



SILENTLY AND PATIENTLY awaiting the breezes of spring are these members of MIT's sailing fleet.

—Photo by Calvin Campbell

Technical Problems Intrigue Applicants for Class of '81

The Class of 1981—now being selected—appears to be interested in tackling technical problems of the world, according to admissions officials and faculty members who are reading applications.

"We're seeing a heightened interest in engineering as a profession, and an eagerness to apply engineering to problems like the energy crisis, the world food situation, pollution and overpopulation," said Peter H. Richardson, director of admissions.

"We are also seeing some new career directions," he said, "kids interested in economics and management, for example. This is an encouraging sign."

"Another encouraging thing we're seeing this year is applicants who select MIT as a place to mix science, arts and sports," he said.

"Many applicants are very knowledgeable about MIT. They mention music, theater, the cultural life of the area and sports

activities as being important in their college selection. UROP and IAP are also frequently mentioned as inducements."

Mr. Richardson also noted that the incoming class seems more conservative than most recent classes.

"They are career oriented," he said. "Many are coming from schools that have provided alternative education, giving the student a greater voice in his or her program. As a result, they're not the risk takers we saw five or six years ago."

In numbers, applications stand at approximately 4,300, down from last year's all-time high of 4,900. However, Mr. Richardson said, 4,300 represents a good year, comparable to classes admitted in 1969, 1970, 1974 and 1975.

The bad news is that the numbers of minorities and women applicants are down slightly.

"It's terribly frustrating," Mr. Richardson said, "when just staying level is inadequate."

Target size of the incoming class has been set at 1,000. Approximately half of the applicants will be admitted, including 241 who were admitted in December under MIT's early action policy.

Faculty to Meet

A regular meeting of the faculty will be held Wednesday, Feb. 16, at 3:15pm in Rm. 9-150.

Items on the agenda include: —Report of the Committee on Graduate School Policy to recommend candidates for advanced degrees.

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

—Motion to amend Regulation 2.82 of the Rules and Regulations of the Faculty to add subject 5.40 to the list of subjects in the description of the General Institute Requirements for the degree of Bachelor of Science.

—Request that the faculty approve a special assignment to the Committee on Industrial Liason to study the relations between MIT and industry.

—Recommendation by CGSP for new graduate degrees in the Joint Harvard-MIT Program in Health Sciences and Technology.

—Report of the Task Force on the Use of Human Subjects in Social Science Research.

—Report of the Ad Hoc Committee on Grading.

NSF Funds Automation Study at ESL

The Electronic Systems Laboratory at MIT has received a two-year grant of \$310,000 from the National Science Foundation's Research Applied to National Needs (RANN) Program to study complex materials-handling and assembly systems in the automated factory.

The co-principal investigators for the program, Professor Michael Athans, director of the Electronic Systems Laboratory and a professor of systems science and engineering in the Department of Electrical Engineering and Computer Science, and Professor Leonard A. Gould of the same department, said the grant covers Phase 1 of a longer term, four-phase research program. The program deals with the definition of generic concepts associated with scheduling and adaptive real-time control of complex manufacturing

processes involving networks of single and multi-purpose machines interconnected by material-transfer mechanisms with flexible routing.

"The goal of this work is to bring the benefits of automation already achieved in many large-scale production processes to medium and small-lot production processes where single-purpose solutions are not economic," Professors Athans and Gould said.

Others in the laboratory associated with the program are John E. Ward, and Dr. Stanley B. Gershwin, lecturers in the electrical engineering and computer science department; graduate student Paris Kanellakis and Ejaz Kahn, an undergraduate, both in electrical engineering and computer science.

Professors Nathan B. Cook of mechanical engineering and Alvin

W. Drake of electrical engineering and computer science are participating in the project.

The study will provide opportunities for graduate or undergraduate student projects in identifying and defining industrial requirements and in modelling complex manufacturing processes.

Interested students should contact Professor Gould in Rm 38-467, x3-7312, or Mr. Ward, Rm 35-402, x3-3891.

