, Rm 3-136. Application deadline: Nov 30.

Amelia Earhart Fellowships**—Grants of \$4,000 offered to women for graduate study and research in aerospace related sciences and engineering. Application deadline: Jan 1, 1979. Info: Graduate School Office, Rm 3-136.

Lena Lake Forrest Fellowships**—The Business and Professional Women's Foundation sponsors the Lena Lake Forrest Fellowship Program and the BPW Foundation Research Grant Program which support research pertaining to economic, educational, political, social or psychological factors affecting working women. Awards range from \$500 to \$3,000. Applicants must be doctoral candidates or postdoctoral scholars whose proposal for research has been approved by an accredited graduate institution. Only US citizens are eligible. Info: Graduate School Office, Rm 3-136. Application deadline: Jan 1, 1979.

Pharmaceutical Manufacturers Association Research Grants**—Doctoral dissertation research grants to encourage original research in areas relating to socioeconomic aspects of the health care products industry. Doctoral candidates pursuing a degree in economics or related social and administrative sciences may apply. Applicants must have completed all course work leading to the doctoral degree and passed all qualifying examinations. The maximum stipend is \$2,500. Info: Graduate School Office, Rm 3-136. Application deadline: March 15, 1979.

Danforth Foundation Fellowships**—For the first time the Danforth Foundation is asking for nominations for postbaccalaureate awards. Applicants should hold a master's degree or equivalent number of course credits and be enrolled full or part time in a program leading to the doctor's degree, with serious interest in a career of teaching in a college or university in a field common to an undergraduate liberal arts curriculum in the US. A special effort is being made to bring qualified persons from racial and ethnic minorities into the teaching profession through this fellowship program. Graduate students wishing to apply should submit brief summaries of their plans for graduate study and an academic career in university teaching to Jeanne Richard, Associate Dean of the Graduate School, Rm 3-136, before October 20, 1978.

Marshall Scholarships**—Approximately 30 Marshall Scholarships are awarded annually by the British Government to US citizens under 26, to study for a degree at a university in the United Kingdom for a period of at least two academic years. Applications due Oct 22, are available at the Graduate School Office, Rm 3-136.

National Hispanic Scholarship Fund**—Grants ranging from \$200 to \$600 for graduate and undergraduate students of Hispanic American background. Applicants must be US citizens and presently enrolled and attending college as full-time students. Application deadline: Oct 20, 1978. Info: Graduate School Office, Rm 3-136.

Regents Physician Shortage Scholarships**—Available to residents of New York State who agree to practice medicine in an area of New York State designated as having a shortage of physicians. Awards based on MCAT scores, provide \$1,000 to \$4,000 each year for four years of professional study. Applications available in Preprofessional Advising and Education Office, 10-186, x3-4158. Application deadline, Nov 1, 1978.

Root-Tilden Scholarship Program, New York University Law School**—20 Root-Tilden Scholarships are awarded each year to graduates of accredited colleges who are committed to public service. The program complements normal law curriculum, giving opportunity to observe and support work of lawyers committed to public service. Each scholarship covers full tuition for one year and is renewable. Additional aid, on a loan, part-loan or part-grant basis, may be granted upon a demonstration of need. Deadline for nominations, Oct 19. To place your name in nomination, make an appointment with Dean Susan Haigh Houpt, Preprofessional Advising & Education Office, Rm 10-186, x3-4158.

Foreign Studies

Social Science Research Council**—Fellowships for doctoral dissertation research in the social sciences and the humanities to be carried out in Africa, Asia, Latin America and the Caribbean, the Near and Middle East, or Western Europe. The programs are designed to support scholars who intend to become specialists in the area where they will conduct their research. Applicants must be enrolled full-time at universities in the US or Canada and must have completed all requirements for the PhD except the dissertation by the time the fellowship is activated. Info: Graduate School Office, Rm 3-136. Application deadline: Nov 1, 1978.

The Latin American and Caribbean Learning Fellowship**—Pre- and postdoctoral research fellowships to provide opportunities for scholars to learn about processes related to social change in Latin America and the Caribbean. The fellowships are open to scholars in the social sciences and professions. Doctoral candidates must be enrolled in higher education institutions in the US and have fulfilled all degree requirements other than the dissertation at the time of the award. Info: Graduate School Office, Rm 3-136. Application deadline: Dec 5, 1978.

Echoes

October 8 - 14

50 Years Ago

Recently announced was the engagement of Dr. William P. Allis '23 to Miss Margaret James of Belmont. After his graduation from Technology Dr. Allis received his Doctor of Science degree from the University of Nancy, France. At present he is a research associate in the Physics Dept. of the Institute.

40 Years Ago

Institute track coach Oscar F. Hedlund and Professor William C. Greene addressed sophomores in an effort to rally students for the annual Field Day rivalry between sophomores and freshmen. "Wild Bill" Greene forecast defeat for the sophomores reasoning that he had supported the Class of '40 last year and they consequently lost Field Day.

25 Years Ago

Professor John F. Reintjes, Associate Professor of Electrical Engineering at the Institute, has been appointed director of the Servomechanisms Laboratory.

(Prepared by Marcia Conroy, MIT Historical Collections, x3-4444.)

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CABLE TV SCHEDULE X3-3625

October 4 - 10, 1978

Wednesday, October 4
Channel 8:
11am-12noon UNITED WAY
12noon-1:30pm SELECTED SHORTS: Computer Music, Weightlessness, Prisoner's Dilemma, Marriage, Cold Shoulder
1:30-2pm AFRICAN JOURNAL by Carol Beckwith

2-3pm TELEVISION WITHOUT GUILT with Prof. David Thornburn

Thursday, October 5
Channel 8:
11am-12noon WOMEN AT MIT
12noon-1pm UNITED WAY
1-1:45pm THE NORTH END
2-3pm WOMEN: New Roles
TELEVISION WITHOUT GUILT: Repeat, Wed., Oct. 4, 2pm
7-9:30pm POLITICS AND TELEVISION: with Ed Diamond. Live from 9-150.

Friday, October 6
Channel 8:
11am-12noon WOMEN: Infertility
12noon-1pm SELECTED SHORTS: Repeat, Wed., Oct. 4, 12noon
1-2pm UNITED WAY
2-3pm TELEVISION WITHOUT GUILT: Repeat, Wed., Oct. 4, 2pm

Monday, October 9
Institute Holiday. No programs scheduled.

Tuesday, October 10
Channel 8:
11am-12noon TELEVISION WITHOUT GUILT: Repeat, Wed., Oct. 4, 2pm
12noon-1pm SELECTED SHORTS: Repeat, Wed., Oct. 4, 12noon
1-2pm THE NORTH END
2-3pm TELEVISION WITHOUT GUILT: Repeat, Wed., Oct. 4, 2pm

DSRE Announces Staff Appointments

The MIT Division for Study and Research in Education has appointed four new members to its staff.

Dr. Benson R. Snyder, director of DSRE and professor of psychiatry at MIT, has announced the appointments of Dr. Barbara S. Nelson as associate director of the Division and assistant professor of education, and Dr. Daniel Osherson as associate professor of education and psychology jointly with the Department of Psychology.

The Division has also appointed two visiting professors to join the faculty of the Division for the 1978-79 academic year. They are Dr. Sheldon H. White, professor of psychology in the Department of Psychology and Social Relations, Harvard University, and Dr. Howard E. Gruber, professor of psychology at the Institute for Cognitive Studies, Rutgers University.

"These appointments mark the beginning of a new and exciting stage in the development of the Division," said MIT Provost Walter Rosenblith. Five years ago, when the Division was founded, its small faculty pooled their individual intellectual resources in search of common themes to explore the world of learning. Some of the tentative ideas that surfaced at that time have now become testable hypotheses and a variety of research projects are currently underway.

The Division focuses primarily on fundamental questions of how individuals and institutions learn. The emphasis is on the role of the productive image or metaphor in individual and institutional learning and its relation to cognitive theory on the one hand and to educational practice on the other. A wide variety of particular projects provides the context for such inquiry: research into the way children mentally represent music; the study of metaphor as a way of restructuring a problem, situation or idea; development of sophisticated computer environments for use by children; the development of new strategies for assessing competence in our society, as a response to evolving social purposes; the exploration of new ways to teach physics, calculus, and mathematics which take advantage of, rather than ignore, the students' intuitive sense of these subjects; and research into the long-lasting effects of MIT's "hidden curriculum."

The members of the Division bring to their shared educational interests a wide diversity of academic experience, professional perspective and personal concern.

Since 1972, Dr. Nelson has served as assistant to the president and chancellor of MIT. In that role, she has dealt with a wide range of issues involved in the leadership of MIT—educational issues, finances and fund raising, national issues of concern to the Institute, etc. She represented the president and chancellor in supervising MIT's participation in the desegregation of Boston's public schools, including a program to tap MIT faculty and student expertise to develop a school of science and technology (the Mario Umana Harbor School of Science and Technology, East Boston, Mass.) within the Boston public school system.

Dr. Nelson was a member of the steering committee which planned the organization of the DSRE and has served on its policy committees. In addition to her work with the senior administration of MIT, she has also been a lecturer with the Division since 1975 in the area of institutional studies. She will continue to teach and conduct research in this area.

A magna cum laude graduate in philosophy from Mount Holyoke College, Dr. Nelson received an MAT degree from Johns Hopkins University and an EdD degree from Harvard University.

Before coming to MIT, Dr.

Osherson was associate professor of psychology in the Department of Psychology at the University of Pennsylvania. His research has been focused on the development of an approach to the human cognitive competencies that straddle the dimensions of psychology, linguistics and philosophy. At MIT, he will be a member of a working group that seeks to develop cognitive sciences. Among numerous publications and manuscripts by Dr. Osherson are four volumes entitled *Logical Abilities in Children*.

In the field of education, Dr. Osherson has been investigating the pedagogical impact of alternative forms of higher education. He is particularly interested in the potential of devising small, liberal arts institutions that would maximize the intrinsic appeal for students of scholarship, art and intellectual excellence.

Dr. Osherson has served on the Board of Editors of *Cognition* since 1975. He received a BA degree in psychology from the University of Chicago and MA and PhD degrees in psychology from the University of Pennsylvania.

Dr. Sheldon H. White comes to DSRE as a visiting professor from Harvard University. His studies in cognitive psychology have focused on the cognitive development of children—spatial representations, changes in learning processes in late pre-school years, adolescent learning, etc.

Dr. White intends to devote his research with the DSRE on the social organization of children's cognition. His work will include computer programming to develop theoretical models and research into children's communication patterns. He will be writing a book on cognition and will co-author a second book on knowledge and practice with Dr. Martin Rein, professor of urban studies and planning at MIT and a member of DSRE.

Dr. Howard Gruber is a visiting professor of education with DSRE from Rutgers University. He has been studying the long-term development of complex intellectual systems in individuals. His study of the intellectual development of Charles Darwin, *Darwin on Man: A Psychological Study of Scientific Creativity*, was awarded the Phi Beta Kappa prize for books in science. He is now engaged in a similar study of Jean Piaget, of which he has already published an anthology of writings, *The Essential Piaget*.

While at MIT, Dr. Gruber will participate in the Division's research into intuitive thinking. In particular he will study the cognitive structure, strategies and modes of representation involved with certain phenomena of physics. He also plans to continue his study of Jean Piaget.

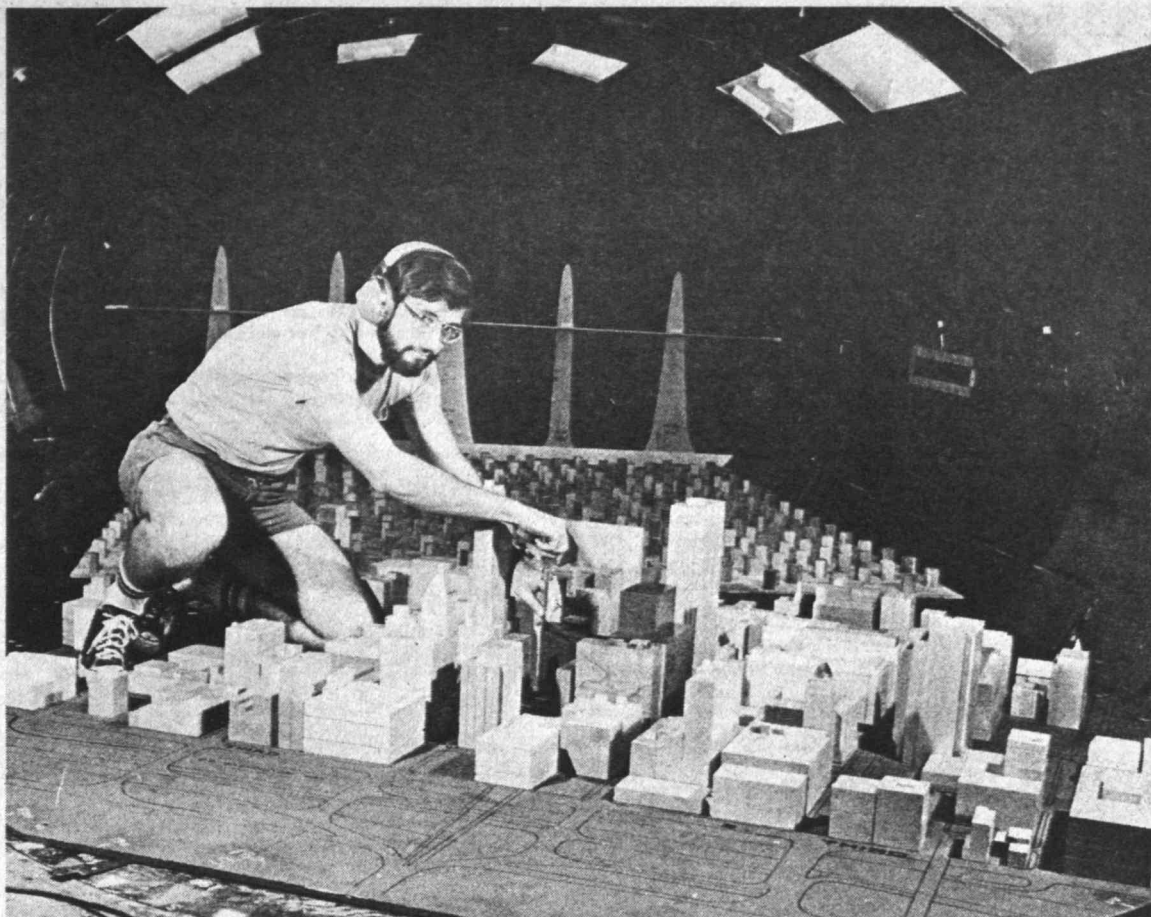
Established in 1973 to offer a special setting for learning about learning, the DSRE now offers an interdisciplinary PhD program in collaboration with graduate departments at MIT. The Division also offers some subjects as electives for undergraduates and graduate students at MIT, Harvard University and Wellesley College.

