



CROWD SCENE—Room 7-102 was stuffed with books and people last week during the annual Libraries' Book Sale which netted more than \$2,600 for some 6,000 materials no longer needed. According to Deborah Kram, exchange and gifts librarian who

arranged the sale, the most popular items were hundreds of geological maps that she hawked as hiking aids or wall hangings. Proceeds from the sale will be used for library purchases.

—Photo by Calvin Campbell

Uncertainty Clouds Nuclear Power Future

The "proliferation of uncertainty" concerning the future of nuclear power, rather than any specific fault with the energy option itself, is leading the US nuclear industry into stagnation and eventual collapse, according to an article to be published in the March/April issue of *Technology Review*, MIT's national journal of science and technology.

The authors, Timothy L. Montgomery, a researcher at the MIT Energy Laboratory, and Professor David J. Rose of the Department of Nuclear Engineering, identify the federal government as a principal contributor to the escalation of uncertainty.

The government, they write, has failed to act decisively, neither building a national consensus of acceptability for nuclear power that would give electric utilities and equipment manufacturers some assurance of a future for nuclear power, nor suppressing nuclear power and accepting responsibility for doing so.

Other contributors to the uncertainty, the article says, are nuclear power critics and the electric

power industry itself. Both groups fail to address adequately the question of what the United States will do for energy in the longer term.

The article poses the paradoxical question of why, when nuclear reactors run better than ever before and in many parts of the country generate power cheaper than alternative sources of energy, is the domestic light water reactor industry nevertheless in grave danger of withering away.

Mr. Montgomery and Professor Rose suggest three major sources of uncertainty facing the nuclear option: Unpredictable government attitudes, intervention by critics, and capital scarcity.

The many bureaucracies with authority over nuclear power are sending out "conflicting signals," say the MIT researchers, and no mechanism exists to integrate the piecemeal regulatory efforts. Utilities, the authors say, cannot anticipate potential regulatory changes and do not know what is to be done with the spent fuel they are now storing temporarily on site.

(Continued on page 8)

Toxicology Principles Course Announced

The Department of Nutrition and Food Science this summer will present a special 10-week course, "Principles of Toxicology," sponsored partially by a training grant from the US Environmental Protection Agency.

The course is part of a general expansion of research and educational activities in this area at MIT. The purpose of the course is to further train scientists and engineers already working in toxicology and to introduce the subject to other scientists and engineers

who may be interested in pursuing a career in toxicology.

Dean Robert A. Alberty of the MIT School of Science, who chaired the committee that planned the course, said that the course is "part of a growing interest at MIT in becoming more deeply involved in learning more about the biological effects of chemicals, methods for reducing exposure, and for wise regulation."

Designed for a maximum of 50 students from universities, government, and industry, the course will be taught by professors from MIT and the Harvard School of Public Health as well as guest scientists from government and industry. The course (20.610) will give students 30 MIT units of academic credit and will occupy students full-time during the 10-week session.

Twenty-four students, who must be US citizens, will be selected to receive traineeships, provided for under the grant from the EPA. Tuition for students not receiving traineeships will be \$3,000. MIT dormitory space will be available, for a fee, during the session. Students applying for the course should have a background in chemistry, biology, or related science, at least at the master's level.

The four main components of the course are: 1) toxicology, 2) analytical chemistry methodology, 3) epidemiology and occupational health, and 4) regulatory framework and environmental decision making. These sections of the course are being arranged by, respectively: Professor Gerald N. Wogan, head of the Department of

(Continued on page 5)

Nygaard to Discuss Worker Role in Technology Design

The role of the worker in designing manufacturing technology will be the subject of the next Technology and Culture Seminar (TCS) activity in a continuing series on Technology and Work.

The speaker at 4:30pm March 22 in Rm. 54-100 will be Kristen Nygaard, research director at the Norwegian Computing Center in Oslo and professor of computer science at the University of Oslo.

Professor Nygaard, co-author of several important programming languages, was project director on the first solely union-sponsored research project in Norway—a collaboration between the computing center and the Iron and Metal Workers' Union. Several textbooks for shop stewards on computer-based production technology, written by Professor Nygaard in collaboration with workers who participated in the union project, came out of that effort.

David F. Noble, assistant professor of humanities at MIT, who is among those organizing the Technology and Culture Seminar series, said Professor Nygaard's work has

led to similar projects in other industries in other Scandinavian countries. "The aim of all these efforts is to create an effective collaboration between technical people and trade unionists, a collaboration which enables the unions to prepare themselves to challenge effectively management design and deployment of new technologies, and, thus, to insure that these technologies meet the interests and needs of the workers in the affected industries."

The Technology and Work Series is one of three—the others involve the arms race and the finite earth as seen by its poor—running concurrently this academic year under TCS sponsorship. When the subjects of the series were announced in October as this academic year's continuation of the TCS, attention also was called to the July 12-24 Conference on Faith, Science and the Future, an activity of the World Council of Churches, which will be held at MIT. The WCC conference agenda includes the concerns reflected by the TCS series.

Student Telethon Tops All Goals

"All goals were surpassed!" reported a tired but triumphant Joan Sclar, administrative assistant to the director of the Alumni Fund and coordinator of the first student telethon.

Altogether, 305 students raised \$71,445 from 2,045 alumni contributors in 12 evenings of calls. The goals were 200 students hoping to raise \$50,000 from 2,000 contributors over a 10-night period.

Prime targets for support in the telethon were the Campus Residence Fund (dormitories) and the Independent Residence Development Fund (fraternities and other independent living groups). However, all contributions were designated for whatever purpose the alumnus or alumna specified.

An informal ice cream party to celebrate the success and get feedback from the students who participated will be held March 19, at 4:30pm in the Bush Room (10-105).

Halle to Present Killian Lectures

Dr. Morris Halle, the Ferrari P. Ward Professor of Modern Languages and a leading scholar in the field of linguistics, will give the 1978-79 James R. Killian, Jr., Faculty Achievement Award Lectures Thursday, March 15, and Tuesday, March 20.

The lectures, on "Sound, Meter and Mind," will be given both days at 4pm in Huntington Hall (Rm. 10-250).

Blood Drive Tops 1,000 Pints

The TCA-Red Cross Spring Blood Drive is beyond the halfway mark. Only three days remain, and in this time, 960 pints of blood must be donated if the spring drive's goal of 2,000 pints is to be met.

For the first time this year, a special two-day mini blood drive for East Campus and Draper employees was held. A total of 122 pints was collected at this drive. Another two-day drive, at Lincoln Laboratory on March 5 and 6, collected 248 pints of blood from Lincoln people.

The goal of 2,000 pints is an unprecedented one for an eight-day drive, but chairman of the Spring Blood Drive, Jerry Marks, feels it can be met if people understand the need and the use to which their donations will be put.

The Red Cross supplies blood free to all patients who are in need in hospitals in its Northeast Region (Massachusetts and Maine). Patients pay only hospital costs. Residents of the region may receive blood free from any Red Cross participating hospital across the nation, as can their families, even those members who are not residents of the region. If this service is to be successful, donations are urgently needed.

If you are eligible to give blood and have not filled out an application form, or cannot schedule your donation ahead of time, the drive is equipped to take drop-ins as well as appointment holders. Giving blood takes only about an hour, and it is Institute policy to give time off for employees to become donors except in cases of extreme time pressure.

The Blood Drive is open in the Sala de Puerto Rico today and tomorrow from 9:45am to 3pm. Friday's hours are 11:15am to 5pm, with no appointments being given after 2pm. Anyone wishing to donate blood between these times will be welcome, with or without an appointment.

No Tech Talk

Because of spring vacation, Tech Talk will not be published on March 28. The Institute Calendar on March 21 will cover the period from March 21 through April 8.

Deadline for submissions to the Institute Calendar, Institute Notices and Classified Ads for the March 21 issue will be noon Friday, March 16.

Humphries, Willie to Discuss Black/White College Coexistence

Dr. Frederick S. Humphries, president of Tennessee State University in Nashville, Tenn., will be the second speaker in MIT's Minority Graduate Student Spring Lecture Series on Monday, March 19, at 4pm in Rm 66-110.

Dr. Humphries' talk will be on "The Coexistence of Black Colleges with White Colleges in the 80's." Serving as respondent will be Dr. Charles V. Willie, professor of education and urban studies at Harvard University.

Four black college presidents are participating in the lecture series, which focuses on the topic "The Full Participation of Blacks in the Marketplace: A Challenge for Historically Black Institutions

and Predominantly White Institutions."

The first speaker in February was Dr. Herman R. Branson, president of Lincoln University in Lincoln, Pa.

Other speakers will be Dr. Walter J. Leonard, president of Fisk University in Nashville, Tenn., on April 26, and Dr. Elias Blake, president of Clark College in Atlanta, Ga., on May 10.

CU Banquet

Some tickets are still available for the Credit Union Banquet, Saturday, March 17, at the Montvale Plaza. Tickets are on sale during business hours, at the Credit Union Office, Rm E19-601.

Kovach Opera to Premiere In Dramashop Performance

The Music Section and the Dramashop, both in the Department of Humanities, will present the American premiere of "The Rendez-Vous," a chamber opera in one act, on March 16 and 17 at 8pm and on March 18 at 2pm.

The opera was written by MIT visiting professor and composer-in-residence, Andor Kovach. The performance will be free and open to the public in the Little Theatre.

A chamber orchestra, including percussion, piano and string quartet, will be conducted by Mr. Kovach. Staging is by Robert Scanlan, assistant professor of drama and theater, and director of the Dramashop. The three singing roles in the cast will be performed by Kathy Wright, William Parke and Bruce Keizen, all members of the Boston Conservatory of Music Opera Workshop.

"The Rendez-Vous" is a comic opera, based on a play originally written for television by novelist Christine Arnothy. The production is about 40 minutes in length and has been presented in French and German to European audiences, at the Divonne Music Festival in France and on radio. The March 16 performance will be the world premiere of the English version.

Andor Kovach was born in Hungary and is now a Swiss citizen. He studied composition with Zoltan Kodaly and Bela Bartok and conducting with Clemens Krauss. He is founder and permanent conductor of both the Museo de Arte Symphony Orchestra, Sao Paulo, Brazil, and "Jeunesses Musicales," State Symphony Orchestra, Brussels, Belgium.

Before coming to MIT, Mr. Kovach was professor of composition, musical analysis and orchestration at the Cantonal Conservatory of Music, Lausanne, Switzerland. He has received several awards and commissions for his compositions that include works for symphony orchestras, chamber music ensembles and operas.

Following the performance of "The Rendez-Vous," members of the Dramashop will present Peter Shaffer's "Black Comedy," a one-act play. The work was originally

commissioned and produced by Laurence Olivier for the National Theatre, London, during its 1965-66 season. In 1967 the comedy opened in New York where it was hailed by the critics.

"Black Comedy" will be directed by Robert Schaffer, a third year student at MIT. Members of the cast are: Mark Schafer '79, Susan Downing '81, Emil Millet '79, Marc Chelemer '81, Dan Lieberman '82, Joan Solomon '81, Martin Kadansky '82 and Carolyn Comer.

Service of Holy Communion*—Wednesdays, 5:10pm in the chapel. All welcome. Sponsored by the Lutheran and Episcopal Ministries.

Jewish Religious Services*—Traditional Services, daily 8am, Rm 7-102. Friday night, Sunday, Kasher Kitchen, 9am-10:05. Saturday, 9am, Bush Room 10-105. Mincha and Seudah Shlishit, info: 3-2982. Conservative Services, Saturdays, 10am, 312 Memorial Drive. Reform Services, call Hillel Office, 3-2982.

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

Prayer Time and Bible Class*—1-2pm, Fridays, Rm 20E-207. Guest speakers, music, refreshments. Led by Miriam R. Eccles, founder and director, Alpha and Omega Missionary Society.

United Christian Fellowship*—Weekly meetings, Fridays, 7:30pm, Spofford Room (1-236). Prayer Meetings, 5:15pm, Mondays, Tuesdays and Thursdays; 8:15am Wednesdays, W20-441.

Pharmaceutical Manufacturers Association Research Grants*—Doctoral dissertation research grants to encourage original research in areas relating to the 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, Room 3-136. Application deadline: March 15, 1979.

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Joint Center for Urban Studies Fellowships*—Graduate students in any department of Harvard or MIT who are planning to write a doctoral dissertation in urban affairs, and who anticipate passing their general examinations by summer 1979, may apply. Awards can include up to \$1,000 for research expenses, stipend of up to \$3,000 and tuition. Info: Joint Center for Urban Studies, 53 Church St., Cambridge. Application deadline: April 1, 1979.

Tour to Data General Corp*—sponsored by the EECS Student-Faculty Committee. Visit to the firm in Westboro and discussion with company engineers. Leaves from lobby of Bldg. 39 at 1pm, Tuesday, Mar. 20. Info: EECS Undergraduate Office, Rm 38-476.

Graduate Student Council***—Executive meeting, 5pm, Thursday, Mar. 22, 50-220. Activities Committee Meeting, 5pm, Friday, Mar. 23, 50-220.

Registration for physical education classes**—8:30-11am, Monday, April 2, duPont Gymnasium.

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

MIT Go Club*—Regular meetings Mondays and Wednesdays, 8pm-12midnight, W20-491. Players of all ranks, instruction for beginners.

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

MIT Juggling Club*—Thursdays 7:30-11pm, Sundays 1-4pm, W20-491. Visitors welcome.

Kundalini Yoga Group*—Wednesdays, 5-6:30pm, Mezzanine Lounge, Student Center.

Club Latino-MIT*—Regular meetings, 7:30pm, Tuesdays, Student Center, room variable. Info: Juan Carlos, 494-0330; Jesus 494-9039.

MIT Outing Club**—meets every Monday and Thursday, 5-6pm in Rm W20-461, to plan upcoming trips and rent equipment. MITOC sponsors hiking, snowshoe, cross-country skiing, rock climbing, canoe or bicycle trips every weekend, also occasional slide shows and sales at local stores.

MIT Outing Club/Harvard Mountaineering Club*—"Climbs in the Peruvian Cordillera Blanca" by H. Adams Carter, American Alpine Club. Slide show/lecture on first and only ascent of a difficult east face in the Andes. 8pm, Thursday, Mar. 15, Rm 4-231.

MIT Soaring Association*—General Meeting, 7:30pm, Tuesday, Mar. 20, Student Center, Rm 400. Board of Directors meeting, 6:30pm, Tuesday, Mar. 20, Student Center Rm 400, movie, refreshments.

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MIT Tae Kwan-Do Club*—Korean martial art. New members welcome. General meetings, Mondays and Wednesdays, 8-10pm, Dancing Room; Saturdays, 3-5pm, T-Club Lounge.

MIT Chinese Martial Arts Club (Wu-Tang)*—Physical and mental discipline through practice of Kung-fu. Northern Praying Mantis and T'ai Chi offered. Beginners welcome. Tuesdays, 8-10pm, W20-491, Saturdays, 1-5pm, W20-407. Info: Chen-dao Lin, dl5-9640.

INSTITUTE NOTICES Announcements

Discussion of the MCAT, Medical College Admission Test, Monday, March 19, 4pm, Rm 4-149.

1979 Summer Internship Program in Public Policy**—Stipends of \$1,500 to a limited number of undergraduates for full-time internships in Boston or Washington D.C. for a minimum of 10 weeks. Assistance given in finding positions in the executive, legislative or judicial branch of government. Application deadline: March 20. Info: Emily Tsutsumi, E53-460, x3-3649.

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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.

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

Graduate Studies

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ITT/Telecommunications Technical Center; Magnavox Government & Industrial Electronics Co.; Microwave Research Corp.; National CSS; OR/MS Dialogue, Inc.; Pratt & Whitney Aircraft Group; Prudential Property & Casualty Insurance Co.; Strategic Planning Associates, Inc.; Systems Engineering Labs, Inc.; Thornton Associates; TRW Controls; Tri-Onics, Inc.