The program involves agreements with several companies for an exchange of ideas and information on automation, production problems and assembly operations using mechanical and electronic devices. Presently participating are Xerox Corp., General Motors Technical Center, Kingsbury Machine Tool Corp., Raytheon Co., AMP, Inc., and USM Corp.

Hermann Foundation Endows Professorship

The Grover Hermann Foundation of Chicago has committed a \$1 million gift to MIT to establish and endow the Grover Hermann Professorship in Health Sciences and Technology.

Mr. Hermann, noted industrialist and philanthropist, is the retired chairman of the board of the Martin Marietta Corporation and was founder and president of American Marietta Company which merged with the Martin Company of Baltimore, Md., in 1961, to become Martin Marietta. He is president of the foundation that bears his name.

The Hermann Chair at MIT will be occupied by a distinguished and creative scholar yet to be selected, who will be primarily engaged in the

teaching activities of the Harvard-MIT Program in Health Sciences and Technology.

MIT President Jerome B. Wiesner, in announcing the gift, expressed the gratitude and appreciation of the Institute and its faculty for the support it brings to the burgeoning and exciting area of health sciences and technology.

"This gift will be seen as a key element here at MIT in advancing significantly our efforts to apply contemporary science, engineering and technology to national health needs, to the alleviation and treatment of disease and disability, and to the ultimate prevention of human suffering and the preservation of health

(Continued on page 3)

Carter to Name Press

The following article by *The Washington Post* appeared in the *Post* and in *The Boston Globe* on Friday, Feb. 11, 1977.

WASHINGTON—President Carter has chosen Frank Press, a geologist at Massachusetts Institute of Technology, as White House science advisor, Administration sources said yesterday.

Press visited the White House yesterday and spoke with Carter for about 30 minutes. Press was apparently offered the job of science advisor, but did not immediately accept it.

Born in Brooklyn in 1924, Press was graduated from the City College of New York and Columbia University. He taught at Columbia for four years before moving to California Institute of Technology in 1955.

Press joined the MIT staff in 1965. He is head of the department of earth and planetary sciences.

AWS to Present Rep. Elaine Noble

Representative Elaine Noble of the Sixth Suffolk District in Boston and a noted champion of civil rights, will speak at MIT on Tuesday, Feb. 22, at 8pm in Rm 26-100.

Her talk, "Women in Politics," will be sponsored by the Association for Women Students and open to the community free of charge. Men are invited to attend. Rep. Noble was instrumental in establishment of a Special Legislative Commission to study the effects of the Equal Rights Amendment and later chaired the House Commission.

1977 Changes Announced In Biweekly Salary Review

Instructions outlining the guidelines for the 1977 Biweekly Salary Review are being forwarded to all department headquarters. Employees hired on or before January 3, 1977 are eligible for consideration for raises which will become effective March 28, 1977, and will be reflected in April 6 paychecks.

John Wynne, Vice President, Administration and Personnel, explained that several factors were weighed in determining this year's seven percent review allocation. First was the Institute's desire to compensate its employees fairly and competitively in relation to what other persons in the local job market are receiving for comparable work. Another factor, inescapably, is the Institute's financial position and the imperative to bring revenues and expenses into balance from a current deficit position. Also influencing the determination is the fact that the rate of inflation, while sharply down from the high of two years ago, nevertheless continues to cut into everyone's income.

Mr. Wynne went on to say that although the 1977 Review will be conducted in very much the same manner as it was the last two years, it will differ in one significant respect in that it will not be divided into separate merit and general increase components. Consequently, the entire 1977 review allocation will be distributed on the basis of individual work performance.

Mr. Wynne emphasized that the

stress on performance evaluation increases the importance of supervisor/employee discussions which occur as part of the review process. In order to facilitate these discussions the Personnel Office has used material developed by The Working Group on Office-Clerical Issues to produce a pamphlet entitled "Some Suggestions for Performance Evaluation Discussions." The pamphlet should prove particularly useful to supervisory personnel who have never participated in an MIT performance evaluation discussion. The pamphlet will be distributed to supervisors and copies made available in department headquarters to others who wish to read it. Form A and Form B continue to be another mechanism for facilitating performance evaluation discussion, but their use is optional and may be most beneficial for newer employees.