Designers Cited

Seven works by MIT designers Ralph Coburn and Nancy Pokross were accepted for inclusion in an exhibition last week at the University and College Designers Association in Estes Park, Col.

Mr. Coburn's designs selected included the 1976 Sea Grant Report, a brochure for graduate study in chemical engineering, letterhead for the Visible Language Workshop and posters for the MIT Brass Ensemble and the Borodin Quartet.

Ms. Pokross was cited for her designs for the 1978 Technology Day mailing and the January cover for *Technology Review*.



WIND IN CINCINNATI is simulated at the MIT Wright Brothers Wind Tunnel during window pressure tests ordered by Abramovitz, Harris, Kingsland of New York City, the architectural firm for an office building/hotel complex which is to be built on the south side of downtown Cincinnati's Fountain Park South. Drahomir "Mike" Lazar, a graduate student in aeronautics and astronautics from Selden, N.Y.—his ears protected from the sound of the fans that produce the wind—adjusts a sensitive pressure meter housed inside of a wooden model of the 17-story hotel.

The model of the 30-story office building is the taller, dark structure next to the screwdriver. The scale model, eight feet in diameter, is of an area of Cincinnati 3,200 feet in diameter. The pressure model of the Fountain Park Development was built by F.W. Dix & Co. of Woburn, Mass. The model of the city was made by Earle J. Wassmouth, a patternmaker at the MIT Aerolastic and Structures Research Laboratory. Data developed during the tests will help architects and engineers design the facade of the building.

—Photo by Calvin Campbell

Women's League Salons to Feature Faculty

MIT Historical Collections will be the scene of a new venture for the Women's League this fall—a series of salons featuring members of the faculty.

"Salon," says the *American Heritage Dictionary*, is "A drawing room or other large room for receiving and entertaining guests" and "An assemblage of persons, usually of social or intellectual distinction, who frequent such a room."

The intermingling of the social and academic verve of MIT is the objective of the series of salons, according to Dr. Lucy Nedzel, hospitality chairman of the Women's League.

"We are hoping to promote the social sharing of the intellectual excitement at MIT," Dr. Nedzel said. "We want to extend the cross-cultural stimulation that occurs during the day in telephone calls or over lunch to a wider segment of the community."

The first salon is scheduled for Friday, Oct. 20, at 8pm, with Dr. Harold J. Hanham, dean of the School of Humanities and Social Science, Dr. Gene M. Brown, head of the Department of Biology, and Dr. Walter S. Owen, head of the Department of Materials Science and Engineering, as the featured guests. They will discuss "Man in the Technology of the Future—Monotony or High Adventure?"

Marcus Receives Scott Award

Beth A. Marcus, a senior in mechanical engineering from New York City, has been selected to receive the prestigious Scott Paper Company Foundation Award for Leadership for outstanding academic work and participation in extracurricular activities.

Ms. Marcus is presently working on two research projects in biomedical engineering. In association with Dr. Philip A. Drinker, head of bioengineering in the Department of Surgery at Peter Bent Brigham Hospital, Ms. Marcus has devised a non-invasive surgical skull clamp to immobilize a patient's head during neurosurgery.

At MIT she is using the scanning electron microscope to determine how the surface of red blood cells change as they are hemolyzed, in a project carried out with Dr. Ernest G. Cravalho, Matsushita Professor of Mechanical Engineering in Medicine.

Ms. Marcus, who is president of her class, is a member of the women's varsity swimming team

and has been a member of the women's crew and the tennis team. She is also a former editor for *Technique*, the MIT yearbook, and a past social chairman of Burton House.

Recipients of the Scott Paper Company Foundation Award are selected for leadership potential and professional promise in engineering. The award carries a stipend of \$1,000 per semester for up to four semesters, with a supplementary grant to the department.

For security reasons, doors at Historical Collections will be opened at 7:30pm and closed at 8:30pm. Because of space limitations, reservations are necessary and may be made with Dr. Nedzel at 894-0350 or with Mary Pinson in the League office, x3-3656.

Those wishing to attend are invited to come early to view the Historical Collections, mingle, and partake of wine and cheese. Ample parking space is available in the nearby Windsor lot.

"Problems of the Upright Man on Earth and in Space" will be the topic at the second salon on Wednesday, Nov. 1, at 5:30pm. The featured guests will be Dr. Jerome Y. Lettvin, professor of electrical and bioengineering and of communications physiology; Maggie Lettvin, lecturer in the Department of Athletics and well-known authority on exercise; and Dr. Robert M. Rose, professor of materials science and engineering.

The third salon will focus on "Extraterrestrial Life and the Means or Meaning of Communication," led by Dr. Philip Morrison, Institute Professor and professor of physics; Dr. Stephan Chorover, professor of psychology, and Dr. Morris Halle, Ferrari P. Ward Professor of Modern Languages and Linguistics. It will be held Friday, Nov. 17, at 8pm.

Members of the faculty and staff who are interested in sharing their expertise, interest or hobbies at future salons are invited to call Dr. Nedzel or Ms. Pinson.

4 Appointed Assistant Professors

Four new assistant professors have been appointed at MIT effective last July 1, one in the Alfred P. Sloan School of Management and three in the School of Science.

Stan N. Finkelstein, assistant professor of health management in the Sloan School, received his SB and his SM in chemical engineering from MIT in 1971 and his MD from Harvard Medical School in 1975. He was a lecturer in health policy in the MIT Department of Political Science from 1976 to 1978. He is also a clinical fellow at Massachusetts General Hospital, a physician at the Health Care Management Center of the Boston Veterans Administration Hospital, and a consultant to numerous organizations.

Mary F. Roberts, assistant professor of chemistry, received her AB in chemistry from Bryn Mawr College in 1969 and her PhD in chemistry from Stanford University in 1974. From February, 1977, until her her appointment here she was a National Institutes of Health Postdoctoral Fellow in the Department of Chemistry at University of California at San Diego.

Robert T. Sauer, assistant professor of biology, received his BA in biophysics from Amherst College in 1972, and his PhD in biochemistry and molecular biology from Harvard University in 1978. He was a research associate 1972-1973 in the Endocrine Unit at Massachusetts General Hospital, and a teaching fellow at Harvard University 1974-1976.

J. Scott Whitaker, assistant professor of physics, received his BA in mathematics and physics from University of California, Berkeley in 1970, and his PhD in physics in 1976 from UC Berkeley. From January 1977, until appointment here he worked at CERN, the European center for nuclear research, on the WAI counter neutrino experiment.

THE INSTITUTE CALENDAR X3-3270

October 4
through
October 15

Events of Special Interest

Free China Day* — Sponsored by the China Study Group. Celebration of the 67th National Day of the Republic of China. Featuring Stamp Exhibition, a serial story about China via more than 600 sets of colorful stamps, also, Handicrafts, a fresh expression of tradition; Ancient Arts, duplicates of Chinese masterpieces of 50 centuries; Chinese Costumes, Lion Dance, Kung-Fu Demo, movies, slides. Sun, Oct 8, 10am-5pm, Student Center. Free. Evening Cultural Variety Show. Performance of dazzling native dances, folk songs and more, by a fourteen member Chinese students' goodwill mission from Taiwan, ROC, 8-10pm, Kresge Auditorium. Admission \$2, tickets available at the door or at the exhibitions.

Seminars and Lectures

Wednesday, October 4

Models of Oculomotor Neural Organization* — Dr. Klaus Hepp, Professor of Theoretical Physics, E.T.H., Zurich. Psychology In-House Seminar, Noon, Rm E10-013.

Numerical Model Ocean Interior Eddies — Simple Forced Rossby Waves?* — Dr. Edward Harrison, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915. Coffee provided.

The New Namibia* — Andrias Shipanga, President of SWAPO-Democrats, the party of Namibia, and a recent detainee in Tanzanian jails. MIT African Luncheon Seminar, off-the-record. Bring your lunch. 12:45-2:15pm, Rm 14N-317.

Preprofessional Advising and Education Office Seminar* — Prof. Shel Herman, Tulane University School of Law, 1pm, Rm 12-150.

Third World Championship of Space Models* — Members of the MIT Model Rocket Society will speak. Aeronautics and Astronautics General Seminar, 3pm, Rm 35-225. Coffee served preceding seminar Rm 33-222.

Development of a Model to Predict Flow Oscillation in Low Flow Sodium Boiling* — Ralph Bennett, Doctoral Thesis Presentation, sponsored by the Nuclear Engineering Department, 4-4:40pm, NW12-222.

Counting Quarks and Leptons: Why is Nature Repeating Herself?* — Robert Jaffe, assistant professor, physics. Undergraduate Physics Colloquium, 4:15pm, Rm 4-339. Social Hour Follows.

Thursday, October 5

Preprofessional Advising and Education Office Seminar** — Paul Carrington, assistant dean, Duke University, School of Law. Meeting at 10am, Rm 12-150.

Fabry-Perot Laser Beam Switching* — Philip Henshaw, Lincoln Laboratory. Electrical Engineering and Computer Science Optics Seminar, 3pm, Rm 36-428.

Correction: Seminar Cancelled: New Trends in International Air Transport Bilateral Agreements* — James R. Atwood, Deputy Assistant Secretary of State for Transportation Affairs. Flight Transportation Laboratory Aeronautics and Astronautics Seminar, 3pm, Rm 35-225.

Lasers, Light, Matter* — Prof A.L. Schawlow, Stanford University, California. Physics Colloquium, 4pm, Rm 26-100. Tea served 3:30pm, Rm 26-110.

Measurement of Trace Elements on Marine Samples Using Plasma Emission Spectrometry* — Dr. Thomas R. Gilbert, New England Aquarium Laboratory. Analytical Chemistry Seminar, 4pm, Rm 8-205.

Numerical Modeling of Plumes in Turbulent Stratified Atmosphere* — Alan Levin, Doctoral Thesis Presentation, sponsored by the Nuclear Engineering Department, 4-5pm, Rm NW12-222.

Preprofessional Advising and Education Office Seminar* — Dr. Thomas Lentz, Assistant Dean of Admission, Yale University School of Medicine, 4pm, Rm 15-150.

Debt versus Development in the Third World Countries: The Role of Commercial Banking* — Cheryl Payer, author of "The Debt Trap" and editor of "Commodity Trends in the Third World Countries." Seminar for International Students, 5pm, Rm E53-482.

Friday, October 6

An Analysis of the Heat and Mass Transport During the Freezing of Biomaterials* — Michael O'Callaghan, mechanical engineering Doctoral Thesis Presentation, 9am, Rm 37-212.

Development of Commuter Airlines — The Fastest Growing Airline Segment* — Joseph Fugere, President, Pilgrim Airlines. Center for Transportation Studies Seminar, Luncheon Optional Noon-12:45pm; Seminar 12:45-2pm. Luncheon Fee: \$1.25.

The Future of South Africa's Legal System* — Sidney Kentridge, leading South African barrister and head of Biko family team in 1977 inquest. MIT African Luncheon Series, 12:45-2:15pm, Rm E53-482, everyone welcome, bring own lunch.

Design and Conduct of Epidemiological Field Studies: II Planning a Field Study* — Dr. John Gordon, Professor of Epidemiology, Emeritus, Harvard School of Public Health. International Nutrition Program Seminar, 2pm, Rm 66-144.

Intrinsic Approach in Process Optimization and Synthesis* — Prof H. Nishimura, University of Tokyo. Chemical Engineering Seminar, 3pm, Rm 66-110. Coffee will be served.

Parsing Transformed Sentences* — Dr. Janet Fodor, Linguistics, University of Connecticut. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee 4:15.

Anarchism and Feminism* — Kathy Parson and Martha Acklesberg, Smith College. Social Action Coordinate Commission Lecture, 8pm, Rm 9-150.

Tuesday, October 10

The Effect of Deformation in the Earth on Local Gravity Changes* — Joseph B. Walsh, senior research scientist, Earth and Planetary Sciences. Applied Mechanics Seminar, 3pm, Rm 3-270. Coffee following seminar Rm 1-114.

Introduction to Upper Atmospheric Studies by High-Power Radar* — John Evans, Assistant Director, Lincoln Laboratory. Meteorology Seminar, 4pm, Rm 54-100. Tea and coffee 3:30pm, Rm 54-923.

1/f Noise in Astronomy and Elsewhere* — Prof William Press, Center of Astrophysics, Harvard University. Astrophysics Colloquium, 4:15pm, Rm 37-252. Coffee 3:45pm.

Wednesday, October 11

Chemical Exchange between Seawater and Old Oceanic Crust* — Dr. Russ McDuff, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915. Coffee provided.

Transition from Strict to Laissez-Faire form of Economic Government Regulation of the Airline Industry* — Monte Lazarus, Senior Vice President, Government Affairs, United Air Lines. Flight Transportation Laboratory, Aeronautics and Astronautics Seminar, 2pm, Rm 35-225.

Why Get an MBA?* — Dennis B. Metcalfe, Director of Admissions, Graduate School of Business, University of Chicago. Career Seminar, 4pm, Rm 10-250.

VLBI — A Radio Telescope as Big as the Earth* — Prof Bernard Burke, physics. Undergraduate Physics Colloquium, 4:15pm, Rm 4-339. Social Hour follows.

Reading* — Stephen Jay Gould, Harvard University, author of Ever Since Darwin, columnist for Natural History Magazine. Writing Program Science Writing Series Seminar, 8:15pm, Rm 14E-304. Refreshments following.