March 20—American Science & Engineering; Avco Systems Div.; Boise Cascade; Boston Edison Co.; Computer Corp. of America; Cray Research, Inc.; DuPont; Earl & Wright Corp.; J. Ray McDermott & Co., Inc.; Magnavox Government & Industrial Electronics Co.; Pacific Gas & Electric Co.; PCK Technology Div.; Standard Microsystems Corp.; Strategic Planning Associates, Inc.; Texas International Airlines; USN-Clothing & Textile Research Facility; Vought Corp.

March 21—Analysis & Computer Systems, Inc.; Aramco Services Co.; Bector Dickinson & Co.; Bose Corp.; Branson Sonic Power; Bunker Ramo/Info Systems; Compuvision Corp.; CNR, Inc.; Coca-Cola U.S.A.; Cray Research Inc.; GCA-Technology Div.; Henckels, Haas & Brown, Inc.; Instron; Lagoven S.A.; Litton Guidance & Control Systems; J. Ray McDermott & Co., Inc.; Magnavox/Government & Industrial Electronics Co.; Nuclear Regulatory Commission; Varian Associates.

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.

Psychology: Human Problem Solving
Recent psychological discoveries in "learned helplessness" and elicitation of the "relaxation response" are combined to test the relative effectiveness of three interventions into the human problem solving situation. A student is invited to participate in the research phase, experimental design and statistical analysis. Background in psychology useful but not required. Credit only.

Civil Engineering Department
Opportunity for student interested in underground construction. Task involves collection of historical tunneling cost data in the U.S. and subsequent analysis of the collected data. Contact Edward Tse, 1-241, x3-3880, or Prof. E.E. Einstein, 1-330, x3-3598.

IBM Cambridge Scientific Center
1) Students are invited to contribute to the design and implementation of a sophisticated text editing system. The work is primarily concerned with the data base aspects of the system including: a table-oriented user interface, the design of a new query language and a data base constraint language. 2) Student(s) invited to work on a very-high-level editor and formatter. If you would like to build a formatter with both the power of TEX and a simple user interface suitable for secretaries as well as programmers, we can give you the opportunity to help design and implement it.

Biochemical Properties of Brain Blood Vessels
Freshmen and sophomors interested in strokes and cerebro-vascular disease are invited to study the biochemical properties of isolated brain blood vessels. Students will learn to prepare blood vessels from calf brains and will utilize these vessels to measure biogenic amines and receptors. Studies will also determine the ability of these vessels to synthesize proteins and prostaglandins, *in vitro*. Changes that occur during aging and hypertension will also be examined. Contact Prof. Michael A. Moskowitz, 37-311, x3-7558.

Combustion of Heavy Fuel Oil Droplets
Opportunity for a junior or senior to assist in research work on the combustion of heavy fuel oil droplets in a laminar flow furnace. Experimental data is currently being gathered on the mean temperatures around the drops and the surrounding gas, and on drop size and velocity, to determine the effects of furnace operational parameters (i.e. furnace temperature, gas flow rate, composition) through the use of modern diagnostic techniques. Credit only.

2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: NUCLEAR POWER AND RADIATION—Prof. Kent F. Hansen, Dept. of Nuclear Engineering, MIT. "What is Engineering?" seminar series. Rec. 9/28/78.

Friday, March 16
Channel 8:
12-1pm
TELEVISION COMEDY: ALL IN THE FAMILY—Prof. David Thorburn, Dept. of Humanities, MIT. Rec. 8/78.
1-2pm
REALISTIC EFFECTS FOR THE NEW "STAR TREK"—Dr. Edwin Taylor, Dept. of Physics, MIT. IAP '79 "Physics Potpourri" seminar.
2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: WASTE STORAGE—Alex Perge, US Dept. of Energy. "What is Engineering?" seminar series. Rec. 8/5/78.

Monday, March 19
Channel 8:
12-2pm
POLITICS, TELEVISION, AND THE NEWS—discussion of the Nixon-Frost interviews. Edwin Diamond, Dept. of Political Science, MIT. Rec. 11/9/78.
2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: REGULATORY AND SOCIAL ISSUES—Martin Malsch, Nuclear Regulatory Commission. "What is Engineering?" seminar series. Rec. 8/13/78.
4:30-5:30pm
BIOLOGICAL CHEMISTRY DEPT., HARVARD MEDICAL SCHOOL—lecture to be announced. Live from Harvard.

Tuesday, March 20
Channel 8:
12:15-2pm
2-4pm
HARVARD SHOWCASE POLITICS, TELEVISION, AND THE NEWS—Edwin Diamond, Senior Lecturer, Dept. of Political Science, MIT; Shannon Hack, NBC; John O'Connor, T.V. Critic. The New York Times; Steven Schauer, Editor, TV Key; Prof. Herbert Dordick, Univ. Southern California.
4pm-12am
8.02 REVIEW SESSION

CABLE TV SCHEDULE X3-3625

March 14-20, 1979

Wednesday, March 14
Channel 8:
12-1pm
TELEVISION COMEDY: ORDINARY CEREMONIES—Prof. David Thorburn, Dept. of Humanities, MIT. Rec. 8/78.
1-2pm
VLBI: A RADIO TELESCOPE AS BIG AS THE EARTH—Prof. Bernard Burke, Dept. of Physics, MIT. Rec. 10/11/78.
2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: RADIATION—Prof. Kent F. Hansen, Dept. of Nuclear Engineering, MIT. "What is Engineering?" seminar series. Rec. 9/21/78.
5-6pm
MONOCLONAL ANTIBODIES: PROBES OF CELL SURFACE DIFFERENTIATION AND STRUCTURE—Dr. Timothy Springer, Dept. of Pathology, Harvard Medical School. Live from Harvard.

Thursday, March 15
Channel 8:
12:30-1:30pm
NOON H.I.T.S.—weekly Harvard student-produced show. Live from Harvard.
1:30-2pm
TELEVISION WITHOUT GUILT—Prof. David Thorburn, Dept. of Humanities, MIT. Rec. 1978.

Friday, March 16
Channel 8:
12-1pm
TELEVISION COMEDY: ALL IN THE FAMILY—Prof. David Thorburn, Dept. of Humanities, MIT. Rec. 8/78.
1-2pm
REALISTIC EFFECTS FOR THE NEW "STAR TREK"—Dr. Edwin Taylor, Dept. of Physics, MIT. IAP '79 "Physics Potpourri" seminar.
2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: WASTE STORAGE—Alex Perge, US Dept. of Energy. "What is Engineering?" seminar series. Rec. 8/5/78.

Monday, March 19
Channel 8:
12-2pm
POLITICS, TELEVISION, AND THE NEWS—discussion of the Nixon-Frost interviews. Edwin Diamond, Dept. of Political Science, MIT. Rec. 11/9/78.
2-4pm
THE PROBLEM OF NUCLEAR WASTE DISPOSAL: REGULATORY AND SOCIAL ISSUES—Martin Malsch, Nuclear Regulatory Commission. "What is Engineering?" seminar series. Rec. 8/13/78.
4:30-5:30pm
BIOLOGICAL CHEMISTRY DEPT., HARVARD MEDICAL SCHOOL—lecture to be announced. Live from Harvard.

Tuesday, March 20
Channel 8:
12:15-2pm
2-4pm
HARVARD SHOWCASE POLITICS, TELEVISION, AND THE NEWS—Edwin Diamond, Senior Lecturer, Dept. of Political Science, MIT; Shannon Hack, NBC; John O'Connor, T.V. Critic. The New York Times; Steven Schauer, Editor, TV Key; Prof. Herbert Dordick, Univ. Southern California.
4pm-12am
8.02 REVIEW SESSION

Contact Dr. A.K. Gupta, 66-038, x3-6628, or Prof. J.M. Beer, 66-552, x3-6661.

Acoustics and Vibration & Materials Processing Labs

Opportunity for undergraduate, preferably a junior, to do original research in using force, vibration and/or temperature signals to monitor machine tool condition during the actual cutting process. The goal of this research is to identify changes which take place in these signals (or others) as the cutting edge of the tool wears during normal use. Previous machine shop experience and some familiarity with the Fourier Transform will be helpful. Contact J. Slack, 3-366, x3-3969; Prof. Cook, 35-132, x3-2216; or Prof. Lyon, 3-366, x3-2214.

Preprofessional

Baylor Summer Work and Study Program**—to encourage and assist minority and disadvantaged students to enter health careers. Program combines academic and work experience in the Texas Medical Center, Houston. Academic program objectives are to enable students to perform better in basic science courses, to give students better study, problem solving and test-taking skills, to assist students in attaining a competitive MCAT score. Application deadline: March 31. Info: Preprofessional Office, 10-186, x3-4158.

New York Medical College 1979 Premed Summer Program**—Eight week program to prepare minority and disadvantaged students for medical school. Provides a demanding academic curriculum which enables the students to acquire the knowledge, insight and skills to handle difficult areas of three foundation science courses (Gross Anatomy, Physiology and Biochemistry), taught by regular faculty of the medical school. Students must be admitted to first year of professional training at medical schools or undergraduate juniors and seniors. Stipend, approx. \$80/week. Application deadline: April 1, 1979. Info: Preprofessional Office, 10-186, x3-4158.

Cornell University Medical College Summer Fellowship Program for Minority Students**—Program designed to give premedical students insight into basic and clinical sciences of medicine and of health care delivery systems. Students who have completed their junior year spend 10 weeks as summer Fellows at the Medical Center. Stipend \$112/week. Fellows work three days/week at research, two mornings/week in specially designed course in cardiovascular physiology. Application deadline: April 1. Info: Preprofessional Office, 10-186, x3-4158.

Roswell Park Memorial Institute Summer Preprofessional Program**—A research participation program in science from June 11-August 17 in Buffalo, N.Y. Combines lab research with lectures, seminars and scientific films. Programs are designed to introduce the student to a research atmosphere and to help in career planning. Application deadline: April 2. Info: Preprofessional Office, 10-186, x3-4158.

Echoes

March 11-17

50 Years Ago

The Technology Gym Team overwhelmed both Bowdoin and Temple in a meet held in the Walker Gym this week. Wes Reynolds '29 was the outstanding performer of the afternoon.

40 Years Ago

Two graduate students, Lois W. Worley and William W. Caudill, cooperated to produce a prize-winning design which will represent the Institute in the nation-wide Productive Home Architectural Competition. Since the beginning of the contest, held at John Wanamaker's gallery in New York, Technology students have attracted interest for the simplicity, practicability and ingenuity of their designs.

25 Years Ago

The eclipse of the third moon of Jupiter was celebrated with bonfires, high spirits, firecrackers and an acetylene cannon on the East Campus. At one point a dummy labeled "Major Moon" was used as fuel for the bonfires.

Prepared by Marcia Conroy, MIT Historical Collections, x4444.

TECH TALK Volume 23, Number 27 March 14, 1979

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

Address news and editorial comment to MIT News Office, Room 5-113, MIT, Cambridge, MA 02139. Telephone (617) 253-2701.

Mail subscriptions are \$12 per year. Checks should be made payable to MIT and mailed to Business Manager, Room 5-113, MIT, Cambridge, MA 02139.

Quarter Century Plans Reception

A reception to honor new members of the MIT Quarter Century Club will be held Thursday, March 29, at 5:30pm in Walker Memorial.

Membership in the Quarter Century Club is open to all employees who have completed 25 years of service, whether or not that service has been continuous. Employees with broken service who think they may have completed 25 years in total, should call Bob Radocchia, x3-7914.

Symphony Orchestra to Play Brant, Beethoven & Brahms

The MIT Symphony Orchestra, David Epstein conductor, will present the East Coast premiere of Henry Brant's *Spatial Concerto* in a concert on Saturday, March 17, 8:30pm, in Kresge Auditorium.

Henry Brant has described his *Spatial Concerto* ("Questions from Genesis") as a "piano concerto with orchestra, isolated wind groups and chorus of sixteen women's voices. The work is in one continuous movement consisting of 10 non-recurring sections, each preceded by an orchestral 'signal.' The piano technique is normal except for section two, where the pianist plays in 'artificial harmonics' with one hand directly on the strings, and in section six which is played on the strings with xylophone mallets."

Mr. Brant has composed almost 100 works and has won numerous awards. Since the early 1950's much of his music has been written for groups of musicians separated in space, creating textures of complexity from simple individual parts.

Born of musical parents, Mr. Brant showed his musical gifts early in childhood. He studied at the Juilliard School of Music and privately with composers George Antheil and Wallingford Riegger. He has worked in broadcasting, films and theater and has taught at Juilliard and at Columbia University. In 1957 Mr. Brant became composer-in-residence at Bennington College.

Spatial Concerto will be performed with members of the MIT Choral Society, John Oliver director. Allen Olsen, a graduate student and member of the first violin section of the orchestra, will be assistant conductor. Mr. Brant will also be present at the concert.

Pianist Hilde Somer will be featured as soloist in the Brant work. Born in Vienna, Ms. Somer studied under Rudolf Serkin at the Curtis Institute of Music in Philadelphia.

She also studied with Moritz Rosenthal, Wanda Landowska and Claudio Arrau.

Ms. Somer is noted for her fervent revival of Scriabin for whose music she has particular affinity. In addition to her many performances of new works, she has played and recorded traditional repertoire with the New York, Los Angeles and Berlin philharmonic orchestras, the Chicago Symphony, Vienna Symphony and the Orchestra de la Suisse Romande, among others.

In addition to the Brant concerto, the March 17 concert will also include Beethoven's *Leonore Overture, No. 3* and Brahms' *Symphony No. 3 in F. Major*.

This program is made possible in part through a grant from Meet the Composer, with support from The National Endowment for the Arts, Helena Rubinstein Foundation, Martha Baird Rockefeller Fund for Music and the Alice M. Ditson Fund.

Tickets may be purchased at the door for \$1.00. Members of the MIT and Wellesley communities may obtain free tickets in the lobby of Building 10 at MIT or the Music Office at Wellesley.

This concert will be broadcast by WTBS-FM, 88.1, on Wednesday, March 21, and Friday, March 23, at 4pm.

Open Rehearsal

The public is invited to an open rehearsal of the MIT Symphony Orchestra on Thursday, March 15, 9pm in Kresge Auditorium. Henry Brant, composer of *Spatial Concerto*, a new work that will have its East Coast premiere in the orchestra's March 17 concert, will assist. Following the rehearsal, Mr. Brant will be available to answer questions from members of the audience in an informal discussion.



Dr. Ira Dyer, Dr. Alfred A.H. Keil, Dean Robert C. Seamans, Jr., Provost Walter A. Rosenblith and Dean A. Horn congratulate new Henry L. Doherty Professor, Harilaos Psarftis.

Psarftis Named Doherty Professor

Dr. Harilaos Psarftis of MIT's Department of Ocean Engineering is the recipient of the 1979 Henry L. Doherty Professorship, according to MIT Provost Walter A. Rosenblith.

Dr. Psarftis will undertake the design of an emergency pollution response system for cleaning up "small" (those that are 100,000 gallons or less) oil spills at sea. Although large accidents, such as the *Argo Merchant* and the *Amoco Cadiz*, receive the most dramatic coverage and attention, smaller mishaps, which occur more frequently and usually closer to shore, pose even greater long-range ecological and economic threats to the coastlines.

The most recently appointed Doherty Professor, employing a probabilistic framework, will examine various strategies and tactics, their costs, and their effectiveness in minimizing damage to the coastal environment. Dr. Psarftis has been nominated to be an assistant professor in the Department of Ocean Engineering, effective July 1, 1979. He received an SM in Naval Architecture and Marine Engineering and in Shipping and Shipbuilding Management from MIT in 1977. His PhD was completed in 1978 at the Institute in the field of transportation/operations research.