It is essential that evaluation of job performance be made in a fair and equitable manner and that recommended increases accurately reflect these assessments. Individuals of unusual ability and accomplishment whose performance clearly exceeds the general performance levels of other biweekly employees in their Departments should receive a proportionately larger increase than those individuals whose performance, though adequate, may be of a less exceptional nature. Individuals whose performance is determined to be unacceptable should not be recommended for any increases at all.

Hillel to Sponsor Marriage Series

A six-week series of discussions on "Issues Relating to Marriage," will begin Monday, Feb. 28, at 7:30pm in the religious counselors' house at 312 Memorial Drive.

Topics to be covered include control and dominance, parents, intermarriage, finances and freedom.

The seminars will be open to all members of the community. Fees are \$6 for students and \$20 for others.

The series will be jointly sponsored by the MIT Hillel Foundation and the Jewish Family and Children's Service of Boston.

lor's degree; however, additional qualifications are recommended.

Contact: Graduate School Office, Rm 3-136.

Deadline: March 1, 1977.

Other Opportunities

For further information on the following, contact the Preprofessional Advising and Education Office, Rm 10-186, x3-4158.

Summer Student Fellowship Program at Hartford Hospital

A ten week program, beginning June 13, is offered by the Hartford Hospital, Hartford, Conn. It is primarily intended for undergraduates completing their junior year in June, 1977, or graduating seniors who have been accepted into medical school. The purpose of the program is to provide an opportunity to learn methods of hospital research and patient treatment with the laboratory and clinical setting. Applications must be submitted before March 1. Fellowship Awards will be based on the student's financial needs.

1977 Medical School Familiarization Program

This program is offered by the University of Texas Medical Branch, Galveston, to provide Black and Mexican American students the opportunity to observe the activities of a medical center. It runs from June 6 to July 1, 1977, and will provide the student with insight into the curricula of a medical school and a better understanding of a medical school complex and its functions. Stipend is \$550.00 for the four week period. Application deadline is March 1, 1977.

Baylor Summer Work and Study Program

This program is offered under the auspices of the Dept of Community Medicine to encourage and assist minority students to enter health careers. The dates are June 20 to August 12, 1977. Priority is given to freshmen and sophomores. Deadline for application is April 29, 1977.

1977 Pre-Medical Summer Program

This program is offered by the New York Medical College, Westchester Campus, Valhalla, N.Y. to enable students to actively observe and participate in clinical hospital rounds throughout Westchester County Medical Center. This program is offered to: college students (juniors and seniors) who are disadvantaged educationally and/or economically. Minority college students (juniors and seniors) who are US citizens or permanent residents. Minority students accepted at N.Y. Medical College for Sept, 1977. Minority students who have completed three semesters of chemistry and two to three semesters of biology. Minority students who indicate potential for medical school. Participants will each receive a stipend of approximately \$80 per week.

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.

Massachusetts Energy Policy Office Boston

The Mass Energy Office, of the Office of Environmental Affairs, is seeking a student to study the economic impact of various energy policy alternatives such as nuclear power plants, solar power, wind power and energy conservation in the New England area. Impact on regional economy through tax rates, employment, etc. will be examined. The work will consist of a library search of existing studies, compilation of results, and some economic analysis of the effects of possible energy alternatives. Pay or credit are available. The project is expected to take until September.

Shriver Center-

Medical Biochemistry I Waltham, Mass
An opportunity exists for a student involving biochemical research directed toward copper and zinc metabolism in genetically determined neurological disease. Copper binding proteins will be isolated, purified, and characterized by biochemical and immunological techniques, utilizing tissues from a patient with steely-hair syndrome, an X-linked neurodegenerative disease associated with abnormal copper metabolism. Experience in biochemistry at the undergraduate level is essential, and specific experience in chromatographic techniques is preferred. An opportunity will be afforded for observation and clinical study of patients hospitalized in the Research Unit of the Shriver Center.