Thursday, October 12

Noise Approach to Biological Systems Analysis* — Syozo Yasui, assistant professor, physiology and Biophysics, University of Texas. Man-Vehicle Laboratory Seminar, 11:30-1pm, Rm 37-232.

A Review of the Importance of Stability and Control on Aircraft Safety* — Dr. Seth B. Anderson, NASA Ames Research Center, Moffett Field, California. Laboratory for Information and Decision Systems Colloquium, 1pm, Rm 39-500.

Thermophilic Bacteria, Ecology, Physiology and Technology* — Dr. J.G. Zeikus, Associate Professor of Bacteriology, University of Wisconsin-Madison. Food and Applied Microbiology Group, Seminar, 2pm, Rm 16-134.

Imaging Infrared Radar: A Review of Theory and Recent Experimental Results* — Robert C. Harney, Lincoln Laboratory. Electrical Engineering and Computer Science Seminar Optics Seminar, 3pm, Rm 36-428.

Interaction of Fast Molecular Ions with Matter* — Dr. D.S. Gemmel, Argonne National Laboratory, Argonne, Illinois. Physics Colloquium, 4pm, Rm 26-100. Tea served 3:30pm, Rm 26-110.

Nutritional Status and Immunological Responses* — Dr. R.K. Chandra, Professor of Pediatric Research, Memorial University of Newfoundland. Human and Clinical Nutrition Group Seminar, 4pm, Rm 16-134.

Friday, October 13

Design and Conduct of Epidemiological Field Studies: III Development of a Compatible S.O.P. (Standard Operating Procedure)* — Dr. John Gordon, Professor of Epidemiology, Emeritus, Harvard School of Public Health. International Nutrition Program Seminar, 2pm, Rm 66-144.

Worldwide Economic, Social and Technological Trends in Computer Automated Manufacturing* — Eugene Merchant, director of research planning, Cincinnati Millacron, Inc. Mechanical Engineering Seminar, 3pm, Rm 3-133. Coffee at 4pm, Rm 1-114.

Chemical Engineering Seminars* — Simon P. Hanson, title to be announced, 2pm. Kenneth G. Hellyar, A Twenty Minute Discourse on Some Aspects of an Experimental Study of Emulsion Stability, 2:50pm. Shingo Ishikawa, A Study of the Mechanism of Vortex Inhibition, 3:25pm, Rm 66-110. Coffee will be served.

Observations of Severe Thunderstorms on the Western Plains* — Dr. Howard Bluestein, University of Oklahoma, Norman, Oklahoma. Meteorology Seminar, 4pm, Rm 54-100. Tea and coffee served 3:30pm, Rm 54-923.

What Preschoolers Know About Numbers* — Prof Rochel Gelman, Psychology, University of Pennsylvania. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Library Tour Schedule

Microreproduction Laboratory Fall Tour* — Room 14-0551. For tour information contact: Peter Scott x3-5667.

Libraries 1978 Fall Tour Schedule* — Student Center, Rm W20-500; Von Hippel Materials Center Reading Room, Rm 12-2137 and the Rotch Visual Collection, Rm 7-304 will offer tours upon requests, as will the Dewey Library, for groups of three or more. For further information contact: Nancy Schrock x3-7098.

Community Meetings

Minority Interest Group** — Meeting held Wed, Oct 4, 1-2pm, Rm 3-207. For further information please call Josie Bartie x3-5446.

Wives' Group** — Wed, Oct 4, Dorothy Bowe, associate director, Student Financial Aid, will speak on "How to Plan a Budget and Spend Your Money Wisely." 3-5pm, West Lounge, Student Center. Babysitting provided.

The 9th Annual Plant Sale** — Sponsored by the Women's League. Thurs, Oct 5, from 9am, Student Center Steps, volunteers will be selling potted plants for students' rooms. Donations of begonias, impatiens, coleus, geraniums, or any kind of house plant are desirable. Proceeds are devoted to Student Service Projects. Call Mrs. Ray 749-3202.

Rune Open House** — Sponsored by Rune, the MIT journal of Arts and Letters. An open house for all people interested in any phase of publication of Rune, editing, production, advertising and to meet and talk with present staff. Thurs, Oct 5, 5pm, Rm 14N-309. Refreshments served. For further information call Susan Ann Silverstein 354-4652.

Relaxation and Breathing* — Class in learning to relax and breathe correctly through Yoga techniques. Fri, Oct 6, 7-9pm. For location and further details call Cynthia Friedman x3-7101, 1-5pm or 661-2648.

Wives' Group** — Wed, Oct 11, "Where and How to Shop in Boston," will be discussed by the Wives' Group Leaders, Charlotte Schwartz, Myra Rodrigues and Carol Hulsizer, 3-5pm, West Lounge, Student Center. Babysitting provided.

Still Room in Drawing, Pottery, Photography & Calligraphy Classes at the Student Art Association** — Registration open until classes get filled. 1-5pm, Student Center, Rm 429. Additional information call x3-7019.

Technology Wives Organization Weekly Exercise Class** — An hour of serious exercise led by professional Marilyn de Kleer. Every Monday through Dec 18, 8pm, Exercise Room, 2nd floor, Du Pont Gym. Info: call Marilyn de Kleer 494-9056.

Lobby 7 Events

Early Music Society* — Concert, Fri, Oct 6, Noon.

Social Events

Electrical Engineering and Computer Science Social Hour* — Sponsored by Eta Kappa Nu. Wed, Oct 4, 4-5pm, Rm 10-105. Coffee, cider, donuts served.

Strat's Rat* — Sponsored by the SCC. Dancing and drinking; Live DJ, beer, wine, and soda 35¢/glass; wine available by the bottle. Fri, Oct 6, 8:30pm-1am, 2nd floor, Student Center. College ID required. Free.

Oktoberfest** — Assorted Wursts Sauerbraten Wiener Schnitzel, Tues, Oct 10, Faculty Club, \$7.95 incl tax. For reservations call x3-4896.

Electrical Engineering and Computer Science Social Hour* — Sponsored by the Eta Kappa Nu. Wed, Oct 11, 4-5pm, Rm 10-105. Coffee, cider, donuts served.

Faculty Club** — Open Monday through Friday: Luncheon served Noon-2pm; Dinner served 5:30-8pm. Happy Hour: Monday through Friday, 4:30-6:30pm, wide variety of drinks \$1.05.

Movies

Anna Karenina** — Sponsored by the Department of Humanities, starring Greta Garbo. Wed, Oct 4, 3pm, Rm 14N-0615. Free.

Forgotten Village** — Spanish Narration. Sponsored by the Department of Humanities. Wed, Oct 4, 8:40pm, Rm 14E-304. Free.

A Man Called Bee** — Sponsored by the Department of Humanities. Thurs, Oct 5, 2pm, Rm 16-310. Free.

Spirit of Ethnology** — Sponsored by the Department of Humanities. Thurs, Oct 5, 3pm, Rm 66-056. Free.

Program of Fluid Mechanics Films* — Thurs, Oct 5, Pressure Fields and Fluid Acceleration, 4-5pm, last 30 minutes. Rm 3-270.

The Visit** — Cinema Scope. Thurs, Oct 5, 7:30pm, Rm 26-100. Sponsored by the Department of Humanities. Free.

Grapes of Wrath** — LSC Classic Film. Fri, Oct 6, 7:30pm, Rm 10-250.

Gone With the Wind** — LSC movie. Fri, Oct 6, 8pm, Kresge Auditorium. Admission: 75¢ w/MIT or Wellesley ID.

Science Fiction Double Feature** — LSC movies. Sat, Oct 7, The Day the Earth Stood Still, 6 & 9:30pm; The Time Machine, 7:45 & 11:15pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Midnight Movie** — Start the Revolution Without Me. Sponsored by the SCC. Sat, Oct 7, Midnight, Sala de Puerto Rico, Student Center. Bring your own blanket and sit on the floor. Free.

Hamlet** — LSC movie. Sun, Oct 8, 6:30 & 10pm, Rm 10-250. Admission 75¢ w/MIT or Wellesley ID.

Program of Fluid Mechanics Films* — Surface Tension. Thurs, Oct 12, 4-5pm, Rm 3-270. Last 29 minutes.

Grand Illusion** — LSC Classic Film. Starring Erich von Stroheim. Fri, Oct 13, 7:30pm, Rm 10-250.

Dr. No** — LSC movie. Sat, Oct 14, 2pm, 7pm & 9:30pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Red Detachment of Woman* — Sponsored by FLCC. Sun, Oct 15, 2pm, Rm 9-150. Donation \$1.

To Have and Have Not** — LSC movie. Sun, Oct 15, 6:30 & 9pm, Rm 10-250. Admission 75¢ w/MIT or Wellesley ID.

Music

Chamber Music Society* — Program includes works by Schubert, Quintet in C Major, "Shepherd on the Rock," and other songs; Beethoven, Quintet for Piano and Woodwinds in Eb Major. Sat, Oct 14, 8pm, Rm 10-250. Free. A reception will follow. Rm 10-105.

An Evening of the Liting Sitar* — Sponsored by Sangam. Concert of classical Indian Music with artist Nikhil Banerjee. Sun, Oct 15, 4pm, Kresge Auditorium. Admission: \$5 & \$4 student discount \$1. For Reservation call Sanjoy Mazumdar 494-8713. Refreshments served.

Exhibits

The Wednesday Afternoon Photography Lecture Series* — Linda Connor will give an informal lecture and present her work in photography. Made possible by a grant from the Minolta Corporation. Wed, Oct 4, 4:30pm, Creative Photography Gallery, 120 Mass Ave, Camb. For information call x3-4424.

Department of Architecture Fourth Floor Exhibition Program* — The Laboratory of Architecture and Planning. On view daily Mon, Oct 9 through Oct 19, Bldg 7, 4th Floor.

Aspects of Art and Science* — An exhibition of diverse art objects illustrating the concepts of Cyril Stanley Smith. On view Tues, Oct 10 through Dec 22, 9:30am-5pm, reception Tues, Oct 17, 7-10pm, Margaret Hutchinson Compton Gallery, Bldg 10, 77 Mass Ave, Cambridge, MA. Organized by the National Museum of History and Technology, Smithsonian Institution. Presented by the Compton Gallery Committee with the assistance of the Committee on the Visual Arts.

Carl Beckwith, Photographs* — Sponsored by the Committee on the Visual Arts. On view through Nov 3, 7 days a week, 10-4pm; Wed, 6-9pm. 160 Memorial Drive, Camb, MA.

Metamorphosis: Totems, Masks and Objects* — Sponsored by the Committee on the Visual Arts. By San Francisco artists Phil Pasquini (icons, squarities and monstrosities); Ivan Majdrakoff (box-like totemic environments filled with artifacts of the 50s and 60s); Ursula Schneider (life-size masks of invented physiognomies); Elin Elisofpm (fetish objects). On view through Nov 3, 7 days a week, 10-4pm; Wed 6-9pm. Public preview, Fri, Oct 29, 8-10pm. 160 Memorial Drive, Camb, MA.

Harry Callahan and Aaron Siskind Photography Exhibit* — A major two-man show on view daily, through Oct 20. Creative Photography Laboratory, 120 Mass Ave, Camb, MA. For further information call 253-4444.

Campus Photography Show* — Exhibition on view daily, Building 4, 4th floor. Sponsored by the Historical Collections.

Department of Architecture Fourth Floor Exhibition Program* — Works of Jan Wampler. On view daily through Oct 5, Bldg 7, 4th floor.

Compton Years* — A photographic essay of the lives of Dr. & Mrs. Carl Taylor Compton. Mon-Fri, 9am-5pm, Historical Collections, 265 Mass Ave, 2nd floor, Camb, Mass. For information call 253-4444.

Charles Stark Draper: Many Facets of the Man* — Major photographic show on view Mon-Fri, 9am-5pm, Historical Collections, 265 Mass Ave, 2nd floor, Camb, Mass. For information call 253-4444.

MIT 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.

MIT Historical Collections* — In house exhibits include antique globes; Ellsworth A. Wentz Collection of motors and meters; rare instruments including compasses, sundials and other measuring devices from the 17th and 18th centuries; Early Alumni and several exhibits of memorabilia and photographs honoring prominent graduates of the Institute. On view daily, 9am-5pm, 265 Mass Ave, 2nd floor, Camb, Mass.

MIT Historical Collections* — Permanent exhibition Mon-Fri, 9am-5pm, Bldg N52, 2nd floor. **Katharine Dexter McCormick, '04; Vannevar Bush, '16;** Bldg 4 corridor. **The New Technology Exhibit** 2nd floor balcony Lobby 7. **Energy Exhibit,** Bldg E40, 1st floor. **Solar Energy,** Bldg 8, 1st floor. **Center for Space Research, Astrophysics Exhibit,** main corridor, Bldg 4. **Bldg 6 Dedication Exhibit.**

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 and Jacques Lipschitz. For information and guides to the campus, call the Information Office, 253-4795.

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

Musical Caricatures* — Music Library, Rm 14E-109. Numerous cartoons of various aspects of music, especially pictures of famous composers and conductors.

Strobe Alley* — High speed photographs by Harold E. Edgerton, Institute Professor and Professor of Electrical Measurement, Emeritus. Bldg 4, 4th fl.

Athletics

Fall Sports Home Schedule* — **Field Hockey:** Mon, Oct 9, Gordon, 3:30pm. Fri, Oct 13, Clark, 4pm. Mon, Oct 23, Pine Manor, 3:30pm. Tues, Oct 31, Endicott, 3:30pm. **Varsity M Sailing:** Sat, Oct 7, NEISA Team Racing Championship Eliminations, 9:30am; Sat, Oct 14 & 15, NEISA Team Racing Tournament STAAKE Trophy, 9:30am. Sun, Oct 22, Open Invitational, Smith Trophy, 9:30am. Sat, Oct 28 & 29, NEISA Fall Inter-sectional, Schell Trophy, 9:30am. **Varsity Soccer:** Wed, Oct 4, Northeastern scrimmage, 3pm. Sat, Oct 7, Bates, 2pm. Tues, Oct 10, Brandeis, 3pm. Sat, Oct 14, U of Lowell, 2pm. Sat, Oct 21, Holy Cross, 2pm. **JV/Frosh Soccer:** Thurs, Oct 5: Curry scrimmage, 3:30pm. Wed, Oct 11, Tufts, 3pm. Sat, Oct 14, Emerson, host, 10am. Wed, Oct 18, Phillips Andover, 3pm. Sat, Oct 21, Babson, 10:30am. Sat, Oct 28, Emerson, 2pm. **W Volleyball:** Thurs, Oct 5, Boston University, 7:30pm. Thurs, Oct 12, Bridgewater, 7:30pm. Tues, Oct 17, Wellesley, 7:30pm. Sat, Oct 28, SMU & Kenne, 1pm. **Fall Women's Tennis:** Thurs, Oct 5, Holy Cross, 3:30pm. Thurs, Oct 26, Boston State, 4pm. **Fall Baseball:** Sat, Oct 7, UNH, Noon. **Fall M Tennis:** Wed, Oct 4, BU, 3pm.