The Henry L. Doherty Professorships, administered by the MIT Sea Grant Program, were initiated in 1973 to support young, promising faculty members whose research interests focus on contemporary problems in ocean science and utilization. During the two-year appointment, the young teachers and researchers remain affiliated with their respective academic departments, but conduct their research under the aegis of the MIT Sea Grant Program.

Currently three other faculty members hold the chair. Ole S. Madsen, associate professor of civil engineering, in July 1979 completes the development of techniques for predicting sediment movement in the coastal zone. The results of his research will be applied to improve measures for preventing serious beach erosion.

Alician V. Quinlan, assistant professor of mechanical engineering, is a specialist in environmental engineering. Professor Quinlan is utilizing support from the Doherty chair to lead a major project sponsored by the Commonwealth of Massachusetts and the MIT Sea Grant Program to identify environmental factors that are promoting algal growth that fouls Nahant Bay beaches each year.

In the Department of Ocean Engineering, Francis Noblesse, assistant professor, is translating an analytical theory for calculating ship wave resistance into a practical design tool. The theory, which is being applied to both a simple mathematical hull and to a typical ship, will provide both environmental and economic benefits in ocean utilization.

Dean A. Horn, director of the MIT Sea Grant Program, described the professorships as a "valuable method for encouraging junior faculty members to apply their superb skills to marine and aquatic resource development."

Concord Quartet To Continue Beethoven Cycle

Members of the Concord String Quartet will return to MIT on Monday, March 19, at 8pm in Kresge Auditorium for concert number four in a series of six all-Beethoven performances.

Sponsored by the Music Section, the Quartet's appearances here are part of this season's MIT Guest Artist Series. The series of the complete Beethoven cycle is free and open to the public.

The program for the March 19 concert will include the Quartet in E Minor, Opus 59, No. 2, one of the more dramatic quartets, and the Quartet in C Sharp Minor, Opus 131, considered by many (including Beethoven himself) to be the greatest of the late quartets.

Members of the Concord String Quartet are: Mark Sokol, violin. Andrew Jennings, violin, John Kochanowski, viola, and Norman Fischer, cello. As Quartet-in-Residence at Dartmouth College, the four musicians combine their teaching duties with a year-round concert schedule, taking them annually to some 100 cities.

Neurobiology Lecture Planned

A special lecture on neurobiology will be presented by Dr. Stephen W. Kuffler, of the Harvard Medical School, at 4:30pm March 21 in Little Theatre of Kresge Auditorium. The lecture is open to the public.

Dr. Kuffler, the 1979 recipient of the F.O. Schmitt Lectureship Medal and Award of the MIT Neuroscience Research Program, will speak on "Synaptic Transmission: In Search of Models." Dr. Kuffler is the former chairman of the medical school's department of neurobiology and now holds the chair as John Franklin Enders University Professor. He will be introduced by Dr. Walter A. Rosenblith, MIT Provost.

The F.O. Schmitt Lectureship and Award were established in honor of Dr. Francis O. Schmitt, who helped establish the field of biophysics in the 1950's and who founded the Neuroscience Research Program in 1962.

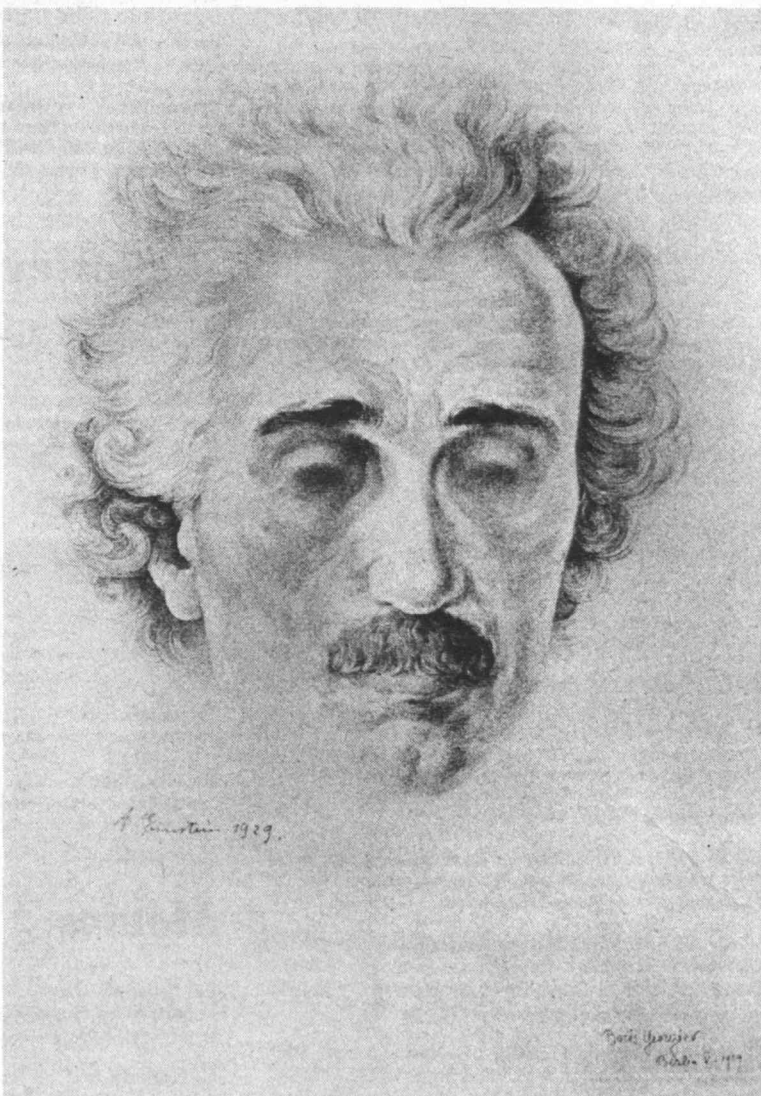
MacVicar Visits at U of California

Dr. Margaret L.A. MacVicar, associate professor of physics and director of UROP, is spending the winter quarter as Chancellor's Distinguished Professor at the University of California at Berkeley.

Professor MacVicar is one of the first four to be appointed in a new program, that brings to the university both distinguished senior scholars and more junior persons of demonstrably proven excellence. Professor MacVicar has been lecturing in the Department of Materials Science and Mineral Engineering.

Because of her interest in educational development and reform, she is also a visiting associate at the Center for Studies in Higher Education at Berkeley. She is expected to return full-time to MIT in April.

Einstein Portrait on Loan Here



A crayon portrait of Albert Einstein is one of three special memorabilia that are on exhibit at MIT on the occasion of the centenary—today, March 14, 1979—of Einstein's birth. The memorabilia were loaned to the Institute by the noted constitutional lawyer Raoul Berger of Concord, Mass. Now on display at MIT Historical Collections, they include an autographed photographic portrait and a letter. The brown crayon 31-by-26-inch portrait was done in 1929 and is signed by the artist, Boris Georgiev, and by Einstein. The photo portrait, also from 1929, was autographed for the late Helen Beck, who became Mr. Berger's wife. The 1922 letter was from Einstein to Dr. Carl Beck, Mr. Berger's father-in-law, and dealt in a light vein with a humorous proposal to sell paintings held by German museums to meet Germany's war reparations payments.

Awards Nominations are Sought

A call for nominations for Karl Taylor Compton Prizes, William L. Stewart Awards and the James N. Murphy Award has been issued. The awards recognize various kinds of contributions to the Institute community.

Compton Prizes, given in Sclater Receives Rosenstiel Award

Dr. John G. Sclater, professor of marine geophysics in the Department of Earth and Planetary Sciences at MIT, has been awarded the Rosenstiel Award in Oceanographic Science.

The Rosenstiel Award, presented annually for outstanding achievement in the study of the oceans and the atmosphere, carries a \$5,000 prize and is given by the University of Miami's Rosenstiel School of Marine and Atmospheric Science.

Professor Sclater, currently on sabbatical leave, in Cambridge, England, received the award for his explanations of oceanic topography, particularly the shape of the mid-ocean ridges, based upon heat flow measurements of the earth's crust taken beneath the sea.

memory of MIT's ninth president, are the highest awards given to students. They recognize excellence and devotion to the welfare of the community with emphasis on lasting or sustained contributions.

Stewart Awards are in memory of William L. Stewart, Jr., an alumnus and member of the Corporation who showed deep interest in student life. Stewart Awards honor contributions to a particular activity or event.

The Murphy Award was established in 1967 as a memorial to Mr. Murphy, manager of West Campus, for his immeasurable contributions to Institute life. It is presented to an employee whose spirit and loyalty exemplify such dedication, especially with regard to students.

All nominations should be sent to the Awards Selection Committee, Rm W20-345 by April 11, 1979. The awards will be presented at the Awards Convocation on Friday, May 11, in the Little Theatre.

Fuller to Speak

R. Buckminster Fuller, inventor, architect, engineer and writer, will speak at Kresge Auditorium this evening, Wednesday, March 14, at 8pm, sponsored by the Lecture Series Committee (LSC). Mr. Fuller is known for his active concern with the effect of technological development on the quality of human life.

Tickets at \$3.00 (\$1.50 with MIT or Wellesley ID) will be available at the door, or may be picked up in advance at the LSC office, W20-469, x3-3791.

Faculty Records Office Has Moved

The Academic Staff Records Office, renamed the Faculty and Academic Staff Records Office, which has been housed in Rm 3-231, has moved to Rm E19-220 on the corner of Ames and Main Streets. Telephone extensions will remain the same.

THE INSTITUTE CALENDAR X3-3270

March 14
through
March 25

Events of Special Interest

Ethnic Foods* — Organized by the Minority Interest Group. There will be a variety of foods and pastries from various countries. Wed, Mar 14, Noon, Rm 10-105.

Lecture Series Committee Lecture* — R. Buckminster Fuller, inventor and author will speak. Wed, Mar 14, 8pm, Kresge Auditorium. Admission: \$3, \$1.50 w/MIT or Wellesley ID. Ticket information: 253-3791.

Killian Lecture* — Presented by Dr. Morris Halle, Prof Ferrari P. Ward, Modern Languages and Linguistics and 1978 recipient of the James Rhyne Killian, Jr., Faculty Achievement Award. Thurs, Mar 15 and Tues, Mar 20, 4pm, Rm 10-250.

Technology Wives Organization Bake Sale* — Homemade cookies, brownies and cakes for sale. Thurs, Mar 15, 9am-sellout, Lobby 10. Information: Shelley Dynys 648-0360.

The 1979 Women's League Evening Dinner*** — Distinguished speaker, Dr. Brandford Washburn will show colored slides of his recent project, Mapping the Grand Canyon, and describe in detail the topographic and geologic features of the heart of the Canyon. Thurs, Mar 15, cocktails at 6:30pm, dinner, 7pm. Faculty Club.

F.O. Schmitt Lecture in Neuroscience: Synaptic Transmission: In Search of Models* — Stephen W. Kuffler, neurobiology, Harvard Medical School. Presented by the Neurosciences Research Program. Wed, Mar 21, 4:30pm, Kresge Auditorium.

Seminars & Lectures

Wednesday, March 14

Purine Metabolism of the Gut — Implications for Clinical Therapy* — Neal Leleiko, MD, Fellow in Clinical Nutrition. The Clinical Research Center Seminar, 9am, Rm E18-408.

Theory on Applications of the ITEK PROM* — Dr. Bruce Horowitz, ITEK Corporation. Electrical Engineering and Computer Science Optics Seminar, 3pm, Rm 36-428.

Brain Reserves, Food Aid, and Food Insurance: How a Comprehensive Scheme Might Operate* — Barbara Huddleston, I.F.P.R.I. International Food and Nutrition Policy Program Seminar, 4pm, Rm 16-310.

Hospitals and Health Care in the Progressive Era City* — David Rosner, CUNY: Baruch College/Mt. Sinai School of Medicine. Program in Science, Technology and Society Seminar, 4pm, Rm 20D-205. Coffee served 3:45pm.

Human Rights and National Security* — Donald Fraser, former Congressman 1962-1978 from Michigan. Center for International Studies Seminar. 4-6pm, Rm E38-762.

Statistical Physics and Population Biology: Some Applications of An Entropy Measure* — Prof Lloyd Demetrius, Rockefeller University, New York. Joint Seminar by Mathematics and the Center for Advanced Engineering Studies, 4pm, Rm 9-451.

The Control of Tubulin Expression in the Developing CNS* — Dr. Ilana Gozes, Neural and Endocrine Regulation Group Seminar, 4pm, Rm 66-144.

Enormous Atoms* — Prof Daniel Kleppner, physics. Undergraduate Physics Colloquium, 4:15pm, Rm 4-339. Social hour follows.

Thursday, March 15

Tactical Precision Guided Munitions (PGM) in Perspective* — Wolfgang Samuel, Lt. Colonel, USAF, and CIS Air Force Research Associate. Center for International Studies Seminar, Noon-2pm, Rm E38-762.

Einstein at 100: Some Sidelights on His Life and Work* — Prof A.P. French, Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

Queueing Models for Spares Provisioning* — Dr. Donald Gross, Operations Research, The George Washington University, Washington, DC. Operations Research Center Seminar, 4pm, Rm 24-121. Coffee and cookies served after seminar.

Ultrasound Imaging-Past, Present and Future* — Larry Banks, Project Manager, Ultrasound Systems, Hewlett-Packard Company, Andover, Mass. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 35-225. Refreshments served.

Contemporary Choices for Rural Development: The Energy Link* — Philip Palmedo, Brookhaven National Laboratory. Sponsored by the Faculty Steering Committee, 4:30-6:30pm, Rm 4-270.

Music and Related Fields* — Prof Irving Lowens, Peabody Conservatory of Music, speaks on music and American Journalism, 4:30pm, Rm 66-110. Free.

Character Recognition: A Psychologically Based Functional Attribute Approach or YAYSOAV** — Ted Kuklinski, CIPG. CIPG General Meeting, 5pm, Rm 36-428.

Friday, March 16

Studying Collisions with Assistance from the Doppler Effect and Maxwell's Demon* — Prof David E. Pritchard, Modern Optics and Spectroscopy Seminar, 11am, Rm 9-150. Coffee and tea at 10:30am.

The Changing Political Economy of Labor Migration in Southern Africa* — David Massey, Department of Geography and the African Studies Center, Boston University. Migration and Development Study Group Seminar, Noon-2pm, Rm E38-615. Bring your lunch, coffee, tea and soda are available.

Congressional Perspective on the Future of Amtrak* — Congressman Robert W. Edgar, Member of the US House of Representatives, 7th District, Pennsylvania. Center for Transportation Studies Seminar, Noon-12:45pm, optional luncheon; 12:45pm-2pm, seminar. Luncheon fee: \$1.25 students; \$2 others, Mezzanine Lounge, Student Center.

Numinous Namibia* — Anthony Lewis, *New York Times*, African Luncheon Seminar, chaired by Prof. Rotberg, 1-2pm, Rm E53-482, 30 Wadsworth Street. Everyone welcome, off-the-record.

Process Models for Surface Roughness and Temperature in Grinding* — Gunther Werner, associate professor, mechanical engineering. Laboratory for Manufacturing and Productivity, Mechanical Engineering Seminar, 1:30pm, Rm 37-252.

Chemical Engineering Seminars* — Prof Preetinder Virk, chemical engineering, **Pericyclic Pathways in Coal Liquefaction**, 2pm. Guest speaker: Dr. Paul B. Weisz, Mobil Oil Corporation, **Evolution of Shape-Selective Catalysis and Processes**, 3pm, Rm 66-110.

Electron Temperature Gradient Driven Micro Tearing Modes* — Prof C.S. Liu, physics, University of Maryland. Plasma Fusion Seminar, 3pm, Rm NW16-212, Refreshments served.