Shriver Center-

Medical Biochemistry II Waltham, Mass
An opportunity exists for a student involving participation in an ongoing research project directed towards a greater understanding of glycoprotein storage diseases. The student will learn microanalytical techniques of carbohydrate detection and quantitation and will apply these in a study of the glycopeptides accumulating in cultured fibroblasts and lymphocytes derived from a patient with mannosidosis. A knowledge of column chromatographic techniques and a familiarity with general laboratory procedures is a prerequisite.

Department of Nutrition and Food Science

This project is intended to study the hydrolysis of protein. The changes in molecular weight distribution during hydrolysis will be determined by gel filtration chromatography. The objective of this study is to predict the molecular size distribution of the hydrolysate in order to develop industrial processes applicable for various proteins. For credit only.

Contact: Prof ChoKyun Rha, x3-3492, Rm 56-137, or Dean Hsieh, x3-3493, Rm 56-138.

Digital Buffer and Interfaces

This is an opportunity for a student with MIT Digital Lab experience to design, build, and test a digital buffer and interfaces. The equipment will provide for on-line communication between two microprocessors here at MIT as well as serve as a several-thousand character I/O buffer for a peripheral device. Contact: Prof Donald Troxel, Rm 36-683, x3-2570.

Placement

The following companies will be interviewing during the time period covered by the current Institute Calendar. Those interested may sign up in the Career Planning and Placement Office, Mon-Fri, 9am-3pm, Rm 10-140, x3-4733.

Wednesday, February 16—Aeronutronic-Ford Corp; American Elec Power Serv Corp; Dept of the Navy, CAPSO-N; Energy Research and Development Admin., div of naval reactors; Exxon Corp & USA Affiliate; Gen Motors Corp; Kearfott Div, Singer Co; Motorola, Inc; Procter & Gamble Co; Naval Surface Weapons Ctr, White Oak Lab; Naval Underwater Systems Ctr; St. Regis Paper Co. **Thursday, February 17**—Exxon Corp & USA Affiliate; Gen Motors Corp; Aluminum Corp of Am; Institute for Defense Analyses; Nat'l Semiconductor Corp; Pillsbury Co; Procter & Gamble Co, Internat'l divisions. **Friday, February 18**—Aetna Life & Casualty; Equitable Life Assurance Soc; Exxon Corp and USA Affiliate; GTE Labs, Inc; Lawrence Livermore Lab; Merck & Co, Inc; Prime Computer, Inc; Texaco, Inc; Watkins-Johnson Co (Maryland & Cal). **Wednesday, February 23**—Bendix Corp; Dynamics Resrch Corp; W R Grace & Co; Hercules Inc; Motorola, govt electronics div; General Elec Co; Pullman, Kellogg; Sikorsky Aircraft; Standard Oil Co. of Cal & Chevron Companies. **Thursday, February 24**—General Dynamics Corp/Electric Boat/Strom-