Theater

Tech Show Organizational Meeting** — Welcome anyone with any interest in the Tech Show. Thurs, Oct 5, 7:30pm, Student Center, Rm 407.

An Evening of One Act Plays* — Dramashop presents Sacred Ground by Giuseppe Giacosa (a play from 1894 by Puccini's librettist, and Italian Strindberg); and The Collection by Harold Pinter. Thurs, Oct 12, 13, 14, 8pm, Kresge Little Theater. Admission: Free w/MIT ID or \$1 at the door without ID.

Dance

Informal Dance* — Sponsored by the MIT Ballroom Dance Club. Come dance all your favorite dances, Fri, Oct 6, 8-12pm, Sala de Puerto Rico, Student Center. Admission: \$1. Call Teri Weston x5-8514 or Kelly Gamble x5-7335 Dorm.

Beginning Cha-Cha Workshop* — Sponsored by the MIT Ballroom Dance Club. Learn to dance the Cha-Cha, no partner necessary, Sun, Oct 8, 2-4pm, Burton Dining Hall. Call Teri Weston x5-8514 or Kelly Gamble x5-7336 Dorm.

Dance Workshop** — Workshop director Beth Soll will teach both technique and composition/improvisation classes. Class meets Mon & Wed, 3-5pm, T-Club Lounge, duPont Gymnasium. For further information call x3-2908.

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 Oct. 11 through Oct 22 to Calendar Editor, Rm 5-113, x3-3270, before Noon, Friday, Oct. 6.



CONVOCATION SPEAKER William I. Spencer, left, president and chief administrative officer of Citicorp and Citibank, a featured speaker at the Sept. 29-30 convocation for alumni of the Alfred P. Sloan School of Management, talks with Professor William F. Pounds, dean of the Sloan School.



SLOAN ALUMNI MEET—Among those attending the Sept. 29-30 convocation for graduates of the Alfred P. Sloan School of Management were, from the left, John F. Fort III (SM '66), president, Simplex Wire and Cable Co.; Erskine N. White, Jr. (SM '49), executive vice president, Textron, Inc.; Richard A. Crowell (SB '62, SM '64, PhD '67), senior vice president, The Boston Co., Inc.; and Stanley M. Proctor (SB '43), president, Stanley M. Proctor Co., and a member of the MIT Corporation.



PANELISTS CONFER—Denis M. Slavich (PhD '71), manager of investments and economic services for Bechtel Corp. and vice president of Bechtel Financial Services, Inc., left, talks with Dr. Lester C. Thurow, professor of economics and management, at last week's convocation for graduates of the Alfred P. Sloan School of Management. Professor Thurow was chairman of a panel of five Sloan School graduates—one of them Dr. Slavich—who are chief and senior executives of major companies.

Four MIT Press Authors at Book Fair

(Continued from page 1)

ecture Project (from 1972-1977), Lois Craig studied the design improvement needs of federal building programs. Among the accomplishments of the Federal Architecture Project and Lois Craig was the preparation of a book on the history of federal architecture, *The Federal Presence: Architecture, Politics and Symbols in US Government Building*, which will

be published by The MIT Press in November.

Ms. Craig is scheduled to speak at the Globe Book Fair Friday (Oct. 6) at 7:30pm.

A *Fortran Coloring Book* (paperback, \$6.95) is a blue, yellow and green cartoon-filled production which you've seen if you've been to the Coop lately. It's the work of Roger Kaufman, whose jokes, hand-drawn charts and pictures,

and cartoons were tried out first on MIT freshmen—who gave his Fortran course a rave—before they were incorporated into an introductory book on Fortran. Dr. Kaufman, who's now a professor of mechanical engineering at George Washington University, will speak at the Book Fair on Saturday (Oct. 7) at 5:15pm.

Science, Sin, and Scholarship: The Politics of Reverend Moon and the Unification Church (now available, \$12.50) is a collection of essays and documents about many facets of a faith, a religion, and a sub-culture, which has been in the headlines off and on for the past few years.

Irving Louis Horowitz is the editor of the book, which addresses many of the questions currently being debated: questions about the civil liberties of sect members, activities of the Korean CIA in the United States and Reverend Moon's pro-Seoul actions, and the psychology and sociology of Moon. The author of some twenty books, Editor-in-Chief of "Transaction/Society," and Distinguished Professor of Sociology and Political Science at Rutgers, Dr. Horowitz is scheduled to speak at 4pm, Sunday, Oct. 8.

Lung Association Quit Smoking Program Set

The MIT Medical Department will offer a quit smoking program which will be available to the entire MIT community.

The seven sessions will span a four-week time period and will use a small group format based on a model developed by the American Lung Association.

The group will be led by a Lung Association staff member, an MIT health educator, and one or more guest speakers. It will meet at noon in the Infirmary Conference Room. An explanatory and introductory session will be held on Tuesday, Oct. 10. The program begins on Monday, Oct. 16.

A small fee will be charged, with a partial refund given to those who attend all sessions.

The group will be limited to 20-25. For further information and registration call the Health Information and Education Office of the Medical Department at x3-1316.

300 Expected to Attend Scanlon Plan Conference

(Continued from page 1)

Calif. He is an independent consultant on the plan and a former staff member of the Industrial Relations Section who still meets with classes at the Sloan School twice a year.

Mr. Lesieur had been president of a union local at a machine tool company where the Scanlon Plan had one of its early successes. He left the company in 1950 to join Mr. Scanlon in the Industrial Relations Section.

The conference fees go to the Joseph N. Scanlon Memorial Fund, which supports graduate fellowships in industrial relations each year.

The conference will open Thursday, Oct. 12, in Kresge Auditorium with a welcome from Sloan School Dean William F. Pounds.

The agenda for companies with the plan includes morning talks at Kresge by Dr. Phyllis A. Wal-

lace, professor of management ("Teaching Labor-Management Relations to Sloan Students"), and by Dr. Lester C. Thurow, professor of management and economics ("Current Economic Issues and a Look Ahead").

There will be a panel discussion centering on the plan in the afternoon, including representatives of the companies using the Plan.

Meanwhile, representatives of companies without the plan, meeting at the Student Center, will attend sessions at which the principles of the plan will be outlined by Mr. Lesieur.

Later, both groups will hear an address by Ren C. McPherson, chairman of the board of Dana Corporation of Toledo, Ohio. A larger number of Dana plants have the Scanlon Plan.

On Oct. 13, combined sessions and workshop seminars will be held at the Sloan School, followed by a reporting panel in the afternoon at Kresge Little Theatre.

MIT and Cambridge Plan Experimental Learning Center

(Continued from page 1)

will be seeking expanded and broad community participation.

"The project has been underway for a number of years on a preliminary basis," Professor Kaplow said. "During that time the funding was very limited, but now we hope to move ahead more strongly."

When completed the prototype system will allow citizens of Cambridge easy access to a wide variety of basic informational needs, such as the delivery of municipal and private human services. The information system will also serve as a basis for a city-wide telephone information service.

The center will be multi-purpose and will focus on user-perceived

needs. Programs for learning will also be included, such as for reading and writing basic English, and for practicing simple arithmetic and mathematical skills.

One of the aims of the project is to create a simple facility that anyone can use. If the program is successful in Cambridge it may be used as a national model.

In the prototype system envisioned for Cambridge, the user will ask the system questions and it will reply on a video screen. Users will be able to "browse" through large amounts of material on the screen and select specific information to be printed. A new type of terminal with no keyboard and requiring no typing will enhance easy interaction by the user. Terminals may be located in different neighborhoods in the city.

CLASSIFIED ADS X3-3270

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Persons who have no extensions or who wish to list only home telephones may submit ads by coming in person to the Tech Talk office, Rm 5-113, and presenting Institute identification. Ads may be telephoned to x3-3270 or mailed to Rm 5-113. **Dead line is noon Friday before publication.**

For Sale, Etc.

Excess furn for sale, refrig, 10 mos old, hardly used, nw \$200, ask \$135. If interested pls call 646-1018 aft 6:30pm.

Butcher block loveseat, solid oak, pinstripe cushions, \$500 value, ask \$250 or best. Call 266-1318 aft 4pm.

White House, plastic mod, unassembled, incl 36 presidents, Heritage Play set, Sears, could be used for historic display, \$7. Call 436-5391.

Nikon FTN black bdy, 55mm, f/1.2 lens, 135mm, f/2.8 lens, close up ring set, several filters, soft case, other extras, \$560. Call Jerry x8-1343 Draper.

Sm full sz refrig, gd working cond, \$40. Call Richard Harrington x3-1757.

Kg sz bedspread, deep avocado grn, org \$65, now \$25. Call Jeannie x8-2577 Draper.

2 hvy wire milk boxes, \$2 ea. Call Peter Stevens x3-6800.

3 LA36 deckwriters @ \$1000 ea or best. Call x3-7788.

Zenith Trans Oceanic short wave radio, best over 15; M 3 spd bike nds some reprs, \$20. Call 926-1685 aft 6pm.

Metal doll hse-fully furn w/mod furn & fmly of 4; complete exhaust sys parts for '70 Maverick, \$30. Call 862-1935.

Quilted bedsprd, fits dble bed, vy colorful bandana print. Call Mary x3-5646.

Sears 1/4 hp Router \$40 or best; Sonab man trntrble \$75 or best. Call Web x3-7322 or x3-4021.

PDP-8/1 mini computer w/12K memory, pos & neg buses, runs OS-8 w/appro mass storage device, incl ASR-33 teletype high spd paper tape reader also avail. Call Len x8-1354 Draper.

Raleigh Grand Prix, 10 spd bike, perf cond, hardly ever used, \$150. Call 266-0702.

Spinning wheel, Canadian, 4 yr old, \$100. Call Rita x3-7052.

Sears A/C, 14000 BTU, fits Eastgate Apt, exc cond, \$125. Call 494-8488 aft 5pm.

Refrig-frzr, frost free, approx 16' nds recharge, best. Call Dick x3-6472.

Tw sz sprng, matt & frme. Call Kevin x3-4489 or 254-6557 eves.

Office desk 4x2.5x2.5', \$70; file cab, metal 1.5x2x4', \$60; Zenith radio clock \$15; 1500W heater, \$16; auto, 3 spd fan \$20; GE iron, \$10, all exc cond or new. Call Kay 494-8665.

Baby bed, like nw, \$30. Call Hans x3-1822.

Guitar Aria, 2 pick-ups w/independent tune vol control, \$75. Call Michael x7379 Lincl.

Child's bureau, exc cond, white, 5 draws, \$45. Call Ben x7905 Lincl.

26" color TV, \$195; 5x3' wood desk & 3x3' metal tble & chr, \$30; Osterizer blender, \$15; Sansui tuner amp + BIC Venturi Formula 4 spkrs & Sankyo csst desk & Realistic trntrble, \$550; Emerson Quiet Cool A/C, \$125. Call Clarence x3-6060 or 523-0157.

M 10 sp Raleigh bike, white, nw summer 76, seldom used, \$80; brown tie hush puppies, sz 9A, worn once \$8. Call Linda x3-6690.

Pr G70-14 can replace G78-14, fiberglass beltd whitewall snws, Mercury rims, used 1000mi, \$40; used qu az brass plates headboards \$10; used ski equip; Hart standard skis w/Salomon bindings; & more, buy any item, or take all for \$30. Call Bob 726-3946 days.

Hoover port washer, \$70; Clairol elec curler \$5; end tble, wnt wood, mod \$10; rival crockpot, nw \$9; AM/FM conv fr car radio, \$15, prc nego. Call Marilyn x5724 Lincl.

Nursery grown trees, scotch pine, white spruce 3-8', \$1.50 per foot. Call Mario x8-2588 Draper.

Snows, Dunlop H78-15 snow cruisers, mtd, 6 bolts on 5 1/2" circle, fits many light trucks & 4 whl drvs, 5K, on 4 tires, 5th brand nw, \$45 ea, \$200 for all 5. Call Frank x3-4182.

Pr Mobil Premier tires w/rims, F78-14, practicaly brnd nw, \$25 ea. Call Jim x3-7477.

Xcountry ski boots M sz 7 1/2 worn twice, \$17; 2 lg white K cabs, \$15 ea. Call 876-3014 eves.

VW Beetle parts, nw battery. Call 266-1202 eves.

2 prs W boots, sz 7; pr Bass Climbing, fair cond; pr LL Bean Maine hunting boots, exc cond, nrly nw, best. Call Sydne x3-6708 or 734-6340.

Tires, 14" Kelly-Springfield, 4 ply poly cord, C78-14, \$20 pr; snws G78-14, \$15 pr. Call Craig 494-0194 aft 6pm.

Sony STR-7065 recvr \$225; Sony AM/FM clock radio \$15; Favilla classic guitar \$60. Call 868-4744.

1.5 cu ft refrig, gd for office or dorm, exc cond, \$120, sell for \$65; Brother sew mach, forward & reverse, \$25. Call Judy x5-9375 Dorm.

10 spd bike, almost nw, only used for 5/7 days, going cheap to the best. Inquire Sonia 354-3613 days or late eves.

Free IEEE transactions, computers 4/70 to 3/76; information theory 7/70 to 3/76; communications 1/74 to 3/76; VW eng parts & r/window; 6.95-14 tires on 4 stud rims, free. Call x177 Lincl or 729-2143.