Analytical Applications of Positive-Negative Ion Chemical Ionization Mass Spectrometry* — Prof Donald F. Hunt, chemistry, University of Virginia. Analytical Chemistry Seminar, 4pm, Rm 8-105.

Electronic Properties of Amorphous Selenium and Its Use in Xerography* — Dr. G. Pfister, Xerox Corporation, Webster Research Center, Webster, New York. Center for Materials Science and Engineering Colloquium, 4pm, Rm 9-150. Coffee at 3:30pm.

Ocean Engineering at Lockheed Missile and Space Company** — Herbert Schreiber, engineer at Lockheed. Ocean Engineering Seminar, 4-5pm, Rm 5-314. Beer, soda, refreshments served.

Monday, March 19

Transmission and Emission Computed Tomograph* — G.L. Brownell, Principles of Medical Imaging Seminar Series, 1-2:30pm, Rm NW12-222.

Determination of Crack Size by Means of Acoustic Emission* — Ming Tse, research assistant, mechanical engineering. Laboratory for Manufacturing and Productivity, Mechanical Engineering Seminar, 3pm, Rm 37-252.

Annihilation of Dislocations During Glide at Low Temperatures-Limits on Dislocation Densities* — Dr. H. Mughrabi, Max-Planck-Institut für Metallforschung, Stuttgart, Germany, on leave at Materials Science, Cornell University. Mechanical Engineering Joint Seminar Series on Mechanics and Materials, 4pm, Rm 3-133. Coffee served 3:30pm, Rm 1-114.

The Coexistence of Black Colleges with White Colleges in the 80's* — Dr. Fredrick S. Humphries, President, Tennessee State University, Nashville, Tennessee; Respondent: Dr. Charles V. Willied, Professor of Education and Urban Studies, Harvard University. Minority Graduate Student Spring Lecture Series, 4pm, Rm 66-110.

Electrification of Low Conductivity Fluid Flow Through Pipes* — Behrouz Abedian, research assistant. Fluid Mechanics Seminar, 4-5pm, Rm 5-234. Coffee at 3:55pm.

New Methods of Intractability-Unfaithful-Reducibility* — Prof Leonard Adleman, mathematics. Applied Mathematics Colloquium, 4pm, Rm 3-388. Refreshments served at 3:30pm, Rm 2-349.

The Offshore Construction Industry* — E.J. Evans, J. Ray McDermott Company. Sponsored by the Ocean Engineering and Civil Engineering Departments. Offshore Engineering Seminar, 4pm, Rm 3-270. Coffee and doughnuts served 3:30pm, Rm 1-236.

The President's Hunger Commission: Progress to Date* — Dr. Daniel Shaughnessy, Executive Director, President's Commission on World Hunger. International Food and Nutrition Policy Program Seminar, 4pm, Rm 16-310.

Tuesday, March 20

After Amin, the Deluge?* — Clyde Ferguson, Former Ambassador to Uganda, currently professor of law, Harvard University. African Luncheon Seminar, 12:45-2pm, Rm E53-482. Everyone welcome, off-the-record.

Adaptation During Human Movement Control* — Prof Neville Hogan, Design and Controls Division, Mechanical Engineering Seminar, 1-2pm, Rm 1-114. Coffee served.

Gyrotion Design Considerations* — Kenneth Kreischer, Doctoral Seminar-Fusion, 3-5pm, Rm 24-407.

On J-controlled Crack Growth — Evidence, Requirements and Applications* — Dr. Fung Shih, Research and Development, General Electric, New York. Applied Mechanics Seminar Series, 3pm, Rm 3-270. Coffee served after seminar, Rm 1-114.

Distributed Decision Making with a Distributed System Model or How to Make a Group of Experts Work Together* — Robert R. Tenney, Laboratory for Information and Decision Systems. Laboratory for Information and Decision Systems Colloquium, 4pm, Rm 39-400.

Ground Motion Attenuation Laws* — Dr. J. Savy, Earthquake Engineering Seminar, 4-5pm, Rm 1-246.

Optical-Optical Double Resonance (OODR) of Low Pressure Flames* — Dr. Richard A. Gottscho, physics. Seminar in Physical Chemistry, 4pm, Rm 4-370. Coffee at 3:45pm, Rm 6-321.

A Robust Statistic for Long Term Dependence: R/S Analysis* — Dr. Benoit Mandelbroth, IBM Research Centre, Yorktown Heights. Statistics Seminar, 4pm, Rm 2-338. Refreshments at 3:30pm, Rm 2-349.

Gravitational Collapse to Black Holes and Neutron Stars* — Prof Saul Teukolsky, Cornell University. Astrophysics Colloquium, 4:15pm, Rm 37-252. Coffee served at 3:45pm.

Energy and Social Systems: A Case Study of Food Supply and Energy Use* — Dan Gross, anthropology, Hunter College. Sponsored by the Faculty Steering Committee, 4:30-6:30pm, Rm 4-270.

Viral Induced Tumor Antigen Expression in Ferato-Carcinoma Cells* — Dr. Arnold J. Levine, biochemistry, Princeton University, New Jersey. Biology Colloquium, 4:30pm, Rm 6-120. Coffee at 4pm, Vestibule 5th floor, Bldg 56.

Guest Lecture* — Klaus Liepmann, Professor Emeritus of Music, MIT, speaks on Beaumarchais' involvement in the United States in the 18th century. Sponsored by the Department of Humanities, 5pm, Rm 4-160. Free.

Wednesday, March 21

Medicine in China* — John F. Burke, MD, Chief of Staff, Shriners' Burns Institute. Clinical Research Center Seminar, 9am, Rm E18-408.

Localization of Peptides in the Brain* — Dr. T. Hokfelt, Korolinska Institute, Stockholm. Neural and Endocrine Regulation Group Seminar, 11am, Rm 16-310.

Interfacial Effects in Fast Reactors* — Mohammad Saidi, Nuclear Engineering-Reactor Physics Seminar, 3-4pm, Rm NW12-222.

Quaternary Compounds-Semiconducting Lasers and Detectors* — Dr. Martin Pollack, Bell Telephone Laboratories. Electrical Engineering and Computer Science Optics Seminar, 3pm, Rm 36-428.

Science and the Media* — June Goodfield, Rockefeller University. Program in Science, Technology and Society Seminar, 4pm, Rm 20D-205.

Quarks* — Prof Francis Low, Undergraduate Physics Colloquium, 4:15pm, Rm 4-339. Social hour follows.

The Wednesday Afternoon Lecture Series* — Larry Clark, photographer, New York City. Made possible by a grant from the Minolta Corporation. Creative Photography Gallery, 4:30pm, 120 Mass Ave, Camb, Ma.

Thursday, March 22

Comparative Aspects of the Mutagenic Effects of Ethyl Methanesulfonate* — Charles S. Aaron, Ph.D., radiation genetics and chemical mutagenesis, State University of Leiden, The Netherlands. Nutrition and Food Science Invited Lecture in Toxicology, 4pm, Rm 16-310.

Interlimb Reflexes* — Robert E. Kearney, assistant professor, Biomedical Engineering Unit, Faculty of Medicine, McGill University, Montreal, Canada. Committee on Biomedical Engineering Seminar, 4-5:30pm, Rm 35-225. Refreshments served.

An Inventory of Molecular Matter in the Galaxy: Astronomy from a New York Rooftop* — Prof Patrick Thaddeus, Institute for Space Studies. Physics Colloquium, 4pm, Rm 26-100. Tea served at 3:30pm, Rm 26-110.

The Real World* — Liz Haas, Management Science Group, Sloan School of Management. Operations Research Center Student Workshops Seminar, 4-5pm, Rm 24-121. Coffee and cookies served after seminar.

Friday, March 23

The International Laser Scene* — Howard Rausch, Laser Focus Magazine. Modern Optics and Spectroscopy Seminar, 11am-Noon, Rm 9-150. Coffee at 10:30pm.

Chemical Engineering Seminars* — Jay Schnitzer, **The Transport of Macromolecules Across the Arterial Wall: An Autoradiographic Study**, 2pm. Guest Speaker: Prof Theodore Vermeulen, University of California at Berkeley, **Dynamics of Run-Away Systems — Explosions and Flames**, 3pm, Rm 66-110.

Prostitution as Psychological Guerilla Warfare* — Danielle of the Prostitutes' Union of Massachusetts. Sponsored by the SACC, 8pm, Rm 9-150.

Community Meetings

Wives' Group — Wed, Mar 14, Emily Huang, member of the Wives' Group, will demonstrate how to make artificial flowers, 3-5pm, Mezzanine Lounge, Student Center. Babysitting provided.

Technology Wives Organization International Cooking Group** — This month's TWO cook, Lale will demonstrate Turkish cuisine. Wed, Mar 14, 8pm, Rm 10-340. Admission: 50¢ members, \$1 non-members. Information: Debbie Kreischer 494-8296.

Gardening in the City, Gardening in the Shade* — Presented by the Technology Organization of Professional Secretaries. Ruth Brooks Littleboy, well-known horticulturist and consultant will give a lecture/slide show. Wed, Mar 21, 5:45pm, Rm 10-340. Wine and cheese served at 5pm.

Technology Wives Organization March General Meeting* — Debra Kowalski from the Middlesex County Extension Service will talk on the care of houseplants. Please bring a small plant with you to trade with other members. Refreshments served. Wed, Mar 21, 7:30pm, Rm 10-340. Information: Roberta Caton x3-2740.

Society of Women Engineers Interest Group Meeting* — Thurs, Mar 22, 7:30pm, Rm 1-236. Refreshments will be served.

Technology Wives Organization Weekly Exercise Class** — An hour of serious exercise led by professional Wambui Demps. Every Monday through May 14, 8pm, Exercise Room, 2nd fl, DuPont Gymnasium. Information: Call Wambui Demps 427-5008.

Wellesley

Seven Artists at Wellesley* — Paintings and drawings by Arlene Grossman; paintings and drawings by Bunny Harvey; photography by John Messina; drawings and paintings by James Wilson Rayen; lithographs, montypes and paintings by Heidi Vaughan Siebel; sculpture by William Travis and paintings by Flagg Watermire. On view through Apr 1, Mon-Fri, 8:30am-Noon & 1-5pm; Sun, 2-5pm, Jewett Arts Center, Wellesley College Museum, Wellesley, Ma.

Social Events

The Mezz** — Sponsored by the SCC. Folksingers in a relaxed coffeehouse atmosphere, refreshments available. Sat, Mar 17, 9pm-Midnight, Mezzanine Lounge, Student Center.

Prime Rib Nite*** — Includes salad bar, baked potato, dessert, \$7.75 including tax. Thurs, Mar 22, Faculty Club. RSVP x3-4896.

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

La Regle du Jeu** — French w/English subtitles. Sponsored by the Department of Humanities. Wed, Mar 14, 7pm, Rm 66-110. Free. For confirmation call Dora x3-4441.

La Regle du Jeu** — French w/English subtitles. Sponsored by the Department of Humanities. Thurs, Mar 15, 2pm, Rm 26-168. Free. For confirmation call Dora x3-4441.

The Searchers** — Sponsored by the Department of Humanities. Thurs, Mar 15, 7pm, Rm 66-110. Free. For confirmation call Dora x3-4441.

The Tall Blond Man with One Black Shoe** — LSC movie. Fri, Mar 16, 7 & 9:30pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Magnificent Ambersons** — LSC Classic Series. Fri, Mar 16, 7:30pm, Rm 10-250. Admission: 75¢ w/MIT or Wellesley ID.

Tiger Cliff* — Sponsored by the Chinese Student Club. Life of Chinese Acrobatic Circus. Sat, Mar 17, 3pm, Rm 10-250. Free. Ticket information: Call Andy x5-9616 Dorm.

Her Majesty's Secret Service** — LSC movie. Sat, Mar 17, 7 & 10pm, Rm 26-100. Admission: 75c w/MIT or Wellesley ID.

Wrong Box** — SCC Midnite movie. Sat, Mar 17, Midnight, Sala de Puerto Rico, Student Center. Bring a blanket and sit on the floor for the best movie bargain at MIT.

Assassination Bureau** — LSC movie. Sun, Mar 18, 6:30 & 9pm, Rm 10-250. Admission: 75c w/MIT or Wellesley ID.

Confession (Costa-Gavras)** — Sponsored by the Department of Humanities. Russian w/English subtitles. Mon, Mar 19, 7pm, Rm 66-110. Call Dora for confirmation x3-4441.

Plaint of Steve Kreines as Recorded by His Younger Brother Jeff** — Sponsored by the Film/Video Section. Mon, Mar 19, 7pm, Rm E21.

the King's Men** — Sponsored by the Department of Humanities. Mon, Mar 19, 7:30pm, Rm 14N-0615. Call Dora for confirmation x3-4441.

Portrait of Dorian Gray** — Sponsored by the Department of Humanities. Mon, Mar 19, 9pm, Rm 10-250. Call Dora for confirmation x3-4441.

Memories of Underdevelopment** — Sponsored by the Department of Humanities. Spanish w/English subtitles. Wed, Mar 21, 7pm, Rm 66-144. Call Dora for confirmation x3-4441.

Memories of Underdevelopment** — Sponsored by the Department of Humanities. Spanish w/English subtitles. Thurs, Mar 22, 4:30pm, Rm 66-144. Call Dora for confirmation x3-4441.

the Left-Handed Gun** — Sponsored by the Department of Humanities. Thurs, Mar 22, 7pm, Rm 66-110. Call Dora for confirmation x3-4441.

the Wizard of Oz** — LSC movie. Fri, Mar 23, 7 & 9:30pm, Rm 10-250. Admission: 75c w/MIT or Wellesley ID.

li: Fear Eats the Soul** — Sponsored by the Department of Humanities. German w/English subtitles. Fri, Mar 23, 7:30pm, Rm 66-110. Call Dora for confirmation x3-4441.

actus Flower** — LSC movie. Sat, Mar 24, 7 & 9:30pm, Rm 10-250. Admission: 75c w/MIT or Wellesley ID.

the Candidate** — LSC movie. Sun, Mar 25, 6:30 & 9pm, Rm 10-250. Admission: 75c w/MIT or Wellesley ID.

Music

Noon Hour Chapel Concert* — The Fairfax Concert of Viols. Kathleen Atman, Louise Egbert Treitman, Margaret Bossi, Adrienne Hartzell. Thurs, Mar 15. Free.

Symphony Orchestra* — Open rehearsal concert. Henry Brant, composer. Spatial Concerto, will premiere. Thurs, Mar 15, 9pm, Kresge Auditorium.

Chamber Opera* — Andor Kovach, visiting professor and composer from Switzerland, will present his chamber opera, *The Rendez-vous*. Mar 16, 17, 8pm and Mar 18 at 2pm, Little Theater, Kresge Auditorium. Free.

Symphony Orchestra* — David Epstein, director. Program will include Brahms Third Symphony, Brant's Spatial Concerto, Hilde Somer, piano. Sat, Mar 17, 8:30pm, Kresge Auditorium. Tickets \$1 at the door.

Guest Artist Series* — Sponsored by the Music Section, Department of Humanities. Concord String Quartet, all Beethoven program, Quartet in E Minor, Op. 59, No. 2 and Quartet in C Sharp Minor, Op. 131. Mon, Mar 19, 8pm, Kresge Auditorium. Free.

Noon Hour Chapel Concert* — Live Oak, Thurs, Mar 22. Free.

Exhibits

Painting and Pastels* — by Paul Brown and Stuart Diamond. Organized by the Committee on the Visual Arts. On view daily Mon-Fri, 10am-4pm; Wed evening 6-9pm, Hayden Corridor Gallery, 160 Memorial Drive. Public preview Fri, Mar 23, 5-7pm, artists will attend. Information call x3-4400.