berg-Carlson/Convair Div, Pomona Div, Electronics Aircraft/Aerospace/Missile Group; McDonnell Douglas; The Mead Corp; Raytheon Co; Schlumberger Well Services; Gen Elec Co; Standard Oil Co. of Cal & Chevron Co. **Friday, February 25**—EDS Nuclear Inc; ESL Inc; IBM Corp; Mobil Oil Corp; Harris Corp/PRD Electronic Div; Schlumberger Well Servs; US Steel Corp; Westvaco Corp; McDonnell Douglas. **Monday, February 28**—Applied Data Resrch, Inc; Baxter Travenol Labs, Inc; Bankers Trust Co; Bolt, Beranek and Newman Inc; Computer Sciences Corp; Jaros, Baum & Bolles; Nicolet Scientific Corp; Logicon, Inc; Loral Electronic Systems; Manufacturing Data Systems, Inc; Naval Sea Systems Command and Naval Ship Eng Ctr; Oxirane Intnat'l; Rockwell Intnat'l; US Envelope. **Tuesday, March 1**—Rockwell Intnat'l; Amdahl Corp; Aqua-Chem, Inc; Bell System Co—AT&T Long Lines, Western Electric & Bell Labs; Bethlehem Steel Corp; Bureau of the Census; Continental Forest Industries—corrugated division; Gen Elec Co; US Navy Officer Programs. **Wednesday, March 2**—American Microsystems, Inc; Dranetz Eng Labs, Inc; Ford Motor Co; Kollmorgen Corp; C-E Lummus; Modicon Corp; Bell System Co—AT&T Long Lines, Western Electric & Bell Labs; General Electric Co. **Thursday, March 3**—Applied Physics Lab of the Johns Hopkins Univ; S.C. Johnson & Son, Inc; Eli Lilly and Co; Sandia Labs; Scott Paper Co; Texas Instruments; TRW Defense and Space Systems Grp; Union Carbide Corp; Xerox Corp; Kollmorgen Corp. **Friday, March 4**—Amoco Resrch Ctr, R&D Depts, Amoco Chemicals Corp and Amoco Oil Co, subsidiaries of Standard Oil Co. (Indiana); Argonne Nat'l Lab; Charles Stark Draper Lab, Inc; Federal Aviation Admin; Hughes Aircraft Co; The MITRE Corp; Siemens Corp; Outboard Marine Corp; Texas Instruments; TRW Defense and Space Systems Grp; Sandia Labs; Applied Physics Lab of the Johns Hopkins Univ.

MIT Shotokan Karate Club—Rigorous training for intercollegiate competition & self-defense, given by 6th degree black belt. Thurs, 8pm; Fri, 6pm; Sun, 10am, duPont T Club Lng. Info: x3-7220.

MIT Soaring Assoc—Monthly Meeting, Thurs, Feb 17, Mezzanine Lng (3rd fl, Stu Ctr), 7:30pm. General meeting for all soaring enthusiasts; demonstration of first-aid techniques; film and refreshments.

MIT Space Habitat Study Group—Interdisciplinary studies on space colonization. Thurs, 7pm, Rm 37-252.

Tae Kwon Do Club—Workouts on Tues, T-Club Lng (W31-225), & Thurs, W31-225, 6-7pm. Info: Jim Cole, x3-3283.

Tech Model Railroad Club—Meetings, Sat, 4pm; Operating Sessions, Fri nights; Rm 20E-214, x3-3269.

MIT Tiddlywinks Association—Meetings Thurs, 8pm, Stu Ctr Rm 473.

White Water Club—Pool sessions alternate Tues, 8-10pm, Alumni Pool. Next session March 1.

Religious Activities

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

Hillel Services—Orthodox: Fri, sundown, Rm 50-005; Sat, 8:30am, Rm 10-105. Traditional/Egalitarian: Sat, 10am, 312 Memorial Dr (Religious Counselors Bldg). Reform: Fri, 7:30pm, Chapel.

You are invited to the weekly Interdenominational worship and holy communion, Wed, 5:05pm, Chapel. Get-acquainted supper following.

Prayer Time—Lunch hour Bible classes led by Miriam R. Eccles. Fri, 1-2pm, Rm 20E-207, prayer, music, guest speakers and refreshments. All welcome.

Protestant Worship Service—Worship, prayer, praise & teaching. Sun, 10:45am, Chapel. Coffee, donuts & fellowship following.

Tech Catholic Community—Roman Catholic Liturgies will be offered as follows: Sun, 9:15am, 12:15 & 5:15pm; Tues, Thurs, 5:05pm; Fri, 12:05pm. Ash Wednesday: Feb 23, liturgies at 8 & 11:45am, 12:30pm. Confessions by appointment, 253-2981.