Blue rug 10x13, gd cond, \$30. Call Jerry x3-2627.

Practicaly nw tire for Harley Davidson motorcycle, FLH Electra Glide, 4 ply, white wall, poly cord, tube type, ask \$40. Call Josie x3-5446.

Olivetti studio 45, port typewriter yr use, \$75; GE stereo sys AM/FM, 65 watts, \$150. Call 876-1456 eves.

Staedler sys Mars 700, tech pens, set of 7, 2 to 1mm sz w/case hardly used, ask \$30. Call Gabriel x5-9684 Dorm eves.

2 storm drs gd cond: Cross-Buch & Hi-lite sz 36"x80"; white aluminum, best. Call Sam x8-4121 Draper or 369-3976 aft 6pm.

Plants, spider, sw ivy, etc. Ice skates, boy's 6 1/2, 7 1/2, 8. \$3/pr. Call Harry x3-5837.

Sand box grade sand \$1.50 per trash barrel, pic-up in Lex. Call Mike x3-5824.

3 prs of skates: Munari plastic boot M hockey skates sz 10, \$45; CCM Goalie sz 8 1/2, fit 9-10 \$25; Hyde red-line sz 11, \$30. Call Mitch 738-5166 anytime.

16 cf refrig, yr old, \$175 or best, org \$230. Call Bruce x3-1589 or lv msg.

Bradford apt sz mini washer, \$60. Call George x3-4923.

Nice wood DR tble, 45x34" w/leaf 10x34, can also be used as desk & 4 match sturdy chrs, \$65 or best; matt, qu sz foam, yr old, \$30 or best. Call Candy x3-2076.

Old Singer port sew mach w/case, gd cond, nw motor, jst straight stitch, \$30. Call 492-4969 eves.

Minolta C110 zoom SLR, used 1 w/UV filter, case & M auto flash 25, cost \$220, wl sell \$175. Call Ed x8-4459 Draper.

Ski boots, Nordica sz 6; Garmont sz 4; M Hanson sz 11; Ladies sz 7 1/2, pr ski 135cm, pr ski 160 cm, boots exc cond. Call 784-5562.

Foam beads for bean bag chr, \$1.25/lb. Call x5-9794 Dorm.

Keystone K620 super 8 movie camera w/carry case & Kenko camera lite, \$85, Keystone K-560 super & reg movie projector, nds minor adj \$75. Call x3-3864.

Tube Tester, Hickoch 533, \$10; freq counter-timer CMR 201A, \$25. Call 876-0390.

Tempwood wood burn stove, yr old, perfect cond, \$200. Call x5271 Lincl.

Ham radio recvr, Drake R-4 + MS-4 spkr w/10 crystals XTLS for SWL, \$225. Call Paul x3-5461.

Wet suit, 1/2", M appr 6', 175 lbs, \$80 or best; single hose regulator, \$50 or best. Call Dick x3-6472.

R/window for Chevy van, fits '71-78, Solid-Ox weld-braze kit, used once, H78-15 LT, pr mntd on 6 bolt Chevy rims. Call Gary x3-7006.

Pr gd H78-14 stud snws, mntd Ford rims, \$25; Pr 14" 5 lug chrome reverse rims over sz fits 13" Dart, Valiant drums, \$15; 13" 4 lug rims, 1 1/4" dia bolt circle, Pinto; 4" dia bolt circle, Vega, \$2 ea wl haggle. Call Terry x3-1621.

Rug, 9'x12', \$15; blue background floral pattern, 236-4205 eves or x3-6557, lv msg for Sandy.

IBM Executive typewriter w/greek keys, best over \$175; GE vacuum cleaner w/accessories, \$20. Call Bill x3-5012.

F Vascount Grand Prix, 10 spd, chrome mold frame, Schiedmo components, end shifter, 5 mos old, \$150. Call x3-6289.

Skis, bindings & poles, \$50; ski boots, sz 8 1/2 & boot tree, \$25. Call Dorothy x8-3428 Draper.

Hse plants, \$3 & up; Minolta SR-T leather camera case, 1st \$25; nvr used, \$12; boy's clothing birth to 7 yrs, pick & choose, any offers accepted, misc child things. Call Willie x5536 Lincl.

Knotty Pine bar \$35; lg mirror, \$15; foot stool \$5; lime grn fl lamp; \$15; orange fl lamp \$5; TV stand \$10; 2 Chrysler hub caps for fl sz car \$3 ea. Call J. May x8-2843 Draper.

Vehicles

'65 Pontiac Catalina, exc cond, low milg, \$500 or best. Call x5-9640 Dorm or 494-8396.

'66 Chevy Malibu, runs wl, dependable, \$200 or best, mst sell. Call Kathy x3-1836 or Marty 266-8193 eves.

'68 Corvair 110 convertbl, 4 spd, 1 ownr, McCarney-maintained since nw, org paint, org top, vy clean, 125K, but many more to come. Call x3-8251.

'68 Mercedes, classic mod 200, auto, PB, A/C, comply renovated, \$4250 or best. Call Edwin x3-5812.

'68 Mustang, 6 cyl, 200 ci, 3 sp auto fl shift, AM, 4 gd tire, 1 spare, 2 worn snws on whls, nd bdy work, \$250 or best. Call x3-3403 or 259-8996 eves.

'69 Chevy Impala, blue w/white vinyl top, A/C, PS & PB, tilt whls, \$880. Call x3-5077.

'69 Dodge Dart, damaged right center section, slant 6 eng, mny gd parts, \$135. Call Leo x3-7216 or 665-7232 aft 6pm.

'70 BMW 2002, 2 dr cpe, exc rough, interior exc cond, runs perfect, nw tires, nw electrical, best; '72 BMW Motorcycle, 600cc, exc cond, recently overhaul, 22K fl access, best. Wl make deal for both. Call 729-2404 aft 6pm & wkends.

'70 Buick Sport Wg, gd eng, dent frame, \$150 or best. Call Karen x3-5718 or 492-7862.

'70 Ford Maverick, stand, A/C, \$700 or best. Call Sue x8-3541 Draper.

'70 Maverick, exc cond, no rust, rebt eng, auto trans, \$975 or best. Call Steve 862-6222 x191 anytime.

'70 VW Squareback, \$375, nds nw fender, some eng work, but runs; bikes M & W, \$20 ea. Call 661-8440.

'71 Ford Galaxy 500, gd mech, gd mpg, tires, perm mntd snws, \$650. Call Dick x8-1340 Draper or 443-3512.

'71 Toyota \$325. Call 389-4410.

'71 VW Bus, blue w/white; top cond ins & out, recent rebt eng, exh, tires, front end & clutch w/2 bike racks & roof rack \$1700 or nego. Call x3-2336 or 546-6236 aft 6pm.

'72 Chevrolet Vega GT Htchbck, Calif plates, no rust, exc cond \$700 or best, mst lv country. call 494-0496 aft 6pm.

'72 Cutlass Olds, 4 dr, top cond, \$1600 firm. Call 666-1540 am.

'73 Chevy Malibu Wg, V8, PS & PB, radio, rf rack, hi milg, gd cond, \$1200 or best. Call Bjorn x3-7309 or 924-5625.

'73 Chrs Stat wg, exc cond, best. Camping Travel Trailer, 99 Wilmington Rd, Burlington, Rt 3A to 62 Rt. Call (1)459-4746, 5pm-9pm.

'73 Pontiac Ventura htdp, 8 cyl, bucket seats, PS, 45K, mint cond, maint references mst be seen. \$2350. Call x3-7166.

'73 VW Bus, A/C, rads, 20K, rebt eng, exc cond, \$1900. Call Mr. Shah x3-2593.

'74 Ford Pinto, brwn, auto, htchbck, \$950. Call x3-4916.

'74 Vega, auto, 34K snws, \$885. Call Herbert x5-9715 Dorm or x3-5095.

'75 Fiat 128 Sport Coupe, 34K, exc cond, 4 snws, extra instrumentation. Call Bahram x3-1409.

'75 Volvo 244, 4 spd overdrv, AM/FM, fuel injecon, exc cond \$3900. Call x7701 Lincl or 862-5761 aft 6pm.

'77 Toyota, white, stand, exc cond, mst sell, \$3400 or best. Call Lee 783-3249.

Housing

Furn or unfurn optional apt in prv school, Chestnut Hill section of Brkline, incl 2 sun, spc rms, 2 B, washr/dryr, A/C, all util & 2 park spcs, shr school K w/nw appl, incl D&D, etc, short walk to shops, trans, synagogue & church, avail now, \$300/mo. Call 469-0130.

Camb, hide-away hse, this 6 rm home w/xtra usable attic & bsmt spc is hidden away on a dead end st. Call 666-1400.

Cohasset 2 fl, 2 BR apt, LR, eat-in K, porch at bus stop, \$375/mo + util, no smoker. Call 383-1520 aft 7pm.

Falmouth ranch, prv waterfront, prv dock access to Vineyard Sound, frplc LR, 3 BR, ol ht, yr round enjoyment, \$52,900. Call 332-3048.

Lex, Brnd nw 1-story condo town hse, lgly furn, 2BR, 2B, responsible couple only, condo snow & lawn services provided, \$975/mo. Call 862-4805 daytimes.

Watertwn, The Village Condo, lg 6 rm, 2 B, central A/C's vacuum, encls deck, hdwd flrs, gd closet spc, pool, club hse, off at park, \$51,500. Call x5721 Lincl.

Animals

AKC toy poodles, 9 wks, 1 F, 2 M, silver. Call Randy x3-1789.

Yng F black cat still nds gd home. Call x5-9623 Dorm.

Pretty white F cat nds gd home, pref, fmly or settled indivl, friendly, gntle, spayed. Call x3-4141 or 354-5773.

Free cat, 3 yrs old, beauty tiger w/long hair has been declawed & spayed, vy affectionate. Call x3-7004.

AKC Champ line, Doberman pup, 5 mos old, lg blk & rust M, ears, tail, shots, done. \$150. Hse brkn. Call Jerry x3-7713.

Siamese cats, yng pr, pedigreed, nd gd home. Call x3-4992.

Wanted

Paris apt wntd for June 79. Call Nancy x3-6323.

Bass player for Rock group. Call Sam x5-8417 Dorm.

Ceiling light fixtures. Call Brenda x3-6728 or x3-3109.

Seamstress needed to sew a dress. Call Marilyn x3-5848.

G bike, sm frme, narrow handle, coaster brke, 15-16" dia, pneumatic tires, appear not import but must be gd mech. Call Tony x3-5717.

Prof, family sk 2-3 BR, furn hse/apt, yard, general Boston area, from Jan-Aug '79; exchange poss. Call collect (919)682-5337, Durham, No. Carolina.

2 whls for Ford F150 1/2 ton truck, 5 lug, 15x5 1/2 whl sz. Call Carl x3-2250.

Rd nd Melrose to MIT 9-5 or 8:30-4:30 wl shr exp. Call Cheryl x3-6732.

Nd ride from Newton to MIT & back, hrs 8:45-5:15pm, wl shr exp. Call Julie x3-4250.

Person to care for 2 children ages 9 & 11, Mon-Fri afternoons, Lex home. Call David x3-6606.

Roommates

Rmmtte wntd for 2 rm apt, Allston area, \$100 per mo, ht incl. Call x3-7575 or 782-0403.

M pro sks other to find Brkline or Belmont hse or apt, rent is than \$200 ea. Call Marie x3-3807.

Brighton, rmmate to shr, 5 rm apt, conv to T & buses, prefer no-smoke, \$100/mo + util. Call Lee 783-3249 eves.

Lincl, shr miles of adj conserv land, 20 min from Camb, sk responsl P over 25 for warn peaceful coope living, \$200/mo, sorry no pets. Call 259-0959 Esther or William.

Rmmtte wtd Newton. Call Scott 965-0183 aft 5pm.

Carpools

NH residents wntd for carpool from Derry, Londonderry or Salem NH to MIT, arriving around 7am, lv around 4pm. Call Ken x3-4325.

Driving to Wash DC on Oct 27, return Oct 30, can take 3 riders, 1 way or round trip. Call Mary x3-4183.

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 reflect your new parking area.

Wl swap 68 Albany for Albany, East Gar or Dock St. Call x3-1341.

Wl swap Sloan sticker for Albany or East Gar. Call Frank Satlow x3-1623.

Miscellaneous

Wl type theses, MS, tech, fast & accurate, IBM Correct Select. Call Debbie x3-1848.

Retired watchmaker E.B. Horne Co, Boston, will repair watches at home, reas rates. Call Rosalie x3-6867 at 5pm.

Pro typist of doctoral thesis, MS, term paper w/an eye to perfection, IBM equip. Call 734-7496 eves.

Wl type theses, reports, exp, IBM Select. Call Linda x8-1395 Draper.

Wtd Flute instructor. Call Carol x3-6824.

Typing fast & accurate, MS, theses, reports, etc., IBM Select II. Call Lisa 327-3295.

Wl type theses, reports, etc on IBM Select. Call Carol x3-4152.

Wl type anything, tech, etc., IBM Correct Select, reas rates. Virginia 926-8894.

Wl do general, tech or thesis typing IBM Correc Select, 10 yrs exp x3-3807.

Surplus Property

MIT surplus property for transfer or sale for research or teaching programs only. 3pcs Low Frequency Induction Heating equipment, Mfg. by Induction Process Equipment Co, also, 1 Pipe Rack unit sz 6 1/2"H, 5"L, W12" arms, for further info please call W. A. Derry, Property Office x3-2777.

POSITIONS AVAILABLE

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Kiosk 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 Office.