Two Views: Two Installations* — Installation pieces by sculptors Peter Berg (New York) and Ed Rothfarb (Boston) will be built in the gallery. On view daily 10am-4pm; Wed evenings 6-9pm, Mar 24 through Apr 29, Hayden Gallery, 160 Memorial Drive, Camb, Ma. Tues, Mar 20, public invited to observe construction and development, Noon-2pm; public preview, Mar 23, 5-7pm, artists present. Organized by the Committee on the Visual Arts.

Stethoscope Laser Inscription: Poems and Projects 1975-'78* — Presented by Mark Mendel, fellow, Center for Advanced Visual Studies. On view through Mar 30, Mon-Fri, 9am-5pm; Center for Advanced Visual Studies, 40 Mass Ave, Camb, Ma.

Books 2000: Publishing at MIT Press** — An exhibit on the MIT Press, one of the largest and youngest of America's university presses, and one of the few existing at a major technological institution. Sponsored by the Compton Gallery Committee. On view Mon-Fri, 9:30-5pm, through March, Margaret Hutchinson Compton Gallery, Rm 10-150, Cambridge, Mass.

Voice and Vision* — Representing the work of Harvey Stein (Parallels: A Look at Twins), Duane Michals (Homage to Cavafy), James Van Der Zee (The Harlem Book of the Dead) and Jim Goldberg (The San Francisco Hotel Series). On view through Apr 4, Creative Photography Gallery, 120 Mass Ave, Camb, Ma.

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

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

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

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 Center, x3-4795.

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

MIT Historical Collections* — Katharine Dexter McCormick, '04; Vannevar Bush, '16; Bldg 4 corridor. **The New Technology Exhibit**, 2nd floor balcony of Lobby 7. **Energy Exhibit**, Bldg E40, 1st floor. **Solar Energy**, Bldg 8, main corridor. **Harvard-MIT Rehabilitation Engineering Center**, main corridor, Bldg 4. **Rogers Building Exhibit**, Bldg 4. **Meteorology**, main corridor, Bldg 8. **Norbert Wiener**, and **Karl Taylor Compton**, Bldg 4. **Laboratory for Physical Chemistry**, Bldg 6.

MIT Historical Collections* — In house exhibits include antique globes; the 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; Charles Stark Draper: Many Facets of the Man; The Compton Year, a photographic essay of the lives of Dr. & Mrs. Karl Taylor Compton. On view daily, 9am-5pm, 265 Mass Ave, 2nd floor, Camb, Mass.

Athletics

Men's Volleyball* — Sponsored by the Men's Volleyball Club. New England Collegiate Volleyball League Divisional Match vs Harvard, Wed, Mar 14, 7:30pm, Dupont Gymnasium.

Dance

Dance Workshop* — Modern dance classes, Mon & Wed Technique classes, Thurs Composition-Improvisation class, 3-5pm, T-Club Lounge, duPont Gymnasium.

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 March 21 through April 8 to Calendar Editor, Rm 5-113, x3-3270, before Noon, Friday, March 16.

Toxicology Course Set

(Continued from page 1)

Nutrition and Food Science; Professor Klaus Biemann of the Department of Chemistry; Professor Kenneth Rothman, David H. Wegman, and others from the Harvard School of Public Health; and Nicholas A. Ashford of the MIT Center for Policy Alternatives.

Other faculty members who will be involved in giving the course will be: Maurice S. Fox, Department of Biology; Paul M. Newberne and William G. Thilly, Department of Nutrition and Food Science; Jerome Rothenberg, Department of Economics; Christopher T. Walsh, Department of Chemistry; and Donald Hornig, Harvard School of Public Health.

For details and application forms contact: Linda C. Boyar, program administrator, Department of Nutrition and Food Science, Rm E18-564, x3-7023. Deadline for applications is April 30.

Rogers Papers First To Be Indexed In New Program

Fittingly enough, the papers of William Barton Rogers, founder and first president of the Massachusetts Institute of Technology, were the first to be processed in a new program of preservation and indexing underway in the Institute Archives and Special Collections.

Requests for access to the Rogers papers, more than sentiment, led to the collection being the first to be indexed, according to Helen Slotkin, Institute archivist and head of Special Collections in the MIT Libraries.

"Because of the prominence of the four Rogers brothers in the development of the sciences during the 19th Century," we have had requests for material from the Rogers papers from all over the country," Ms. Slotkin said.

Karen Temple Lynch, archival/manuscript specialist in the Archives, processed the Rogers papers and compiled the 80-page finding aid. Consultants on the project were Dr. Julius A. Stratton, president emeritus who is writing a book on the intellectual foundations of MIT, his assistant

Loretta H. Mannix, and Professor Emeritus Robert H. Shrock former head of the Department of Earth and Planetary Science.

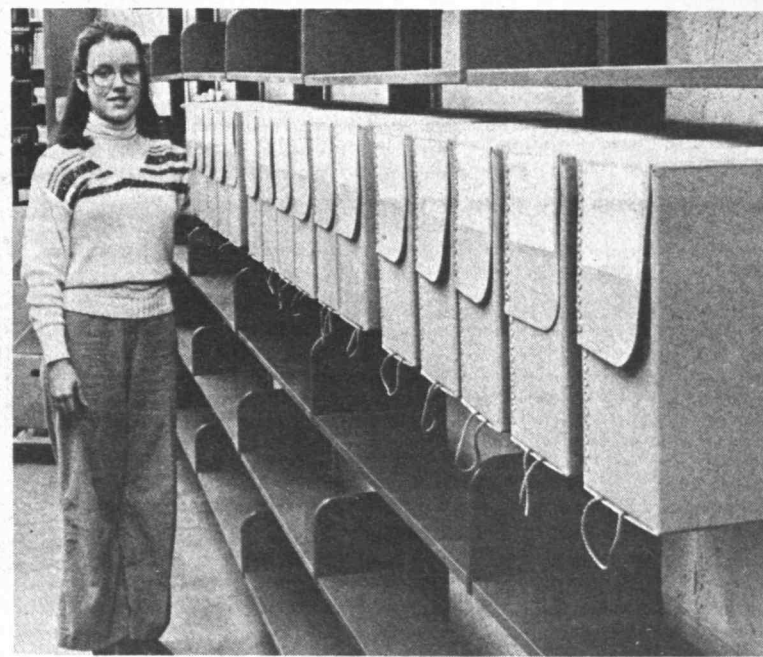
The papers are filed in acid-free folders in manuscript boxes that occupy approximately 10 linear feet of shelf space. Organizing the papers and preparing the finding aid took more than six months.

The finding aid includes a four-generation genealogy of the Rogers family, a brief biography and extended chronology, notes on the scope and content of the collection, a detailed folder list, and index of correspondents and a bibliography of William Barton Rogers that was prepared by Professor Shrock for his book *Geology at MIT*. In addition to the William Barton Rogers index there are smaller finding aids for the Rogers family papers and for papers of William Barton Rogers II, nephew of the MIT founder.

Plans are underway to microfiche the finding aid and, eventually, the entire collection. Having the finding aid on microfiche will make it readily available to researchers at very low cost. The finding aid for the Rogers collection, Ms. Slotkin said, will fit on one microfiche sheet.

Processing of the Rogers papers was the first in a continuing series of preparation of guides to manuscript collections. Work is now in progress on the collections of the late Norbert Wiener, Institute Professor and father of cybernetics, and Dugald Caleb Jackson, head of the Department of Electrical Engineering from 1907 to 1935.

Work on the manuscript collections has been expedited by a



Karen Temple Lynch in the Archives with the Rogers collection.

—Photo by Calvin Campbell

MIT Secretary To Star in Musical

Rosalie Gerut, administrative secretary to Professor Mildred S. Dresselhaus, director of the Center for Materials Science and Engineering at MIT, has a leading role in the Boston Repertory Theater's production of a new musical comedy, *Bittersweet*, opening March 21 at the Church of All Nations in Boston.

Ms. Gerut, a lyric soprano, had performed as a folksinger in Cambridge and Boston coffeehouses in her teens. Her first role in a musical was in the MIT Musical Theater Guild's production of *Godspell* in April, 1977. She enjoyed the work so much that the following December she began taking voice lessons at the New England Conservatory of Music.

She appeared again in the MTG's April, 1978, production, *Guys and Dolls*, in the role of Sarah Brown. Last summer she worked at the Keene Summer Theatre in Keene, N.H., appearing in *My Fair Lady*, *Bye Bye Birdie*, *Carousel* and *Company*. Her roles have spanned both age and type—from Mrs. Pearce in *My Fair Lady* to Alice (the featured teen-ager) in *Bye Bye Birdie*. In *Bittersweet* she appears as Selma, age 60.



Rosalie Gerut (left), secretary to Professor Mildred S. Dresselhaus, plays Julie Jordan in the Keene Summer Theater's production of *Carousel*. With her is Deirdre Alexander as Carrie. Both have appeared in musicals at MIT.

Liepmann Lectures Continue

Klaus Liepmann, professor of music emeritus, and director of music emeritus at MIT, will give his second lecture on "The Case of Beaumarchais Versus the United States" on Tuesday, March 20, 5pm, in Rm. 4-160.

The free, public lecture will be sponsored by the MIT Department of Humanities.

Author of the comedies on which two famous operas are based—"The Barber of Seville" and "The Marriage of Figaro"—Beaumarchais was also involved in diplomatic relations between France and the United States during the

War of Independence.

Beaumarchais was the first Frenchman to advocate America's independence. He loaned millions of dollars to the United States to help in the fight against the British, but he was never reimbursed as promised by US government officials.

The case of Beaumarchais versus the US lasted more than 50 years and involved Benjamin Franklin, John Jay, John Adams, Thomas Jefferson, James Madison, Talleyrand, Richelieu and others.

the papers of the Citizens League against the Sonic Boom (CLASB) contributed by William Shurcliff of Cambridge. The CLASB existed from 1967 until 1978 and was instrumental halting US development of civilian supersonic transport.

"Such collections are welcome here," Ms. Slotkin said, "because of their value in demonstrating how the scientific community affects and interacts with societal issues."

CEP Summary And Agenda

Summary of CEP Meeting on March 8, 1979.

The CEP met with Dean Robert Halfman and Dean Kenneth Wadleigh to discuss the proposal for a faculty Committee on Student Affairs and the broader issue of improving relations and communication between the faculty and student support services.

Agenda for the CEP Meeting on March 15, 1979.

1. Continued discussion of the proposal for a faculty Committee on Student Affairs.

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.

Port AM/FM stereo csstt recdr w/phones Jack & A/C adapter, 1 1/2 yrs old, \$125. Call Scott x5-7515 Dorm or 494-0118.

Marantz 2215B, recvr, exc cond, \$130 or best. Call Bill 661-1280.

Leica CL, 40 mm Summicron, \$350. Call Bob x3-1910.

Garrard ZERO 100 multiple play auto trmble, gd cond, anti-skating nds adjstmnt, \$70. Call Peter x3-7446 or 864-4257.

Datsun 4 std rims & whl covers. Call x8-1130 Draper.

Matt & box spring, tw sz, \$15. Call Peter x3-2922.

Mag tapes 8" BASF 600 to 6000 bpi, nw & usd, 8W stepping motors, 300 rpm, 3 degree steps, Z protected, Bendix plugs, 12 to 60 pin, MS-30 series, org plastic. Call Steve 782-0029 best eve.

5 pc wrought-iron dinette set w/dark br formica top, exc cond, owner moving, \$75. Call 899-9290.

2 Solo-1 spkrs, walnut cabs, \$25. Call Carl x5-9243 Dorm.

150 gal home heating oil, owner converted to gas, best. Call Bill x7185 Lincl.

Tble, 48x30" w/trestle foot in tan wood, butcherblk tble, 42" round w/center pedestal, old dryer. Call 861-7373.

Quad sale: 4 Bose 901-11's w/2 equalizers, walnt case, \$350 pr; SAE C3D csstt w/Solenoid fl logic control, less than mo old, \$350; Dokorder 2/4 ch, 8 track tape deck, \$45; Koss Pro 4AAA, mo old, \$40 & more. Call 321-1172.

Brnd nw qu sz matt, \$70. Call 494-8670 eves or 494-9825 am.

25" TV set, Heathkit, worked well until high voltage SCR's quit, full paperwork, \$150; '73 Audi, nwly rebit eng, front end universal gone, mst be towed, \$800 or best. Call x8-3235 Draper.

4 tickets to Gedda concert, all Shurbert, Apr 1, \$8 ea, org \$10. Call Erica x3-7043.

Antique DR set, china closet, buffet, tble, 6 chrs. Call Mary Ann x3-1682.

Rad snow tire, 155SR12, \$7; Sears canvas 2 man tent, w/floor 82x54" \$6; VW Camper tent, '67 stands alone, 10x6x6", \$25, all vy gd cond & nego. Call x3-3761.

G 3 spd bike, 26", gr. \$25 or best; Panasonic tape player, yellow, \$10 or best; set of electric trains, Cannonball \$15 or best or all for \$40. Call x3-3864.

Rollei 35S, mint cond, still on wrnty w/case & skylight filter, \$140. Call Robert x5-7204 Dorm.

Heath guitar spkr, 900W w/20' cable, casters, man \$95; Dyna SCA35 amp, bad shape, \$10; rare old Simplex metal shift levers for 10 spd, \$5; Universal seat & shoulder belts for car, nw \$15/pr, & more. Call x3-4726 Gerald.

Stereo recvr, Pioneer SX-535, 20W/chan, vy gd cond, \$115. Call x5-7293 Dorm.

Underwood typwrtr, mod 565 elect, yr old, exc cond, \$120. Call x8-3813 Draper.

Qu sz box sprng & matt, \$40. Call x3-7006.

Hockey skates, Lil boys, Bauer Hugger, sz 8, lk nw, \$10; Exeter child's adj Hockey helmet, \$2. Call Bob x8-4433 Draper.

Columbia yellow B bike, 10 spd, dual brks, lk nw, \$50. Call x498 Lincl or 625-4078.

Phase Linear 4000 preamp, \$375; match 100W/ch amp, \$275; B&O 1900 trmble w/nw cart, \$249; 2 pr BOSE 901-II w/equalizer, \$350/pr; Kenwood 7021 trmbl w/AT 14-SA cart, \$135; SAE C3D csstt Deck, \$350 & more. Call 321-1172.

Lg tbletop oven, usd 6 mos, \$40; TV B&W 12", fuzzy sound, \$10; Hamilton Beach hotplate, \$5; sm 3-way spkr, \$10. Call Randy 783-1935.

Tent, 2 man canvas pup tent usd once, exc cond, perfect for car camping, \$15; also avail quilted sleep bag, gd cond, \$15. Call x3-2982 Ora.

Single bed, matt, box sprng & frme, 3 chrs, cheap. Call 628-4847 kp trying.

M X R 10 Band Stereo Graphic Equalizer, usd only 3 mos, exc cond, \$160. Call Daryl x3-3011.

Used bed box sprng, matt & frme, all goes for \$30. Call 494-8883 anytime.

Tires, C78-14 pr snows, 4 reg, 4 AMC Custom hub caps; dbl bowl sink, firewood, best offers. Call x3-6107.

Tennis rackets, usd, Spaulding Kroat, strung, \$8.50; Spaulding Ardmore, unstrung, \$4; Vicki President, strung, \$7; custom re-stringing w/tournament nylon, \$8.50. Call 494-9336.

Blue braided rug, 6x9', jst cleaned, \$10. Call 876-4679 aft 6pm.

Wilson T2000 tennis racket w/cover, \$25; McIntosh MA6100 stereo preamp & power amp, walnut case, \$500; sound & color right display, 3 colors, \$20. Call x3-1996.

19" B&W TV, Zenith VHF & UHF, \$25; elect typwrtr, Olivette, \$130; both vy gd cond. Call Kohlid x3-1588 or 494-8348.