United Christian Fellowship—Fellowship meeting Tues, 6:30pm, Rm 1-236, a time of praise, prayer, testimony and teaching. Everyone welcome. Info: call David Hoicka, 5-9649 Dorm.

MIT Vedanta Society—Meditation and discourses on the Gita by Swami Sarvagatanda, of the Ramakrishna Vedanta Society of Boston. Fri, 5:15pm, Chapel.

Echoes

February 12-18

50 Years Ago

The Institute's oldest book was recently discovered in the Vail Collection, perhaps the largest collection of old scientific records in the US. The title of the book is *Artificiosa memoria*, printed in 1491 and probably the first published record of an artificial memory system.

40 Years Ago

Freshmen will revive the tradition of burying their ties and rules at the annual Freshman dance this week. The ceremony last took place in 1931 when the Freshman Class won Field Day and was allowed to discard their ties before Christmas vacation.

25 Years Ago

For the second year the Albert Farwell Bemis Foundation will offer a Fellowship to be used for graduate research in housing. The Bemis Foundation was established to aid in the "search for...knowledge pertaining to more adequate, economical and abundant shelter for mankind."

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

INSTITUTE NOTICES

Announcements

Notice: There will be no Tech Talk on Feb 23. Deadline for submission of listings for the Institute Notices for the issue on March 2 will be 12 noon, Fri, Feb 25.

Freshman Handbook—Quotes are being solicited by FAC Office for 1977 edition. If you'd like to contribute and did not receive a form stop by FAC Office, Rm 7-103.

Graduate Residents—Dean for Student Affairs is seeking applicants for Institute Houses, fraternities and independent living groups for the next academic year. Applicant must be an MIT graduate student, either having completed undergraduate work here or one year of graduate work. "Mini Information", Thurs, Feb 24, 7:30pm Rm 10-105. Info and application: Dean's Office, Rm 7-133.

Graduate Students—Applications for advanced degrees in June, 1977, must be returned to Registrar by Fri, Feb 23.

John Asinari Award—Nominations being accepted for this undergraduate award in Life Sciences. Eligible candidates must be undergrads in Course VII, VII-I, VII-2, VII-A. Deadline, April 20. Info: Ed Gaudino, Rm 56-524, x3-6715.

Talbot House—Available during the weeks of March 14, 21 and 28 (spring vacation). Applications accepted on first come first serve basis. Info and applications, Preprofessional Advising and Education Office, Rm 10-186, x3-4158.

Washington's Birthday Library Schedules—Monday, February 21. Archives, Chemistry Reading Rm, Von Hippel Materials Ctr Reading Rm, closed. Aeronautics & Astronautics, 9am-5pm. All other: Regular Schedule.

Student Jobs

On Campus: Lab Assistant, Must know FORTRAN. Will assist students in running and debugging programs. Hours: 1-5 M-F, 4-12 SA-SU. \$3.00 per hour. Contact E Newman, Rm 1-125, x3-5327

Student needed to do measurements and preliminary design work for restoration of building project. 15 hours per week, \$3.50 per hour. Contact Mark Levine, x3-7830. Programming in FORTRAN IV, for accounting data for department administration. 10-15 hours per week, \$3.00-\$3.50 per hour. Contact Joseph Dhosi, x3-3301.

Off Campus: Student needed with an EE degree to troubleshoot, fabricate and test electronic circuitry. Now through September. 20-25 hours per week, \$4.50 per hour. Contact Connie Karras, Cabat Corp., 423-6000, x-271. Science Tutors at Lexington H. S. Graduate students preferred to tutor biology and chemistry, 2:30-4:30 on Tues. and Thur. Contact Sue Schachter, 862-7500, x245.

Graduate Studies

Administration on Aging Grants

The Administration on Aging, US Dept of Health, Education and Welfare, is offering \$5,000 dissertation grants to social science doctoral degree candidates doing dissertation research on some aspect of aging or the behavior of the elderly. To be eligible you must have completed all requirements for doctoral degree other than dissertation. Graduate work must be directed toward study of aging persons in a social science discipline, and you must have an approved dissertation research proposal directed toward the study of aging. Contact: Graduate School Office, Rm 3-136. Deadline: March 31, 1977.