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

Dick Higham 3-4278
Pat Williams 3-1594
Carolyn Scheer 3-1595
(Secretary — Tertia Perkins)

Virginia Bishop 3-1591
Richard Cerrato 3-4266
Ken Hewitt 3-4267
(Secretary — Paulette Chiles)

Sally Hansen 3-4275
Laurence Milan 3-2928
Kathleen Rick 3-4269
(Secretary — Jenni Leibman)

Admin. Staff, Fiscal Officer in the School of Engineering to be responsible for all administrative aspects of the Technology & Human Rehabilitation Program; prepare proposals; act as liaison among participating institutions; prepare reports; monitor expenses; prepare budgets; reconcile expenditures; assist in planning and setting up various laboratories. Experience in research and financial administration in academic setting required. Knowledge of proposal and report preparation, excellent interpersonal skills also necessary. A78-69 (10/4)

Acad. Staff, Applications Programmer, in Electrical Engineering and Computer Science to maintain and enhance application programs for current management information systems; specify, design, and code new application programs; document new or revised programs; train and assist users as necessary. Programming experience and an Associate's Degree or equivalent required. PL/1, Multics or RDMS experience helpful. C78-29 (10/4)

Admin. Staff, Director of Systems Planning and Development, in the Information Processing Services Dept. to plan, direct and manage projects involving the implementation of new information systems. Technical leadership in the areas of computers and technology and in-depth familiarity with college and university information requirements is mandatory, as well as excellent communication skills. Supervisory experience in directing activities of computer professionals and Bachelor's degree or equivalent combination of education and experience is also necessary. A78-67 (9/27)

Academic Staff, Asst. Coordinator for Health Information and Education, part-time, to edit and oversee newsletter publication; prepare other educational and informational materials; assist in planning and conducting health maintenance programs, seminars, etc.; assist in administering patient advocacy program. Master's degree in Public Health preferred, but applicable related experience in the health care field, including work with groups will be considered. C78-27 (9/27)

Sponsored Research Staff, Tech. Asst., in a Biology Dept. research group which is studying the structure and function of eukaryotic chromosomes. Will assist in biochemical and cytological experiments on a variety of organisms and manage a laboratory with several graduate students and postdoctoral fellows. A Bachelor's Degree in Biology

command of English grammar and facility with figures required. B78-606 (10/4)

Sec. III/IV in Materials Science and Engineering to assist two faculty members and their research groups: type technical reports, manuscripts, statistical tables and charts from hand written text or machine dictation; compile research related information from library sources; arrange travel; prepare class materials. Excellent typing, ability to work on irregular schedule required. Familiarity with MIT procedures preferred. B78-610 (10/4)

Secretary III/IV to 3 faculty members in the Laboratory for Computer Science: type manuscripts, course materials; handle a variety of other general secretarial duties including text editing through use of a computer system (will be trained). Position offers opportunity for involvement in administrative functions. Good general secretarial skills required. College training or MIT experience helpful. B78-619 (10/4)

Secretary III/IV to two Nuclear Engineering Faculty members to type technical reports, proposals, class materials and correspondence; perform a variety of other general secretarial duties. Good typing skill, familiarity with office procedures and ability to work independently required. Technical typing skill helpful. B78-595 (9/27)

Secretary III/IV in the Student Financial Aid Office to type correspondence and reports; maintain files; handle mail; compile and compare statistics; process forms and records; assume receptionist's duties in absence of regular receptionist. Excellent typing skills required. B78-166

Sec. III in Career Planning and Placement to perform several varied duties: type correspondence, interview and other reports; circulate job information to students and others; maintain job records and bulletin boards; assist with special projects including mass mailings, compiling lists, etc. Good secretarial skills required in addition to an interest in working in a service-oriented environment. B78-613 (10/4)

Secretary III in the Office of the Dean, School of Architecture and Planning to handle a full range of secretarial duties including the collection of statistics; greeting and assisting Office visitors; maintaining supplies; transcribing machine dictation and assisting in preparation for social functions. In addition to excellent secretarial skills, applicants should be able to manage several projects simultaneously. B78-495 (8/30)

Sr. Clerk IV, part-time, in the Sloan School to perform a wide variety of clerical, administrative and accounting tasks; process requisitions, invoices, travel vouchers; maintain related files; check financial statements for accuracy; advise others on accounting and other procedures. Typing skill, accounting and clerical experience required. MIT experience desirable. 20 hrs./wk. B78-614 (10/4)

Clerk III in Biology Headquarters to provide general office assistance: type letters, class notes; distribute informational and other materials to students; xerox; occasionally act as messenger. Position involves extensive contact with students, faculty and staff. Typing skill is required. B78-601 (10/4)

Clerk III in Medical Dept. Records Section to pull and file medical records; assist with maintenance of medical index; answer phones. Position requires ability to work in a busy setting and on one's feet all day. Demonstrated ability to handle clerical duties required. 37 1/2 hrs./wk. B78-603 (10/4)

Sr. Clerk III in the Admissions Office to type address labels; assist in large-volume mailings and special projects; occasionally operate IBM Mag Card machine (will be trained to operate). Excellent typing skill, ability to organize and handle detailed work required. Non smoking office. B78-617 (10/4)

Clerk III in the Office of the Registrar to perform receptionist and general clerical duties: answer phones; redirect inquiries; use record keeping computer terminals. Good typing skill, ability to work with a wide variety of people required. B78-618 (10/4)

Sr. Clerk III in the Space Systems Laboratory, Aeronautics and Astronautics to type and xerox reports; do library research; organize reference material; schedule meetings; arrange travel; perform varied other duties as required. Clerical skill including typing, familiarity with technical writing required. Some college preferred. B78-583 (9/27)

Clerk/Typist III, part-time, in the Graduate School Office to perform general clerical duties: type; prepare mass mailings; answer phones; arrange meetings; assist secretarial staff as necessary. High school graduation, or equivalent, typing skill, some applicable working experience required. 20 hrs./wk. B78-582 (9/27)

Receptionist-Clerk III in the Student Accounts to assist Counselors in providing finance-related services to students; answer student questions; open mail; answer phones; type and mail letters; assist in reviewing accounts and statements; maintain files. Ability to understand and apply complex procedures, typing and communications skills required. B78-593 (9/27)

Sr. Clerk III in the Comptrollers Accounting Office, Travel Section to type checks; check and proofread transfer of data from forms to computer formats; review charges against accounts to assure they comply with policy and regulation; answer phone inquiries for information about travel expense matters. Typing skill, ability to communicate on telephone required. B78-587 (9/27)

Cashier III, Comptrollers Accounting Office to receive and disburse cash; prepare receipts; log mail receipts; cash personal checks; prepare checks for deposit; prove cash fund. Ability to handle a volume of cash transactions accurately, to work well with others and to operate a calculator required. B78-590 (9/27)

Sr. Clerk III in the Accounting Office, Faculty Club, to file and control records; answer telephones; respond to correspondence; update account files; maintain accurate receivable records by processing log sheets for computer input. Interest in detail and ability to handle routine clerical duties required. B78-600 (9/27)

Book Checker II part-time in Chemical Engineering Reading Room/Library to monitor general activity in the facility; maintain order; issue books, periodicals; follow up on unreturned materials; handle light clerical duties. Ability to type and to handle detailed work required. 20 hrs./wk. B78-615 (10/4)

Hourly, Tech. B (Elec.) in the National Magnet Laboratory to fabricate and test special purpose analog and digital electronic equipment and devices; lay out printed circuit boards; carry out photographic and etching procedures; perform light machine shop activities. Applicants must be graduates of 2 year day technical schools or equivalent, and have thorough knowledge of printed circuit techniques, soldering procedures, integrated circuit components and wire harness assembly. Trouble shooting experience and some background in machine shop practice also necessary. (40 hrs./wk.) B78-154 (10/4)

Hourly, Custodian, in Physical Plant to keep assigned areas clean, secure and in presentable condition and to perform other related duties as assigned by the supervisor. Applicants must be able to speak, understand and write in the English language. B78-160 (10/4)

The following positions were still available at *Tech Talk* deadline. The date following each position is the date of the most recent *Tech Talk* in which the position was described.

A77-86, Systems Programmer, Information Processing Serv. (1/11)
A78-14, Asst. Dir., MIT Associates Program (4/12)
A78-20, Admin. Staff, Alumni Association (5/3)
A78-27, Admin. Staff, Auditor, Audit Division (6/7)
A78-30, Admin. Staff, Design Manager, MIT Press (6/7)
A78-38, Admin. Staff, Systems Programmer, Information Processing Services (8/30)
A78-44, Admin. Staff, Industrial Liaison Officer (8/30)
A78-49, Admin. Staff, Financial Aid Officer (8/30)
A78-51, Admin. Staff, Sr. Consultant-Trainer, Personnel Development (8/30)
A78-56, Admin. Staff, Asst. Director, Resource Planning (9/6)
A78-57, Admin. Staff, Property Auditor, Supervisor, Office of Facilities Management Systems (9/6)
A78-58, Admin. Staff, Property Administrator, Office of Facilities Management Systems (9/6)
A78-59, Admin. Staff, Data Base Manager, Office of Facilities Management Systems (9/6)
A78-60, Admin. Staff, Asst. to the Dean, Dean for Student Affairs Office (9/6)
A78-66, Admin. Staff, Real Estate Property Mng., Treasurer's Office (9/27)

BIWEEKLY:
B77-655, Sec. IV, Chemical Engineering (11/16)
B78-129, Sec. IV, Biology (4/12)
B78-154, Sec. III/IV, Lab for Nuclear Science (7/26)
B78-160, Sec. IV, Center for Policy Alternatives (4/19)
B78-165, Sr. Accg. Clerk IV, Sloan School (7/26)
B78-167, Sec. III/IV, Mechanical Engineering (4/26)
B78-178, Sec. IV, Provost's Office (4/26)
B78-185, Account Rep. V, Administrative Computer Serv. (4/26)
B78-275, Drv. IV, Harvard-MIT Division of Health Sciences & Technology (6/7)
B78-302, Sec. IV, Resource Development (7/12)
B78-306, Sec. IV, Research Laboratory of Electronics (7/12)
B78-318, Sec. IV, Mechanical Engineering (9/13)
B78-328, Sec. IV, Humanities (8/16)
B78-343, Secretary IV, Energy Lab (7/26)
B78-349, Editorial Asst. IV, Center for Transportation Studies (7/26)
B78-371, Sec. IV/Admin. Asst. V, part-time, Provost's Office (9/27)
B78-380, Tech. Asst. V, Division of Lab. Animal Medicine (8/16)
B78-382, Sec. V, Physics (9/27)
B78-387, Sec. IV Material Science & Engineering (8/16)
B78-392, Sec. IV, Division for Study & Research in Education (8/16)
B78-408, Sec. IV, Sloan School (8/30)
B78-414, Sr. Clerk/Keypunch Operator III, Temporary, Office of Personnel Services (8/30)
B78-423, Sec. III, Sloan School (8/30)
B78-431, Sec. IV, Division of Health Sciences & Technology (8/30)
B78-432, Sr. Clerk IV, Medical Dept. (8/30)
B78-436, Sec./Receptionist III, Math Headquarters (8/30)
B78-445, Sec. IV, Center for Space Research (8/30)
B78-453, Sec. IV, Nutrition & Food Sciences (8/30)
B78-454, Clerk III, Resource Planning & Development Office (8/30)
B78-457, Sec. IV, Lab. for Computer Science (9/6)
B78-463, Sec. IV, Sloan School (9/6)
B78-472, Sec. III, Office of Facilities Management Systems (9/6)
B78-484, Sec. IV, Civil Engineering (9/6)
B78-488, Sec. III-IV, Arteriosclerosis center (9/6)
B78-490, Sec. III-IV, Ocean Engineering (9/6)
B78-494, Sec. IV, Patent & Copyright Office (8/30)
B78-496, Serv. asst., III, Sloan School (9/6)
B78-503, Sec. III-IV, Chemical Engineering (9/6)
B78-511, Sec. IV, Sloan School (9/13)
B78-515, Sec. IV, Center for Advanced Engineering Studies (9/13)
B78-517, Sec. IV, Economics (9/13)
B78-518, Tech. Typist IV/Mag Card Operator, Economics (9/13)
B78-523, Tech. Asst. V, Alumni Assn. (9/13)
B78-525, Sec. IV-V, Office of the President & Chancellor (9/13)
B78-528, Sec. IV, Earth & Planetary Science (9/20)
B78-529, Sec. III-IV, Meteorology (9/20)
B78-530, Sec. IV, Center for Advanced Engineering Studies (9/20)
B78-531, Sec. III-IV, part-time, Chemical Engineering (9/20)
B78-535, Sec. III, part-time, Earth & Planetary Science (9/20)
B78-536, Sec. III-IV, MIT Associates (9/20)
B78-541, Sec. IV, Office of the Chairman (9/20)
B78-542, Sec. IV, Program in Science, Technology & Society (9/20)
B78-547, Sec. V, temp., Psychology (9/20)
B78-549, Sec. III/IV, Mechanical Engineering (9/27)
B78-550, Sec. III/IV, Mechanical engineering (9/27)
B78-558, Sr. Sec. V, Sloan School (9/27)
B78-560, Sec. III/IV, Office of Personnel Relations, Benefits (9/27)
B78-561, Sec. IV, Research Lab. of Electronics (9/27)
B78-562, Sec. IV, Energy Lab. (9/27)
B78-563, Sec. IV, Sea Grant College Program (9/27)
B78-567, Sr. Clerk III, Libraries (9/27)
B78-570, Sec. IV, Civil Engineering (9/27)
B78-571, Sec. III, Materials Science & Engineering (9/27)
B78-573, Editorial Sec. V, Materials Science & Engineering (9/27)
B78-574, Sec. IV, Admissions Office (9/27)
B78-576, Sec. III, Medical Department (9/27)
B78-578, Sec. IV, Alumni Association (9/27)
B78-579, Sec. V, Plasma Fusion Center (9/27)
B78-580, Sec. III/IV, Lab. for Computer Science (9/27)

ACADEMIC STAFF:
C78-6, Acad. Staff, Asst. Eng. Librarian, Engineering Library (4/5)
C78-9, Acad. Staff, Asst. Science Librarian, Libraries (4/19)
C78-12, Academic Staff, Technical Instructor, Mechanical Engineering (6/7)
C78-17, Acad. Staff, Research Associate (7/12)
C78-22, Acad. Staff, Asst. Librarian, Libraries (8/16)
C78-23, Acad. Staff, Marketing Representative, Medical Dept. (8/30)
C78-26, Librarian, Head, OCLC/LC Cataloguing Section Libraries (9/20)