Vehicles

'67 Mustang, 97K, nds bdy work, \$100. Call Avraham x3-4153 or 494-0345 eves.

'69 Cortina Eng Ford wg, eng exc, 5 stl-bltd rads, 2 mtd rad snows, almost nw brks, exc sw, gd batt, \$475 or best. Call Wilson x3-5121 or 876-6326.

'69 Mustang, 56K, nw brks, clutch, batt, tires, \$800. Call 785-0800.

'69 Ford Van, Chateau Club, 8 pass, 302 & auto, 4 nw tires + pr std snows, nw bttry, mflr & more, gd cond, full write up avail, \$1100. Call Ralph x3-2321.

'70 Monte Carlo, 80K, AM, w/2 snows, \$400. Call Fr. Moran x3-2981 or visit him Rm W-2A.

'71 Ford Galaxie 500, exc cond, lk nw, 70K, mst see to appreciate, \$1190. Call Tasso x8-1620 Draper.

'72 Dodge Coronet, 318 V8, A/C, PS & PB, 4 dr, ask \$995. Call Tom x3-3966.

'72 Volvo 142, fuel inject, 75K, A/C, csstt, 4 nw Tiempo rads, \$1500. Call x5-9636 Dorm.

'73 Ford LTD, 44K, A/C, PS & PB, AM/FM stereo, \$1995. Call Bob x3-4352 or 484-3360 aft 5pm.

'73 Ply, PS & PB, A/C, cruise, stereo, V-top, elect lock, clock, almost nw tires, etc, gd cond, 68K, \$995. Call Lee x3-6165 or 628-3051.

'73 Saab 96 for parts, accident damage, exc interior, all glass drs, eng, etc, w/ sell complete car or parts, prc nego. Call Deena x3-4378.

'74 Audi 100 LS, 4 dr, auto, AM/FM stereo, A/C, r/window defroster, dk blue, \$2250. Call 367-1523.

'74 BMW R75/6, nw front whl tire & tube, frnt disc brks, lugg rack, back rest, mint cond, \$2200. Call 774-3283.

'74 Honda Civic Hatchback, 59K, Mich rads, bdy & interior exc cond, nw battery, brks, timing belt, regulator, ask \$1900. Call Joan x3-6328 or 864-4234.

'75 Buick Century, 2 dr, V6, auto, PS, vinyl roof, 57K, exc cond, nw rads & shocks, \$2500. Call Maria x3-2101.

'75 Dodge Dart, 4 dr, 35K, gd cond, 6 cyl, auto, \$2600. Call Zari 494-0422.

'76 Toyota Corolla, 2 dr sedan, 4 spd, exc cond, \$2995. Call Maryanne x479 Lincl T-F.

'77 Fiat 131, 2 dr, 5 spd, factory A/C, custom AM/FM stereo w/csstt, 21K w/50 mi extended wrnty, \$3800 or best, nd \$, will talk. Call Bill 237-3193.

'78 GL-100 Honda Wind Gamer-3 w/lowers, AM/FM csstt stereo, saddle bag, cigarette lighter, cruise control, custom crash bars w/folding hghwy pegs, rest & lugg rack, lock & cover, 1800mi, stl under wrnty. \$5000 or best. Call x8-2113 Draper.

'78 Mazda GLC, 2 dr & htcback, std, AM/FM, rust proof guarantee, snows, 6,800 mi, perfect cond, \$3-300. Call 734-0083 eves.

Dunebuggy, yellow fiberglass, '66 chassy & eng, beach tires & rims, airshocks, hvy duty constructions & roll bar, mny extras, \$1500 or best. Call x8-3961.

Housing

Sublet Back Bay, 10x18' rm, all furn, refig, elect plate, \$130 ht incl, 10 min from MIT, cls to T, grocery & laundry nxt dr, 1st fl, avail now. Call x3-2922.

Brighton avail May 1, spac 1 BR apt, \$280/mo incl ht & park, exc bldg, conv to Comm Ave & trolley. Call Anne x3-1427.

Camb, apt rmmate wntd, own furn, carpeted rm, safe & conv loc, off Mass Ave, shr w/4 other MIT students, \$97/mo + util, avail Mar 20. Call 868-8895 anytime.

Copley Sq, vy comftrbl, 1 BR condo, 700 sq ft, hrdwd, nice view, frpl, \$38,700. Call 261-1081 eves.

Vacation hse on Cape Cod, 4 BR on acre nr Nauset & Pleasant Bay, can be seen wkends, reasonable rate. Call x3-1316.

Lex condo, nr public library, 2 blk from Green, park view from semicircular LR, 2BR, DR, 1 1/2 B, Central A/C & heating. Call 862-5522 eves.

Watertwn, 3 BR apt for rent, 1st fl, lg LR, mod K & B, unht & gar, avail immed, no pets, \$350/mo. Call 924-1289 aft 4pm.

Wilmington, hse for sale, w/4 acres, less than 30 min N. of Bos, lg Cape, remodeled contemp, fieldstone frpl LR, mod K, 3 or 4 BR, 2B, \$78,000. Call H. Heine x3-5313.

Apt to sublet, Apr 1 to Sept 1, 4 rm apt, 10 min walk from MIT on Pearl St, \$164 per mo. Call Richard Kensley x3-5540 aft 7pm or 876-2684.

Animals

4 beautiful guinea pigs, \$2 ea or best. Call Mike 738-0860 7-9pm.

Lost and Found

Lost: Fri, eve 3/2, Faculty Club, tan W raincoat, sz 13 w/red kniprs umbrella & March T pass in pocket. Call Susan x3-5048.

Found: Casio micro computer at bus stop, towards Bos. Call x3-4904 & identify.

Found: Sm black pup, outside MIT Boat Hse, Mem Drv. Call Joan x3-3213.

Wanted

Substantial old oak desk, any cond, will pay the prc. Call Jeffrey x3-2084.

3 usd 15" VW Bug tires, gd cond. Call x3-6328.

Wtd to rent, Marthas Vineyard, mo of July, 3BR hse, pref w/laundry facilis. Call Carolyn x3-1595.

Marthas Vineyard, 2 wks, summer vac in July. Call 369-2773.

Synchos & surplus equipment, containing synchros. Call 547-1834.

Working motor for Sears, Kenmore 600 wash mach. Call Bill x8-3578 Draper.

Refrig to buy. Call Chris x3-2674.

Usd sew mach, reliable & inexpensive. Call Stuart 354-8883.

Hse to rent or sit, or rmmates to get hse w/at Woods Hole, June-Aug. Please call Sue x3-1702.

2 BR apt, betw Harv Sq & Arl Ctr for childless married couple, quiet bldg, \$350/mo max. Call Libby 696 Lincl or 876-2284 aft 6pm & wkends.

Tble saw, 9' or 10'. Call x3-1789.

Clinical Research Center nds Volunteers 3-4 hrs wk to assist play therapist w/activities for volunteer patients. Call Clare Dee x3-6301.

Roommates

Rmmate M or F wntd to shr beautiful spac 6 rm apt, Allston w/other person, 8 min bus to Central-Sq, quiet residential neighborhd, \$125/mo + util. Call 782-7888.

Campport, rmmate wntd for lg coop hsehold nr Central Sq, shr mostly vegetarian meals, chores, interests, avail Apr 1, \$80. Call 547-5539 or 661-8441.

Looking for mature M rmmate(s), also apt in safe area w/park as of Apr 1. Call Mark 254-4682 6pm.

Rmmate wntd to shr sm apt, Fenway Area, \$115/mo + elect, prefer age 23+, Call 262-1467 aft 5pm or x3-5514.

Somerville rmmate wntd to shr 3BR apt, vegetarian or Kosher, \$73.33/mo + util. Call Aaron x3-1923 or 625-8584.

M rmmate wntd to shr lg Central Sq apt, own rm, conv to MIT & Harv Sq, \$122.50/mo. Call Steven x3-6759 or lv msg.

Miscellaneous

German lessons & conversation, all levels, experienced German teacher. Call 646-5511.

Wl type thesis & tech, experienced on-IBM Select II. Call Beverly x8-4427 Draper.

Wl do gen, tech & thesis typing IBM Correct Select, 10 yrs exp. Call x3-6695.

Surplus Property

The following items are available for sale on a sealed bid basis only. Please submit bids to Mr. Wendell Derry, OFMS Institute Property Officer, E19-429. Sealed Bids will be opened on Thursday, March 29, at 12:10 P.M. in room E19-429. MIT reserves the right to reject any and all bids.

Tank Section (part of wind tunnel), 76" long 46" dia. Reference Case #108

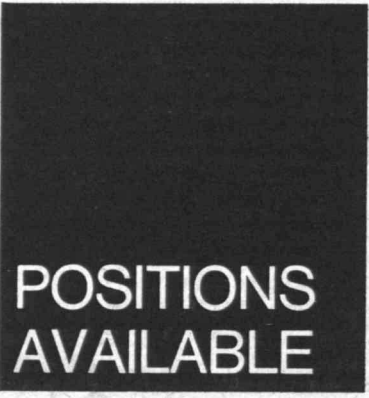
Rock Saw, Mfg. Felker, Ki-Met Model 12080. Reference Case #113.

Radar w/8' ant, 500 kW, 10m wave length, Mfg. Westinghouse, age 30 years. Reference Case #121.

Frequency Meter, BC 221P, Reference Case #119.

Trailer, van type, Mfg. Spim, Serial 49, 19' 10" long, 8'2" high floor to roof, 7'9" wide, Dual Wheels. Reference Case #109.

Worthington Air compressor, Two Stage w/60 HP motor, Pittsburgh Lectrodryer Dehumidifier size 250, Model BWC and one Electric Magnet, 5 ton, 6' x 6' dia., deflecting type, 3/4" cap. Reference Case #110.



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
Lawrence Milan 3-2928
Kathleen Rick 3-4269
(Secretary - Jenni Leibman)

Admin Staff, Industrial Liaison Officer in the Industrial Liaison Program to provide interface between MIT and an assigned number of member firms; solicit new member companies. Bachelor's degree, Master's degree and management perspective required. One degree should be in the field of electrical engineering and computer science and a MIT degree preferred. At least three years' industrial experience, excellent communications skill and in-depth knowledge of Institute also required. A79-15 (3/14)

Admin. Staff, Alumni Regional Director for Southeast Region to have responsibility for all Alumni Association activities in this area (Alumni Fund, Club activities, Alumni Relations Programs.) Position includes interaction with MIT alumni, faculty and administration as well as considerable travel. MIT degree or extensive knowledge of the Institute is required. A79-13 (3/7)

Academic Staff, Administrative Officer/Operations Administrator, in the Chemistry Dept, to manage departmental facilities (laboratories and shops); maintain space inventory and assign space; oversee all physical facilities maintenance and ensure proper operating condition; act as liaison between Dept. and administrative units; arrange class schedules and student teaching assignments; prepare statistical and other reports; arrange Visiting Committee meetings, special lectures; perform other administrative functions as necessary. Bachelor's degree, or equivalent, and 5 years of applicable experience required. Knowledge of MIT helpful. (79-3 (3/7)

Admin. Staff, Asst. Director, in the Office of the Provost/Office of Minority Education to assist disadvantaged students at freshman and sophomore levels to engage the academic programs at MIT; advise, counsel and organize academic support services; act as liaison with other MIT offices and faculty. Bachelor's degree and experience in planning, managing and evaluating academic support services for disadvantaged students required. Proven ability and a continuing interest to work with minority students also required. Some facility with the use of computers (digital) desired. A79-14 (3/7)

Sponsored Research Staff, Programmer, part-time, in Earth and Planetary Sciences will work on conversion editing, management and scientific analysis of large quantities of oceanographic data. Primary emphasis will be on time series analysis methods. Experience in Fortran IV and some knowledge of IBM systems including JCL is necessary. A Bachelor's degree in a related field is preferred. Approximately 20 hrs./wk. R79-63 (3/14)

Sponsored Research Staff, Research Specialist, Software Systems Engineer, at Haystack Observatory, Westford, (MA) to develop, maintain and improve systems supporting real-time control, data processing and data recording portions, of a sophisticated long-range, high-resolution radar system. (The system incorporates both mini-computers and array processors.) Strong math, engineering or physics background required as well as knowledge of assemble language and Fortran. Bachelors degree plus 2 years' related experience required. R79-58 (3/7)

Sponsored Research Staff, Programmer, temporary, in the Energy Laboratory to work with a research team which is developing an advanced computing system for simulation and design of fossil energy processes. Design and code chemical engineering process models for a large interactive (Fortran) process simulator; debug and test programs; document programs and subsystems; implement programs for formatting reports or calculation results. A Masters degree in science or engineering and at least 1 years' experience in technical computer programming, as well as Fortran and IBM operating systems proficiency required. Temporary for six months. R79-57 (3/7)

Library Asst. III in the Collection Development Dept. to be responsible for acquisition of current governmental, regular and all supranational serials and journals; record and process materials; claim outstanding materials; process invoices, credits and charges; circulate sample issues. Will also transliterate and check in cyrillic serials and journals; prepare order forms; process and/or record Technical Reports; answer phone inquiries; assist Head of Government Documents Section. High school graduation, or equivalent, required. Basic typing and organizational skills, reading knowledge of Russian, neatness, accuracy and capacity for detail required. B79-114 (3/7)

Sr. Library Asst. IV in the Barker Engineering Library to assist in acquisition of new materials; check publishers' brochures; type order forms; perform bibliographic searches; act as liaison between Library and Collections Dept; maintain outstanding order files; assist in training assistants. Library experience and/or graduate library science training required, as well as bibliographic knowledge or training. Typing skill also necessary. Foreign language skills helpful. B79-129 (3/14)

Secretary V to the Director and professional staff of the Planning Office to answer correspondence independently and/or from verbal instruction; organize meeting agendas; arrange meetings and luncheons; edit manuscripts; maintain budget records; assist in budget preparation; type correspondence and reports; coordinate work of other secretaries. At least 5 years secretarial experience, or college training and 3 years secretarial experience required. Good secretarial and machine transcription skills and ability to work under pressure also required. Interest in planning and/or architecture helpful. 40 hrs./wk. B79-120 (3/7)

Secretary IV to three faculty members in the Sloan School of Management to prepare class materials and manuscripts; schedule meetings and seminars; perform general secretarial duties. Good typing (including technical) skill and command of English language required. Some college training also required. Secretarial experience desired. B79-124 (3/14)

Secretary IV to the Director, Associate Director and one faculty member of the Gas Turbine Laboratory in the Aeronautics and Astronautics Dept. to type correspondence, proposals and reports; screen phone calls; schedule meetings; arrange travel; xerox; file. Excellent typing and good interpersonal skills required. Technical typing skill preferred. B79-123 (3/14)

Secretary IV to one professor and one research staff person in the Nuclear Engineering Dept. to type technical reports, proposals, classnotes, manuscripts and general correspondence from hand written drafts and dictaphone; file; answer phones; arrange travel; handle mail. Typing skill required; technical typing skill desired. Knowledge of office procedures and organizational skill also required. B79-125 (3/14)

Secretary IV to two Civil Engineering faculty members to type technical material; arrange travel; organize seminars; assist students; monitor accounts and handle other routine office duties. Typing skill and willingness to learn technical typing required. B79-130 (3/14)

Secretary IV, part-time, temporary, to a research group in the Energy Laboratory to type correspondence and technical reports; arrange travel; schedule meetings; perform clinical duties; assist personnel at peak periods. Accurate typing skill (including technical), and ability to establish priorities required. Non-smoking office. Temporary through 8/31/79, 28 hrs./wk. B79-135 (3/14)

Secretary IV in the Industrial Liaison Program to type correspondence, memos, invoices, coordinate travel; prepare travel vouchers; order and mail library cards; answer phones; deposit daily income; check accounting statements; order supplies; prepare requests for payment; handle typing overload in office. Excellent typing skills, accuracy, a facility for details and interest in book-keeping required. B79-136 (3/14)

Secretary IV to the Head of the Engineering Libraries to type correspondence; distribute mail; maintain various administrative records; review accounting statements and monitor expenses; compile statistics; assist library users with non-print and reserve materials. Secretarial experience as well as background in accounting/bookkeeping required. Secretarial school or college training preferred. B79-127 (3/14)

Secretary IV in the Student Accounts Office to answer phones; schedule appointments and meetings; type correspondence, etc.; open and distribute mail; maintain payroll; handle purchase order requests; file; perform miscellaneous duties. Will also be involved in preparation of the Degree List; handle cash receipts from students. Accurate typing and filing skills, organizational ability and ability to work well with a variety of people required. Bookkeeping and/or accounting skills helpful. B79-111 (3/7)

Secretary IV, part-time, in the Civil Engineering Dept. to type correspondence, reports and class notes; maintain files; answer phones; arrange travel; schedule meetings; monitor accounts. Good communications and organizational skills required. Technical typing skill or willingness and ability to learn also required. 30 hrs./wk. B79-118 (3/7)

Secretary IV in the Medical Dept. to provide reception and secretarial support; answer phones; schedule appointments and meetings; type correspondence, reports, meeting minutes, arrange travel; keep records on patient care; perform reception duties; perform triage function; transcribe medical notes; schedule operations with area hospitals. Excellent typing and organizational skills, flexibility and initiative required. Some editing of reports and correspondence may be required. B79-71

Secretary III to a large technical group in the National Magnet Laboratory to type correspondence and reports; answer phones; arrange travel; xerox; relieve supervisor whenever possible; may assist in operation of small library. Accurate typing skill required. Secretarial school training preferred. 40 hrs./wk. B79-126 (3/14)

Secretary III in the National Magnet Laboratory to type purchase orders, letters and miscellaneous forms; file; perform clerical duties as necessary. Excellent typing skill required. High school training or one year of secretarial school also required. B79-132 (3/14)

meetings and travel; type technical reports, proposals and budgets; monitor accounts; act as liaison between Office of Sponsored Programs and sponsors; project future spending of accounts; review purchases and expenditures; process various forms; handle office space and phones; maintain files. Organizational, communications and technical typing skills required, as well as the ability to perform detailed work (budget projections, account monitoring). Administrative and secretarial experience also required. Knowledge of Institute policies and procedures important. B79-119 (3/7)

Clerk Typist IV in the Center for Space Research to assist with headquarters accounting functions and type material which includes technical content on word processing equipment. Typing experience required as well as the ability to handle detailed accounting tasks with accuracy. Secretarial or business school training, and shorthand/speedwriting skills are desirable. B79-110 (3/7)

Sr. Clerk III/IV in the Comptrollers Accounting Office, Payroll Office to review and prepare time sheets for data processing input; log file changes; post audit of time sheets, applying relevant personnel policies; review and compute pay adjustments; perform other clerical functions as necessary. Applicants must be able to handle figures with accuracy and have strong interpersonal skills. B79-116 (3/7)

Clerk III in the Registrar's Office to perform receptionist's duties in records section; assist students, faculty and others in obtaining information and material; receive and process

R78-136, Spons. Res. Staff, Lab for Computer Science (8/16)
 R78-145, Spons. Res. Staff, Electronics Engineer, Lab for Computer 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)
 R78-154, Spons. Res. Staff, Program Director, Neurosciences Research Program (8/30)
 R78-160, Spons. Res. Staff, Programmer, Center for Space Research (8/30)
 R78-161, Spons. Res. Staff, Engr. Asst. Center for Material Science (8/30)
 R78-162, Spons. Res. Staff, Systems/Scientific Programmer, National Magnet 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. Res. Staff, Programmer, Center for Space Research (8/30)
 R78-184, Spons. Res. Staff, Research Engineer, Artificial Intelligence Lab (9/13)
 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)
 R78-208, Spons. Res. Staff, Postdoctoral Research, Nuclear Materials, Nuclear Reactor (9/27)
 R78-212, Spons. Res. Staff, Physics, Center for Space Research (10/4)
 R78-217, Spons. Res. Staff, Research Associate, Civil Engineering (10/18)
 R78-228, Spons. Res. Staff, temporary, Energy Lab (10/18)
 R78-246, Spons. Res. Staff, Systems Programmer, Lab for Computer Science (11/1)
 R78-250, Spons. Res. Staff, Research Associate Materials Science & Engineering (11/1)
 R78-252, Spons. Res. Staff, Tech. Computer Programmer, temporary, Energy Lab (11/1)
 R78-253, Spons. Res. Staff, Digital Engineer, Research Lab of Electronics (11/15)
 R78-268, Spons. Res. Staff, Tech. Asst., Biology (12/6)
 R78-269, Spons. Res. Staff, Technical Asst., Nutrition & Food Science (12/6)
 R78-276, Spons. Res. Staff, Electron Microscopist, Center for Materials Science & Engineering (12/13)
 R78-277, Spons. Res. Staff, Research Engineer, Center for Materials Science & Engineering (12/13)
 R78-278, Spons. Res. Staff, Research Engineer, Center for Materials Science & Engineering (12/13)
 R78-281, Spons. Res. Staff, Tech. Asst., Nutrition & Food Science (12/13)
 R78-282, Spons. Res. Staff, Chief, Linac Operator, Lab for Nuclear Science (12/13)
 R78-283, Spons. Res. Staff, Mechanical Engineer, Lab for Nuclear Science (12/13)
 R78-284, R78-285, Spons. Res. Staff, Accelerator Physicist, Lab for Nuclear Science (12/13)
 R78-286, Spons. Res. Staff, Systems Programmer, Lab for Computer Science (12/13)
 R78-288, R78-289, Spons. Res. Staff, Laboratory for Computer Science (12/13)
 R78-296, Spons. Res. Staff, Systems Programmer, Sloan School of Management (1/3)
 R78-299, Spons. Res. Staff, Systems Analyst/Programmer, Artificial Intelligence Laboratory (1/3)
 R78-305, Spons. Res. Staff, Theoretical Plasma Physicist, Plasma Fusion Center (1/10)
 R78-306, 307, 308 Spons. Res. Staff, Laboratory for Information and Decision Systems (1/10)
 R78-310, Spons. Res. Staff, Statistician/Econometrician, Center for Computational Research in Economics and Management Science (1/10)
 R78-311, 312, Spons. Res. Staff, Lab for Computer Science (1/10)
 R78-313, Spons. Res. Staff, Lab for Computer Science (1/10)
 R78-315, Spons. Res. Staff, Experimental Plasma Physicist, National Magnet Laboratory (1/10)
 R79-3, 4, 5, 6, 7, 8, 9, 10, 11, Spons. Res. Staff, Postdoctoral Research, Center for Theoretical Physics (1/17)
 R79-14, Spons. Res. Staff, Superconduction Magnet Research, National Magnet Laboratory (1/24)
 R79-17, Spons. Res. Staff, Experimental Physics, National Magnet Lab (1/24)
 R79-19, Spons. Res. Staff, temporary, Center for Transportation Studies (1/24)
 R79-21, Spons. Res. Staff, Research Scientist, Energy Lab (1/24)
 R79-22, Spons. Res. Staff, Lab for Nuclear Science (2/7)
 R79-23, Spons. Res. Staff, part time, Laboratory for Computer Science (2/7)
 R79-24, Spons. Res. Staff, Research Associate, Heterocyclic Chemist, Chemistry (3/7)
 R79-26, Spons. Res. Staff, Research Scientist/Engineer, Energy Laboratory (2/14)
 R79-27, 28, 29, Spons. Res. Staff, Transportation Systems, Center for Transportation Studies (2/14)
 R79-33, Spons. Res. Staff, Laboratory for Computer Science (2/14)
 R79-36, Spons. Res. Staff, Technical Asst., temporary, Biology (2/14)
 R79-37, Spons. Res. Staff, Editor, Sea Grant Program (2/14)
 R79-38, Spons. Res. Staff, Policy Analyst, Energy Laboratory (2/28)
 R79-44, Spons. Res. Staff, MHD Combustion development research, Energy Laboratory (2/28)

ACADEMIC:
 C78-17, Acad. Staff, Research Associate (7/12)
 C78-26, Acad. Staff, Librarian, Head, OCLC/LC Cataloging Section, Libraries (9/20)
 C78-34, Acad. Staff, Librarian, Libraries (11/29)
 C78-38, Academic Staff, Asst. Rotch Librarian, Rotch Library (1/10)
 C79-1, Acad. Staff, Admin. Officer, Nuclear Engineering (3/7)
 C79-2, Acad. Staff, Admin. Officer, Earth and Planetary Sciences (3/7)

EXEMPT:
 E78-35, Exempt, Tech. Supervisor, Physical Plant/Telecommunications (8/16)
 E78-58, Exempt, Technical Asst., Alumni Association (11/1)
 E78-61, Exempt, Asst. Accountant, Lab for Nuclear Science (11/8)
 E78-68, Exempt, Nurse, Medical Dept. (12/13)
 E79-2, Exempt, Foreman, Physical Plant (2/7)
 E79-5, Exempt, Area Food Service Supervisor, Food Service (3/7)
 E79-6, Exempt, Registered Nurse, Clinical Research Center (3/7)

BIWEEKLY:
 B78-178, Sec. IV, Provost's Office, Upward Bound Program (10/11)
 B78-511, Sec. IV, Sloan School (9/13)
 B78-518, Tech. Typist IV/MagCard Operator, Economics (9/13)
 B78-523, Tech. Asst. V, Alumni Association (9/13)
 B78-573, Editorial Sec. IV, Materials Science & Engineering (9/27)
 B78-658, Sec. IV, Lab for Nuclear Science (11/8)
 B78-674, Sec. IV, Development Office (11/15)
 B78-681, Sec. III/IV, Energy Lab (12/6)
 B78-687, Sec. IV, part-time, Economics (11/29)
 B78-693, Sec. IV, Center for Policy Alternatives (12/13)
 B78-744, Sec. III/IV, Civil Engineering (12/13)
 B78-768, Sr. Clerk III, Comptrollers Accounting Office (1/10)
 B78-786, Sec. IV, Laboratory for Computer Science (1/10)
 B79-8, Sr. Clerk III, part-time, Clinical Research Center (1/24)
 B79-9, Edit. Sec. IV, Nutrition & Food Science (1/24)
 B79-11, Sec. IV, Physics Dept. (1/24)
 B79-12, Sec. IV, Industrial Liaison Office (1/24)
 B79-21, Sec. III/IV, Student Financial Aid Office (1/24)
 B79-23, Sec. III/IV, Office of Sponsored Programs (1/24)

Tickets Available

Discount tickets for a solo recital by tenor Nicholai Gedda on April 1, and for the Boston Symphony Orchestra open rehearsal on March 29, are now on sale at the Technology Community Association (TCA). The TCA Office, Rm W20-450, is open weekdays, 11am-3pm.

The program for the open rehearsal will be Schoenberg's *Gurre-Lieder*, with soloists Tatiana Troyanos, James McCracken, Kim Scown, David Arnold, Werner Klemperer, and the Tanglewood Festival Chorus, Seiji Ozawa conducting.

Horatio C. Sexton

Word has been received that retired Navy Capt. Horatio Clay Sexton, 81, died December 26 at Anne Arundel General Hospital of a cardioarterial ailment.

Capt. Sexton, a native of Rushville, Indiana, graduated in 1920 from the US Naval Academy. In 1923, he received his SM degree in naval architecture from MIT. He then taught at the Naval Academy.

Towards the end of World War II, he directed the mine-sweeping division of the bureau of ships here. He retired in 1950.

Among his military honors were the Legion of Merit and Commander of the British Empire.

He was associate professor of naval architecture at MIT from 1950 until 1953, when he joined the Central Intelligence Agency as a senior naval analyst. He retired in 1961.

Capt. Sexton is survived by his wife, Ruth (Montgomery) Sexton, Annapolis; a daughter, Mary Susan Brooks of Westport, Conn.; two sons, John M. Sexton of Baltimore and Horatio C. Sexton, also of Annapolis, and eight grandchildren.

- B79-26, Sec. IV, part time, Architecture (2/7)
- B79-33, Sec. IV, Civil Engineering (Transportation Systems) (2/7)
- B79-36, Sr. Library Asst. IV, Libraries (2/14)
- B79-38, Sec. IV, Patent Marketing (VP, Research) (2/14)
- B79-40, Sec. III/IV, Laboratory for Computer Science (2/14)
- B79-41, Sec. IV, Laboratory for Computer Science (2/14)
- B79-44, Sec. IV, Center for Transportation Studies (2/14)
- B79-45, Sec. IV, part-time, Center for Transportation Studies (2/14)
- B79-46, Sec. IV, Materials Science and Engineering (2/14)
- B79-47, Sec./Recept. III, Nutrition and Food Science (2/14)
- B79-48, Sec. IV, Nutrition and Food Science (2/14)
- B79-50, Clerk IV, Energy Laboratory (2/14)
- B79-57, Sec. IV, Laboratory for Information and Decision Systems (2/14)
- B79-61, Sec. IV, Chemistry (2/14)
- B79-67, Admin. Asst. V, National Magnet Laboratory (2/14)
- B79-71, Sec. IV, Medical Dept. (2/14)
- B79-77, Editorial Asst. IV, Energy Laboratory (2/28)
- B79-78, Sec. IV, Psychology (2/28)
- B79-80, Sec. IV, Political Science (2/28)
- B79-87, Sec. IV-V, Urban Studies and Planning (3/7)
- B79-90, Cashier III, Food Service (3/7)
- B79-92, Communications Console Operator III, Physical Plant (3/7)
- B79-93, Sec. IV, part-time, Chemistry (3/7)
- B79-96, Sec. IV, Office of Personnel Services (3/7)
- B79-98, Sec. IV, part-time Nutrition and Food Science (3/7)
- B79-100, Accounting Clerk III, Harvard-MIT Division of Health Sciences and Technology
- B79-102, Sr. Clerk/Receptionist III, Medical Dept. (3/7)
- B79-105, Data Collector V, Office of Facilities Management Systems (3/7)
- B79-106, Sec. III/IV, Office of Facilities Management Systems (3/7)
- B79-108, Sr. Lib. Asst. IV, Barker Engineering Library (3/7)
- B79-109, Sec. III/IV, Admissions (3/7)

- HOURLY:**
 H78-106, Sr. Technician (Electronic), National Magnet Lab (8/16)
 H78-184, Technician A, Lab for Nuclear Science (12/6)
 H78-185, Technician A (Electronics), Lab for Nuclear Science (12/6)
 H78-207, Tech. A, Energy Laboratory (1/24)
 H79-10, Hourly, Campus Patrol Officer, Campus Patrol (2/7)
 H79-26, Hourly, Waiter/Waitress, Faculty Club (3/7)
- The following positions have been FILLED since the last issue of *Tech Talk*:
- A79-6 Admin Staff
 - B78-791 Sec. IV
 - B79-13 Sec. IV
 - A78-85 Admin. Staff (Cancelled)
 - B79-45 Sec. IV
 - B79-104 Section Head V
 - B79-69 Sec. IV
 - B79-99 Lib Asst. III
 - B79-115 Sr. Lib. Asst. IV
 - B79-94 Sec. IV
 - B79-85 Lib. Asst. III
 - B79-68 Clerk III
 - B79-58 Sec. III/IV
 - B79-86 Sec. III
 - B79-91 Sec. IV
 - B79-77 Edit. Asst. IV
 - B79-113 Sec. IV (Cancelled)

- The following positions are on HOLD pending further decision:
- H79-107 Lib. Asst. III
 - H79-101 Medical Asst. IV
 - B79-78 Sec. IV
 - H79-24 Hourly
 - H79-26 Hourly

NAE Elects 2 From MIT

Two members of the MIT faculty—both in the Department of Electrical Engineering and Computer Science—have been elected to membership in the National Academy of Engineering.