EXEMPT:
E77-54, Exempt, Eng. Asst., Center for Material Science (7/12)
E77-56, Estimator/Scheduler, Physical Plant (11/9)
E78-27, Exempt, Admin. Asst., Libraries, Microproduction Lab (6/14)
E78-35, Exempt, Tech. Supervisor, Physical Plant/Telecommunications Dept. (8/16)
E78-36, Exempt, Principal Operator, Physical Plant (8/16)
E78-42, Exempt, Dental Hygienist, Medical Dept. (9/6)
E78-46, Exempt, Admin. Asst., Clinical Research Center (9/6)
E78-47, Exempt, Asst. Accountant, MIT Press (9/6)

HOURLY:
H77-89, HVAC, Designer/Draftsperson, Physical Plant (10/5)
H78-23, Machinist A, Nutrition & Food Science (3/8)
H78-64, Sr. Technician, National Magnet Laboratory (5/31)

H78-95, Tech. A., Aeronautics & Astronautics (9/6)
H78-99, Sheet Metal Worker, Physical Plant (7/26)
H78-106, Sr. Technician, (Elec.), National Magnet Lab. (8/16)
H78-137, Technician B, Center for Advanced Engineering Studies (9/6)
H78-140, Tech. B, Havstack Observatory (9/27)
H78-152, Mechanic B, Lab. for Nuclear Science (9/27)

SPONSORED RESEARCH STAFF:
R77-53, Spons. Res. Staff, Res. Lab. of Electronics (4/12)
R77-79, Spons. Res. Staff, Postdoctoral Research, Physics, Lab. for Nuclear Science (5/4)
R77-91, Spons. Res. Staff, Sr. Accelerator Physicist, Lab. for Nuclear Science (5/18)
R77-97, Spons. Res. Staff, Chemical Engineer, Energy Lab. (6/1)
R77-137, Spons. Res. Staff, Experimental Physicist, Bates Linear Accelerator (8/31)
R77-161, Spons. Res. Staff, Elec. Engineer, Mechanical Engineering (9/7)
R77-201, Spons. Res. Staff, Prog./Data Analyst, Earth & Planetary Science (10/26)
R77-209, Spons. Res. Staff, Res. Scientist, Energy Lab. (11/30)
R77-211, Spons. Res. Staff, Computer Systems Design, Lab. for Computer Science (12/7)
R77-212, Spons. Res. Staff, Prog. Language Design, Lab. for Computer Science (12/7)
R77-213, Spons. Res. Staff, Computer Software Design, Lab. for Computer Science (12/7)
R77-221, Spons. Res. Staff, Nutrition & Food Science (9/27)
R77-228, Spons. Res. Staff, Plasma Physicist, Res. Lab. of Electronics (1/4)
R77-230, Spons. Res. Staff, Computer Software Designer, Lab. for Computer Science (1/11)
R78-55, Spons. Res. Staff, Staff Scientist, Arteriosclerosis Center (4/5)
R78-58, Spons. Res. Staff, National Magnet Lab. (4/12)
R78-60, Spons. Res. Staff, Combustion Engineer, Energy Lab. (4/12)
R78-64, Spons. Res. Staff, Earth & Planetary Science (4/12)
R78-70, Spons. Res. Staff, Energy Analyst, Energy Lab. (4/12)
R78-73, Spons. Res. Staff, Computer Programmer, Energy Lab. (5/10)
R78-79, Spons. Res. Staff, Mechanical Engineer (4/19)
R78-81, Spons. Res. Staff, Lab. for Nuclear Science (4/19)
R78-82, Spons. Res. Staff, Lab. for Nuclear Science (4/19)
R78-83, Spons. Res. Staff, Lab. for Nuclear Science (4/19)
R78-84, Spons. Res. Staff, Lab. for Nuclear Science (4/19)
R78-85, Spons. Res. Staff, Technical Asst., Nutrition & Food Science (4/19)
R78-93, Spons. Res. Staff, Res. Engineer, Civil Engineering (5/10)
R78-101, Spons. Res. Staff, Lab. for Nuclear Science (5/31)
R78-102, Spons. Res. Staff, Lab. for Nuclear Science (5/31)
R78-103, Spons. Res. Staff, Lab. for Nuclear Science (5/31)
R78-104, Physicist, Temp., Lab. for Nuclear Science (6/7)
R78-105, Physicist, Temp., Lab. for Nuclear Science (5/31)
R78-108, Programmer, Temp., Res. Lab. of Electronics (5/31)
R78-110, Spons. Res. Staff, Part-Time, Sea-Grant College Program (5/31)
R78-113, Spons. Res. Staff, Sloan School of Management (7/12)
R78-117, Spons. Res. Staff, Temp., Economics Dept. (7/12)
R78-119, Theoretical Plasma Physicist, National Magnet Laboratory (7/12)
R78-120, Spons. Res. Staff, National Magnet Laboratory (7/12)
R78-125, Spons. Res. Staff, Electrical Systems Laboratory (7/12)
R78-133, Spons. Res. Staff, Sr. Microwave Systems Engineer, Natl. Magnet Lab. (7/26)
R78-134, Spons. Res. Staff, Research Lab. of Electronics (7/26)
R78-135, Spons. Res. Staff, Research Lab. of Electronics (7/26)
R78-136, Spons. Res. Staff, Lab. for Computer Science (8/16)
R78-145, Spons. Res. Staff, Electronics Engineer, Lab. for Nuclear Science (8/16)
R78-146, Spons. Res. Staff, Electrical Engineer, Bates Linear Accelerator (8/16)
R78-147, Spons. Res. Staff, Systems Programmer, Lab. for Nuclear Science (8/16)
R78-148, Spons. Res. Staff, Organic Chemist, National Magnet Laboratory (8/16)
R78-154, Spons. Res. Staff, Program Director, Neurosciences Research Program (8/30)
R78-160, Spons. Res. Staff, Programmer, Center for Space Research (8/30)
R78-162, Spons. Res. Staff, Systems/Scientific Programmer, National Magnet Lab. (8/30)
R78-163, Spons. Res. Staff, Systems Analyst, temp. Energy Lab. (8/30)
R78-166, Spons. Res. Staff, Research Analyst, Center for Policy Alternatives (8/30)
R78-168, Spons. Res. Staff, Programmer, Center for Space Research (8/30)
R78-170, Spons. Research Staff, Programmer, Center for Space Research (8/30)
R78-184, Research Engineer, Artificial Intelligence Lab. (9/6)
R78-185, Medical Technologist, Clinical Research Center Lab. (9/6)
R78-187, Spons. Res. Staff, Asst. Manager, Sea Grant Program (9/13)
R78-189, Spons. Res. Staff, Radiochemist, Nuclear Reactor Lab. (9/13)
R78-193, Spons. Res. Staff, Computer Programmer, Energy Lab. (9/13)
R78-194, Spons. Res. Staff, Research Specialist/Research Asst., Center for Policy Alternatives (9/13)
R78-195, Spons. Res. Staff, Project Manager, Center for Transportation Studies (9/13)
R78-196, Spons. Res. Staff, Project Manager, Center for Transportation Studies (9/13)
R78-197, Spons. Res. Staff, Research Engineer, Energy Laboratory (9/13)
R78-198, Spons. Res. Staff, Postdoctoral Scientist, Center for Space Research, (9/20)
R78-199, Spons. Res. Staff, Postdoctoral Scientist, Nutrition & Food Science (9/20)
R78-201, Spons. Res. Staff, Earth & Planetary Science (9/20)
R78-206, Spons. Res. Staff, Tech. Asst., Arteriosclerosis Center (9/27)
R78-207, Spons. Res. Staff, Applied Magnetism Research, National Magnet Lab. (9/27)
R78-208, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor (9/27)
R78-209, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor (9/27)
R78-210, Spons. Res. Staff, Minicomputer Programmer, Material Science & Engineering (9/27)

The following positions have been FILLED since the last issue of *Tech Talk*:
B78-409 Sec. IV
B78-534 Lib. Gen. Asst. III
B78-358 Sec. IV
B78-537 Keypuncher III
B78-565 Sec. III
B78-516 Sec. IV
B78-468 Sec. V
R78-163 Spons. Res. Staff
B78-577 Tech. Asst. IV
B78-543 Sec. V
R77-53 Spons. Res. Staff
H78-148 Hourly
R78-171 Spons. Res. Staff
H78-136 Hourly
H78-115 Hourly

This Week In Sports

Cross Country Team Is Undefeated So Far

In the only home meet of the fall season, the MIT cross country team (4-0) defeated the United States Coast Guard Academy and Wesleyan over the five mile Franklin Park course. Scores of the meet were MIT 33, Coast Guard 36 and Wesleyan 61.

Leading the Tech harriers on to victory was senior Captain Barry Bayus (Beltsville, Md.). Also scoring for MIT were juniors Walter Sargent (Springfield, Va.) and Leonard Nasser (New London, Conn.) in fourth and sixth places, respectively, and freshmen Jeffrey Lukas (O'Fallon, Ill.) and Colin Kerwin (Westfield, Mass.) in tenth and eleventh. Sophomore Patrick Hamilton (Mendham, N.J.) and freshman Erik Haugsnes (Naperville, Ill.) insured the Tech victory, finishing twelfth and thirteenth.

The team will meet the University of Lowell and Boston College this Friday at 4:00pm at B.C.

Soccer

The Tech varsity soccer team (2-2) was able to beat the always tough WPI Engineers 2-0 last Tuesday at Worcester, scoring one goal in each half. Senior goalie Tom Smith (Millville, N.J.) posted his first shutout of the season.

While neither team played an exceptional first half, MIT's outstanding senior halfback duo of Luis Boza (Lima, Peru) and Robert Currier (Slidell, La.) were able to provide Tech with a 1-0 half-time lead. Boza scored the goal at 17:40 on an assist by Currier. In the

second half, MIT dominated the play, outshooting WPI 13-4. Eleven minutes into the half, sophomore forward Bill Uhle (Miami, Fla.) scored his first goal of the '78 season on an assist from senior halfback Mike Raphael (Ottsville, Pa.).

Over the weekend, the Tech team traveled to Hartford, Conn., to play Trinity. The team's late arrival helped to contribute to the opposition's first goal. MIT didn't get enough warm-up in as evidenced by Trinity's goal, which came only 52 seconds into the game. But by the beginning of the second half MIT was going strong and outshot Trinity 17-5 but was only able to produce one goal. Sophomore Bill Uhle scored his second goal in as many games after a beautiful pass from senior forward Zanda Ilori (Kwara State, Nigeria).

Since the score at the end of the second half was tied at 1-1, two 10-minute overtime periods were played. The first overtime was even until, with just two seconds remaining, Trinity scored the go-ahead goal. During an all-out MIT effort to tie the score in the second overtime, Trinity scored again with one minute remaining. Final score of the game was 3-1.

The Tech soccer team's next three games are at home. This Saturday the Engineers will take on Bates, and next week they'll meet Brandeis on Tuesday and the University of Lowell on Saturday.

Steinbrenner Stadium To Become Movie Set

MIT's Henry G. Steinbrenner Stadium will become a movie set for four hours Sunday morning, Oct. 8.

Yvonne Hanneman, New York City filmmaker, will be there from 8am to noon with 12 of the country's top women runners to make a 25-minute instructional film on running.

The film is being made in connection with the Bonne Bell 10 kilometer (6.2 mile) National Championship for Women to begin at noon Monday, Oct. 9.

The 12 top runners will compete in the race which will begin at the Boston Common, cross the Longfellow Bridge, continue down Memorial Drive to the Boston University Bridge Rotary, go back up Memorial Drive across the Harvard Bridge and down Commonwealth Avenue to the finish line at the Boston Common. Over 4,000 women are signed up to compete in the race.

The Bonne Bell Cosmetics Co., Inc., Lakewood, Ohio, is sponsoring the race and the film. After completion the film will be shown at running clinics for Bonne Bell races around the country.

A competition will be held for "most participation." Last year MIT placed second in that competition and so far 26 MIT-affiliated runners have identified themselves to Jane Betts of the Athletic Department. Women signed up to run in the race who belong to the MIT community—students, staff

B78-407 Sec. IV
B78-532 Clerk III
B78-314 Sec. IV
B78-498 Comp. Op. IV
C78-18 Nurse
B78-559 Sec. IV
B78-493 Sec. IV
B78-581 Sec. III
B78-474 Sr. Clerk IV
B78-509 Sec. IV
B78-533 Admin. Asst. II
B78-483 Sec. IV
Z78-2 Gallery Attendant
B78-501 Sec. IV
B78-489 Sec. IV

The following positions are on HOLD pending further decision:

A78-64 Admin. Staff
H78-139 Pot Washer
R78-157 Spons. Res. Staff
R78-158 Spons. Res. Staff
R78-192 Spons. Res. Staff
R78-193 Spons. Res. Staff
B78-500 Acctg. Asst. V
B78-508 Acctg. Asst. V
H78-144 Hourly
B78-502 Tech. Asst. V
B78-485 Sec. III/IV
A78-55 Admin. Staff
A78-53 Admin. Staff

or faculty—are invited to call Professor Betts at x3-4920.

Runners appearing in the film will be 12 of the 14 winners of Bonne Bell-sponsored races held in major cities during the past year. Two winners will not be present.

A press conference with the 12 runners will be held at 11:30am Sunday, near the stadium stands. Also at the press conference will be Jess Bell, president of Bonne Bell, and Gayle Barron, Bonne Bell's running advisor and winner in the Women's Division of this year's Boston Marathon.

The track will not be closed to casual runners during the filming, but there may be short periods when the director will want exclusive use of sections of the track.

Joseph R. Canavin

A memorial service was held on Friday, September 29, at the MIT Chapel for Joseph R. Canavin of Andover, who died September 25 in the crash of a 727 jetliner in San Diego, California. He was 33 years old.

Mr. Canavin, a dynamics engineer, was a member of the advanced systems department at the Draper Laboratory. He was in California last week to present a paper at the American Institute of Aeronautics and Astronautics Conference on Space Platforms.

He leaves his wife, Madonna (Murphy) Canavin; three children, Shannon, Peter and Erin; his parents, Mr. and Mrs. Joseph J. Canavin; and two sisters, Alice Nemitsa and Mary Roderick, all of Maryland.