They are Dr. Peter Elias, Edwin S. Webster Professor of Electrical Engineering, and Dr. Robert G. Gallager, associate director of the Laboratory for Information and Decision Systems.

Their election brings to 53 the number of MIT faculty (active and emeritus) who are members of the prestigious national engineering organization. That number represents about 5.9 percent of the membership.

Election to the academy is considered among the highest professional distinctions that can be conferred on an engineer. Membership honors those who have made important contributions to engineering theory and practice or who have demonstrated unusual accomplishments in the pioneering of new and developing fields of technology.

This year, the academy announced, 99 engineers were elected to membership and 18 to foreign associateship. The election brought the membership to 953 and the foreign associateship to 74.

About 21.7 percent of the members and about 5.1 percent of the foreign associates are MIT alumni.

In announcing the election, the Academy cited Professor Elias' "pioneering in the field of information theory and leadership in electrical education."

Professor Gallager's "contributions to coding and communications theory and practice" were cited.



Bonnie Beaver Raffle winners, Allan O'Connor (left) and Andy Lee (center), accept their prizes from baseball coach, Francis C. O'Brien. The raffle cleared \$800 which will go toward paying for the annual spring trip of the MIT baseball team. This year the team will go to Melbourne, Daytona, and St. Augustine, Florida, to play six pre-season games—two against Florida Technical Institute, and one each against Embry-Riddle University, Fairleigh-Dickinson University, Flagler College and Urbana College. The team raises money for the spring trip in several ways—alumni contributions, the sale of MIT stocking caps, team members routinely work at indoor track meets, and last fall operated a concession at the homecoming football game, and, of course, the Bonnie Beaver Raffle.

Rasmussen Talk Threatened At Museum of Science

A joint dinner meeting of the MIT Club of Boston and the Wellesley Club of Boston was to have been held as planned last night (Tuesday night) at the Museum of Science despite an anonymous threat to contaminate the site with radioactive material if the speaker, MIT Professor Norman Rasmussen, went ahead with his talk.

Unsigned letters were received Monday by the Museum of Science and two newspapers, The Boston Herald American and the Real Paper. The letters, all identical, said: "We are in possession of a quantity of biologically appropriate radioactive substance (sic). If Rasmussen speaks Tuesday we

will contaminate the Museum of Science."

Dr. Rasmussen is professor and head of the Department of Nuclear Engineering at MIT. His talk was entitled "Nuclear Power: Its Problems and Promises."

The two clubs are made up of alumnae and alumni of the two schools. Richard S. Armstrong '65, assistant director of the MIT Admissions Office and secretary of the MIT Club of Boston, said Museum officials, officials of the two clubs and Dr. Rasmussen decided to go ahead with the meeting despite the threat. Metropolitan District Commission police were scheduled to provide extra security.

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- Create a climate for innovation by rewarding the employee who makes an original contribution.
- Identify management criteria which effectively discriminate between profitable and unprofitable new technologies.
- Avoid the management errors which are responsible for over one-third of the innovations which fail.

This collection, prepared under the supervision of the editors of TECHNOLOGY REVIEW, includes such articles as "Generating Effective Corporate Innovation" by Edward B. Roberts, "Users as Innovators" by Eric von Hippel, "Innovation: The Fruit of Success" by Robert N. Noyce, and "Are You Ready to Become an Inventor?" by Louis Soltanoff. (All the articles in the collection originally appeared in issues of TECHNOLOGY REVIEW magazine from October/November 1977 through June/July 1978.)

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Uncertainty Clouds Nuclear Power Future

(Continued from page 1)

These factors make nuclear power costs and rates of return unpredictable and utilities, traditionally operated conservatively, are reluctant to commit the \$1-2 billion investment needed to build a nuclear power plant, Mr. Montgomery and Professor Rose say.

A second source of uncertainty, they point out, is intervention through the courts by critics of nuclear power.

This has nurtured a "climate of social unacceptability around nuclear power" and has increased the likelihood of regulatory change.

Anti-nuclear sentiment, they say, has arisen from a variety of sources: the "legacy of atomic weapons; public fear of the unknown; general public distrust of government, industry, and technology; and the focusing of environmentalists on nuclear power."

The environmental movement's focus on studying the hazards of nuclear power, they add, "has produced an imbalance of information regarding the dangers of nuclear energy vis-a-vis those of its alternatives."

This information imbalance "has both exacerbated public fear of nuclear power and promoted an unjustified insouciance concerning the hazards of other energy sources—coal, for example."

Mr. Montgomery and Professor Rose also point to the "historical lack of responsiveness shown by government and industry to the social issues surrounding the production of energy" as having greatly contributed to the depth of the anti-nuclear movement.

The result of all this has been the distortion of the current nuclear debate "into a most confused state. What originally were concerns about environmental threats have been subsumed in a broader and highly polarized debate over social issues."

"The one feature shared by most debaters is intolerance. Opponents and proponents generally state their positions well, but listen too much to themselves and not enough to opposing viewpoints. Each participant rejoices to make a hole in the other person's part of the boat."

Interest groups on both sides of the debate, say the MIT authors, "selectively ignore" certain aspects of the nuclear power question and fail to address the wider questions of what the US will do for energy in the immediate and longer term. Proponents, they assert, dismiss the problems of waste disposal, large-scale energy production, and unlimited growth. Opponents of nuclear power, on the other hand, make shallow comparative assessments of energy sources and over-estimate the con-

tribution alternative options can make in this century. Some critics, say the researchers, "sensationalize the failure to solve the waste-disposal problem, yet criticize all proposed solutions in order purposely to impede progress and thereby speed the demise of the nuclear option."

The third major source of utility uncertainty, suggest the authors, is capital scarcity which has its origins in the general unwillingness of banks to finance long-term, capital-intensive projects during periods of sustained inflation and in the unpredictability of costs and returns on investment involved in building nuclear plants.

The consequences of this proliferation of uncertainty are potentially severe, the MIT researchers warn.

For instance, possible technical improvements are not pursued by the nuclear vendors out of fear that the regulatory agencies will order such improvements backfit into existing systems. Furthermore, "since utilities get their rewards not from building any one type of plant, but rather from providing electricity to their customer, they delay new construction in the hope that dwindling energy supplies will create a public consensus on what types of facilities ought to be built."

"Nuclear power, the most controversial of the energy-generating technologies, is opted out of first. Indeed, the principal nuclear vendors may opt out of the nuclear business even earlier than the utilities—perhaps by 1985..."

If this does occur, the MIT researchers say, the federal government will be in the uncomfortable position of having to nationalize the industry or of having to explain to the public how a severe national power shortage developed, Mr. Montgomery and Professor Rose said.

The unresolved uncertainty, they said, is now extending to the future use of coal as more and more difficulties appear with its mining, transportation and burning.

Mr. Montgomery and Professor Rose suggest the following actions which the government should take to reduce uncertainty, increase utility confidence and restore partial health to the US nuclear industry:

—Clearly articulate the philosophy underlying the nuclear regulatory process so that the industry can better predict "how the rules are likely to change."

—Announce a comprehensive national waste-disposal plan, including time and price schedules which would allow utilities to estimate future waste-disposal costs.

—Affirm the acceptability of domestic nuclear power and discuss its risks and benefits in a comparative context.

The federal government should attempt also to rearrange the research and development structure of the electric utility business and become involved in educating the public on energy.

"The government's neglect of public energy education has created an intellectual vacuum into which innumerable special interest groups have rushed, each expounding its own version of the facts and pressing for a specific future..."

"With no authoritative source of information to which to turn, the public is left to learn the facts of energy 'in the gutter.'

"Having left most of the complex social and technical intercomparison of energy options to be sorted out by the public as best it can, the federal government must bear a substantial share of the blame for the misunderstandings, unwarranted fears and distrust which now exist..."

"As the legitimate representative of the public interest, the government should begin helping the public to understand the difficult choices which lie ahead... Only in the light of a comparative assessment can a rational energy debate arise."

Black PhD Reaches Childhood Goal

The American dream is still very much alive and well. And Jerry Lee Bryant, Jr., a father of three from Magnolia, a small town in southern Mississippi, has gone a long way towards the fulfillment of that dream. Dr. Bryant, 28, the son of a laborer and a teacher, has been awarded his PhD in biology from MIT. His thesis advisor was Jonathan A. King, Professor of biology, in the Department of Biology. Dr. Bryant was awarded the PhD on March 2.

"Even in the first grade I wanted to become a doctor," says Dr. Bryant. "The idea of helping sick people to get well was very appealing. Then in high school, I began to think about doing medical research. After all, someone has to find out what makes people sick before doctors can help them."

Dr. Bryant stayed interested in medical research. His dissertation at MIT was a study of how certain environmental pollutants damage cells. He also studied how chemicals (and drugs) kill viruses—work that could lead to the design of new drugs that will alleviate virus infections.

"I was never discouraged from being ambitious," says Dr. Bryant, "but I know most people didn't expect I'd do any of the things I hoped to. After all, a black kid from Magnolia, Mississippi, isn't supposed to amount to much." (Dr. Bryant is the second black student to receive a PhD from MIT's Department of Biology. Yvonne Jones-Brown, the first, received her doctorate in 1977 and is now doing postdoctoral research at the University of California at Berkeley).

Dr. Bryant attended Mississippi Valley State College (now Mississippi Valley State University) at Itta Bena, Miss., on a music scholarship in saxophone. While there he met his wife, Earnestine, and majored in biology. His interest in research was furthered by two summer internships, one at Brookhaven National Laboratory and one at Argonne National Laboratory.

In the fall of 1971 Dr. Bryant came to Cambridge so he could study at MIT.

"I expected that the work would be difficult," says Dr. Bryant, "but until I got here I didn't realize how



Jerry Lee Bryant, Jr., who recently received his doctorate in biology from MIT is shown here with the Department of Biology's electron microscope. Dr. Bryant used the microscope to study virus particles, in the course of his research.

inadequate my background was. I felt like I worked 10 times as hard as everyone else because of my lack of knowledge. Until coming to MIT I had read few scientific papers. In the beginning I thought there was just too much—that I couldn't span the gap.

"Luckily I was assigned an advisor, Professor King, who was very supportive and recognized my talents. He provided me with extra help when I needed it and finally things began to fall into place."

In January of his first year of graduate study Dr. Bryant's father died. For emotional and financial reasons Dr. Bryant decided to take a year off. He went to New Jersey where he taught high school biology, then returned on schedule.

After a slow start, Dr. Bryant launched his successful work with the discovery that the inactivation of bacterial viruses in the presence of dyes and light was due to

damage to a particular set of proteins of the virus particle. These proteins were needed for the injection of the viral DNA into the host cell, and the damaged proteins were unable to perform this function.

"I know it sounds like a cliché," says Dr. Bryant, "but I could never have done it without my wife. She gave me encouragement, support, and had confidence in me when I nearly lost it myself."

Dr. Bryant will continue his research at MIT for the next six months and then he hopes to combine teaching at the university level with further research in toxicological studies.

For the past several years Mrs. Bryant has taught instrumental music at elementary schools in Cambridge. The Bryant family lives in Somerville. The Bryants have two daughters—Keisha, 8, and Kienne, 5, and a son—Kier Jason, 1.



MIT EAST—and friends. At the airport in Bintulu, Sarawak, dressed for December weather on the island of Borneo, are (left to right) Lim Yit Seng, director of the meteorology office at Bintulu, Spiros (Speed) Geotis of the MIT Department of Meteorology, graduate students Frank Marks of the meteorology department and William Silver of the Artificial Intelligence Laboratory, and Gerry Meehl of the National Center for Atmospheric Research. Mr. Geotis and Mr. Marks spent the month of December at Bintulu participating in the winter monsoon experiment.

MIT Meteorologists Work On Winter Monsoon Study

They set up the equipment where it had been stacked next to the airport terminal. The terminal at Bintulu, Sarawak, is not large enough to make any appreciable shadow on the radar, and the front end loader that was the best the north Borneo coast had to offer was not up to the job of relocating all the equipment. Just getting it out of the C130 had strained the ingenuity of American air crew and Malaysian ground personnel.

Spiros (Speed) Geotis of the MIT Department of Meteorology and graduate student Frank Marks were in Malaysia to measure the winter monsoon rainfall in the South China Sea. A part of the monsoon experiment (MONEX), they were to spend December in the tiny town of Bintulu, assessing with radar and computers the rainfall rate of the winter monsoons over the 256 km range of the radar. Though rain gauges have been used in the area for many years, they give only spot checks of rainfall. The use of radar in conjunction with the gauges gives a clearer picture of the distribution of rainfall over a wide area.

Study of the monsoon rains is part of a global international experiment designed to investigate circulations which are important to weather and climate all over the world. The winter monsoon, known as the "northeast monsoon," is generated in a Siberian high, and sweeps down across the Asian mainland and the South China Sea. The wind brings the heavy rains that Malaysian agriculture depends on for its survival. Failure of the monsoon means disastrous drought for the area. On the other hand, if rains are unusually heavy, flooding results.

The monsoon experiment is headquartered in Kuala Lumpur. An international effort, scientists from the United States, China, the Soviet Union, Japan, Saudi Arabia, Hong Kong and Papua, New Guinea are participating in it. Locally, the countries of Malaysia, Indonesia, the Philippines,

Singapore and Thailand are cooperating by making detailed local meteorological information available to each other.

The stations of the experiment are widely scattered. Mr. Geotis and Mr. Marks were among four foreigners in Bintulu. They had excellent support from the personnel of the Malaysian Meteorological Service at Bintulu airport, (directed by Lim Yit Seng) who were more than willing to help with such tasks as changing computer tapes and fueling the portable generator. Electrical service in the area was not compatible, and the generator was a necessity for running the system and the air conditioner that protected the computers from the tropical heat.

(Christmas morning, in fact was partly spent pouring diesel fuel into the generator—a hardship made up for by a trip to the beach in the afternoon.)

The meteorology office personnel, mostly Malaysians, were fascinated by the radar and computers brought from MIT. These were far more sophisticated than any they had seen before. Pilots flying out of the airport were delighted with maps showing stormy areas which were supplied by Mr. Marks and Mr. Geotis.

Their relationship with the meteorology office workers has continued.

"I'm running a sort of correspondence course in computer programming for them," says Mr. Marks.

Data are still being worked on so the only present observation Mr. Geotis and Mr. Marks will make on the monsoon rain is that it is subject to the sea breeze-land breeze phenomenon—developing over the land throughout the day and early evening, appearing over the sea, in the small hours of the morning as the land breeze takes over when the shore cools.

"You can almost set your watch by it," Mr. Geotis said.

AARP to Hold Wine Tasting

A wine tasting party will be featured at the March 27 meeting of the MIT-Cambridge Chapter of the American Association of Retired Persons to be held at 5pm in the Mezzanine Lounge at the Student Center. The wine tasting will follow a brief business meeting.

The chapter has also announced a special spring tour to Mystic Seaport on Saturday, May 19. The tour will include transportation, admission to Mystic Seaport and lunch at the Seamen's Inne Restaurant. Total price will be \$18 per person. Buses will leave from West Garage at 9am.

Membership in AARP is open to all persons aged 55 or more, whether or not retired. Those interested in joining are encouraged to attend the March 27 meeting.

M-M-M Good

MIT's hungry folk will enjoy a trip to Building 10 today and tomorrow.

Today (Wednesday, March 3) the Minority Interest Group will hold an international ethnic food sale in the Bush Room (10-105) from noon-2pm. Filipino and Caribbean dishes will be offered as well as a variety of American foods and pastries.

On Thursday, March 15, the ever-popular Bake Sale of the Technology Wives Organizations will be held from 9am until sellout. Features will include cakes, cookies and brownies.