Thomas F. Connolly

Thomas F. Connolly, a custodian at the Draper Laboratory from 1961 until his retirement in 1971, died September 16 at the age of 76.

Mr. Connolly, who lived in Everett, leaves his wife, Albertine L. (Lacroix) Connolly; two daughters, Mrs. Rita Couture of South Lawrence and Bernadette Connolly, an employee in the Safety Office, of Everett; a son, Gerard Connolly of Revere; a sister, Mrs. Mary Mooney of Woburn; and six grandchildren.

Coordinators To Plan IAP

Preliminary plans for IAP '79 got underway last Wednesday, September 27, with a luncheon meeting for IAP coordinators, at which the broad outlines and purposes of IAP were explained, and the examples of specific IAP '78 activities were presented by their activity leaders.

Robert I. Hulsizer, professor of physics and chairman of the faculty, emphasized the academic opportunities that IAP offers to faculty and students. Since most activities are not for credit there is great latitude for exploring new fields, and to enjoy learning without the pressure engendered by grades.

Woodie C. Flowers, associate professor of mechanical engineering and chairman of the IAP Policy Committee, underlined Professor Hulsizer's remarks, pointing out that IAP offers education outside the limits of standard course offerings, and provides a time when students—and faculty—can pursue individual interests, on their own or within a like-minded group.

IAP '78 activities leaders, Mark Durst, a graduate student in mathematics, Steven Krueger, a senior in electrical engineering and computer science, and Joseph Sefcik and Donald Dube, graduate students in nuclear engineering, told of their experiences with IAP last winter.

Mark Durst, who was involved in the mathematics department's "Soap Bubble Carnival," pointed out that though he was asked to take part in the course "because I was the only one in the department who could blow one soap bubble inside another," the activity itself was based on serious mathematics of minimal surfaces. He added that a few more members of the department can now blow a bubble within a bubble.

Steven Krueger outlined the method used by students in the Department of Electrical Engineering and Computer Science to create more faculty involvement in IAP. The students divided into small groups, each approaching individual faculty members, asking that he or she present a single lecture. The lectures were scheduled for the same time each day. The result was not only the wider faculty involvement that the students sought, but, since each lecture was an individual presentation, attendance varied with the subjects, bringing many different people to the department.

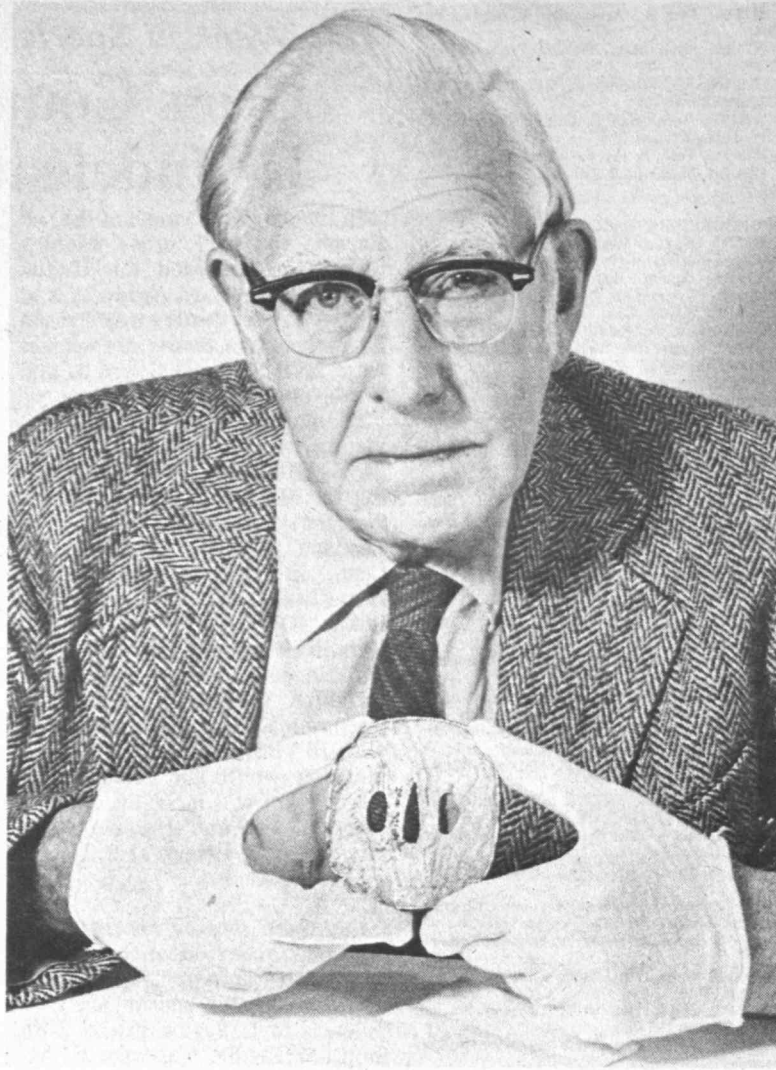
Finally, Joseph Sefcik, an activity leader for IAP '78, told of the problems involved when field trips are planned and how to avoid them, and Donald Dube, also of the nuclear engineering department, voiced hopes of scheduling a "Seabrook Week" for IAP '79, an outgrowth of an IAP '78 activity, "Nuclear Engineering and Public Attitudes," in which members of the Clamshell Alliance spoke with faculty and students from the department.

On Tuesday, October 3, coordinators were given the opportunity to meet in the more informal setting of a coordinators' workshop led by Peggy Richardson, administrator in the physics department and a member of the IAP Administrative Committee.

The role of the IAP coordinator was clarified. It is the coordinator who must schedule activities and generate enthusiasm in the department for specific activities and for its general participation in IAP.

Emphasis was laid on beginning work on IAP as soon as possible. Early participation is necessary for inclusion of an activity in the First Guide to IAP. Publication of a detailed description of the activity allows time to evaluate its potential popularity and decide on its inclusion in the Final Guide to IAP.

Those who want to take part or lead an IAP activity should call their department coordinators, whose names are listed in the IAP Announcement.



Dr. Cyril Stanley Smith gives a preview of one of the objects on exhibit in "Aspects of Art and Science." He holds a sword guard (Tsuba) of iron mokume from 19th century Japan. The exhibit will be open to the public October 10-December 22 in the Margaret Hutchinson Compton Gallery, Maclaurin Building (Rm. 10-150).

Compton Gallery Exhibit Is Visual History of Science

When visitors come to "Aspects of Art and Science" at MIT's Margaret Hutchinson Compton Gallery, they may think they are enjoying an art exhibit when actually they will be exploring a visual history of technology and science.

The exhibition will open Tuesday, October 10, and run through Friday, December 22. A public reception on Tuesday, October 17, 7-10pm, will feature distinguished historian and metallurgist Dr. Cyril Stanley Smith, Institute Professor, Emeritus, MIT, whose work was the inspiration for this exhibition.

"Aspects of Art and Science" is the joint effort of Dr. Smith and Dr. Jon B. Eklund, Curator of Chemistry at the Smithsonian Institution's Museum of History and Technology. Originally organized by the museum this spring, the exhibition has been organized for MIT by Virginia Gunter, director of the Compton Gallery, and will be presented here by the Compton Gallery Committee with the assistance of the Committee on the Visual Arts at MIT.

The exhibition brings together 72 objects and rare books from major museums and collections in the United States and Great Britain, illustrating Dr. Smith's views on the relationships between art and science—particularly the discovery and use of properties of materials.

"Before there existed a formal science to explain the properties of materials, discovery was motivated by a generalized curiosity about the world," Dr. Smith writes in an essay for the accompanying catalogue.

"As this exhibition shows," Dr. Smith continues, "the qualities of the materials to which the artist responded sensually are inherently the same as the properties and structures that are measured and explained by the scientist."

For centuries, artists and artisans have discovered and exploited the properties of matter, much in advance of the scientists who tested, theorized and defined those properties. It is the science of materials which brings the artist together in a study of technology, function and aesthetics. While looking at the objects in this exhibition, the viewer will have reinforced the sense of the inter-

dependence between matter and form and between form and function.

The useful application of materials almost always began in the arts; the sources for the prehistory of solid state physics are usually found in museums. In this exhibition, which covers a vast spectrum of time and space, we find that most of the materials used by society before the 20th century were discovered and manipulated before 2000 B.C., before their structures were scientifically analyzed.

The 72 pieces of "Aspects of Art and Science" are grouped into seven display cases, each examining the diverse characteristics and uses of materials, from gold from Ur and a blue faience Egyptian Ankh of the 18th Dynasty to a modern-day solar cell. The exhibition includes porcelains from China and Japan, a Greek vase dating from 500 B.C., a Japanese steel sword and sword guard (Tsuba), a Peruvian textile and a medallion made from the first synthetic plastic, among others.

A fine etched shell of the Hohokam Indians (1200 A.D.) demonstrates the use of fruit juice acids and pine resin as an etching technique. More sophisticated work is seen in an original Rembrandt etching plate from the 17th century.

An industrial metallurgist by profession, Dr. Smith has been studying the science and application of materials for some 50 years. He was the founder and first director of the Institute for the Study of Metals in Chicago. In 1961, he was named Institute Professor, Professor of the History of Technology and Science and Professor of Metallurgy. His research at MIT has included studies on the history of technology and the interaction of technology and art.

Having brought together the history and science of materials, Dr. Smith says his next effort will be an attempt to summarize the philosophy of structure and structural change in all things.

"Aspects of Art and Science" will be on display in the Margaret Hutchinson Compton Gallery in MIT's Maclaurin Building (Room 10-150), Cambridge, Mass. The gallery is open to the public Monday-Friday, 9:30am-5pm.

Dean Seamans to Present Annual Richards Lecture

(Continued from page 1)

and converting it to electricity and heat.

The current issues and challenges facing students will be described Friday, Oct. 13, at a 3pm panel discussion in Rm. 10-250 involving students, faculty and staff. MIT Chancellor Paul E. Gray will be the moderator.

The conference will begin at noon Friday, Oct. 13, with a lunch meeting of the Educational Council in the Sala de Puerto Rico in the Student Center as well as 10 club luncheons for hometown students.

A 5:30pm reception in the Alumni Center will be followed by a 7pm banquet in duPont Gymnasium at which Howard W. Johnson, chairman of the MIT Corporation, will review the Institute's activities and direction.

At 8:30pm, conference participants will have coffee and dessert with students in their living units.

Saturday activities will begin at 8am with working breakfasts in various locations in the Student Center for fund, class, course and club workers. It will be followed by a business meeting in Huntington Hall at which Joe F. Moore, Class of 1952, president of the Alumni Association, will preside. Thomas H. Farquhar, Class of 1960, chairman of the Alumni Fund board, will describe next year's fund program.

The meeting will be followed at 11am by the Richards Lecture. The lecture is intended to highlight the obligation of MIT alumni to influence public policy.

The Alumni Awards Luncheon will follow Dean Seamans' lecture. It will be held at 12:30pm in Walker Memorial.

At 2:30pm, Provost Walter A. Rosenblith will introduce Margaret L.A. MacVicar, associate professor of physics and director of the Undergraduate Research Opportunities Program (UROP), who will give alumni officers an "inside



Dean Seamans

look" at UROP.

Two MIT undergraduates, Warren J. Manning of Utica, N.Y., and Z Smith of Okemos, Ill., will discuss their research projects following Professor MacVicar's remarks. Manning has been studying the problem of aphakic patient, a person whose lenses have been removed during cataract surgery. The project involves the possibility of correcting a patient's refractive power by altering the curvature of the cornea. Smith's project involves a system for collecting sunlight and converting it to electricity and heat.

Manning's faculty supervisor, Professor Robert W. Mann, Whitaker Professor of Biomedical Engineering in the Department of Mechanical Engineering, and Smith's faculty supervisor, Roy Kaplow of the Department of Materials Science and Engineering, will also speak about undergraduate research at MIT.

The conference concludes with the President's Reception at the President's House.

Donated Time Also Valued In United Way Campaign

A successful United Way/Boston Black United Fund drive involves contributions of time as well as money.

The many volunteer solicitors and area coordinators donate their time to the success of the fund drive. But beyond this effort, the Institute customarily donates the full time efforts for three months of a "loaned executive" to the United Way.



This year's loaned executive is Nancy Wheatley, director of conferences and special programs for the Alumni Association. She is one of more than 60 loaned executives from area companies and educational institutions who are working full time for the fund drive.

Ms. Wheatley's assignment began with a week's training at Harvard Business School, after which she took up the responsibilities of advising educational institutions in the Boston area on techniques of fund raising, and making presenta-

The United Way flagpole is standing in the corner of Lobby 7 to show MIT's progress toward our goal of \$140,000. As contributions come in, the flag will be raised to show the amount raised while the campaign progresses.

tions at many schools and colleges. As a member of the education division, Ms. Wheatley works with key people in the Boston public school system, in private schools in the Boston area and with Harvard, Northeastern and Suffolk Universities, Roxbury Community College and MIT.

"It's really a team effort," she says. As the assignment is a very broad one, it involves cooperative

work with other loaned executives in the division and with the United Way staff, who are available to provide materials needed for the fund drive, and to advise on the most effective techniques to use at each individual institution.

The loaned executive program is one way that the United Way has of keeping its fund raising expenses as low as it does. With 88% of the funds collected going directly to the agencies it supports, the United Way must make use of time donated by volunteers at many levels during its fund drive.

The pool of full time executive help donated by institutions and companies participating in the fund drive provides high level support during the drive itself. This permits the United Way to keep a small, stable administrative staff throughout the year, which supports the talent and expertise available through the loaned executive program during the annual campaign.

Host Families Are Sought

Families from the MIT community are needed to take part in the Host Family Program for foreign students.

Though 104 new foreign students have been matched with host families this fall, and about 200 are continuing in the Program, 65 students still remain unassigned.

A host family can be an important part of the American experience for a foreign student. An invitation to dinner or to join in family activities is much appreciated, and lasting friendships can grow between the families and students they entertain. For information about the program, call Mrs. Mary Pinson at the Women's League Office, x3-3656, or Mrs. Jay W. Forrester, Host Family Program chairman, at 369-9372.