National Air and Space Museum Guggenheim Fellowship

The National Air and Space Museum, Washington, DC, has announced a one-year residential appointment for graduate research, commencing July 1, 1977. Financial support totaling \$10,000 will be awarded including stipend, travel, and misc expenses. Persons interested in research related to technology transfer, planetary exploration, or history of aviation are encouraged to apply. Minimum academic requirement is a bache-

CABLE TV SCHEDULE

X3-3625

February 16-March 1

Channel 8
Wednesday, Feb. 16
No Scheduled Programming

Thursday, Feb. 17
7:30-8:30pm **POLITICS AND TELEVISION** (17.27) With Edwin Diamond. Live

Friday, Feb. 18
9:30-10:30am **RHETORIC AND JOURNALISM** (21.940) With Edwin Diamond. Live

Monday, Feb. 21
No Scheduled Programming

Tuesday, Feb. 22
11am-12noon **POLITICS AND TELEVISION** (17.27) (R)
12noon-1pm **BASEMENT VIDEO** Production (R)
1-2pm **RHETORIC AND JOURNALISM** (21.940) (R)

3-4pm **BASEMENT VIDEO** Production (R)

Wednesday, Feb. 23
No scheduled programming

Thursday, Feb. 24
7:30-8:30pm **POLITICS AND TELEVISION** (17.27) With Edwin Diamond. Live

Friday, Feb. 25
9:30-10:30am **RHETORIC AND JOURNALISM** (21.940) With Edwin Diamond. Live

Monday, Feb. 28
8-9pm **BASEMENT VIDEO** Production. Live

Tuesday, March 1
11am-12noon **POLITICS AND TELEVISION** (17.27) (R)
12noon-1pm **BASEMENT VIDEO** Production (R)

1-2pm **RHETORIC AND JOURNALISM** (21.940) (R)
3-4pm **BASEMENT VIDEO** Production (R)

Channel 10
Wednesday, Feb. 16
12noon-8pm **SPORTSWEEK**

Friday, Feb. 18
12noon-8pm **LOOKAROUND**

Wednesday, Feb. 23
12noon-8pm **SPORTSWEEK**

Friday, Feb. 25
12noon-8pm **LOOKAROUND**

Kerman Appointed to Direct Theoretical Physics Center

Professor Arthur K. Kerman of Winchester, Mass., a noted authority in development of theory relating to nuclear physics and a member of the physics teaching staff at MIT since 1956, has been appointed director of MIT's Center for Theoretical Physics.

Announcement of the appointment was made by MIT Provost Walter A. Rosenblith and Professor Herman Feshbach, head of the MIT Department of Physics. Dr. Kerman succeeds Dr. Francis E. Low, Karl Taylor Compton Professor of Physics at MIT who is completing a four-year term as director of the Center.

The Center, established in 1968, provides a research and study focus for some 60 theorists—professors, visiting professors, postdoctoral students and graduate students—working in the areas of nuclear physics, particle physics and astrophysics and a small effort in the theory of condensed matter.

"The very strong interaction between the theorists working in these groups has been most fruitful," Professor Feshbach said, "and a unique achievement of the center."

Professor Kerman, a native of Montreal, Canada, received the BSc degree with first class honors in mathematics and physics from McGill University, Montreal, in 1950. He also received McGill's Anne Molson Gold Medal in Mathematics and

Physics. He took his graduate studies at MIT, receiving the PhD degree in physics in 1953 under Professor Victor F. Weisskopf. His thesis research was on nuclear surface oscillations.

Professor Kerman spent 1953-54 with Professor R.F. Christy at the California Institute of Technology as a National Research Council Postdoctoral Fellow and was at the Institute for Theoretical Physics in Copenhagen, Denmark, from 1954 to 1956, the first year as an Overseas Postdoctoral Fellow of the National Research Council of Canada and the second year as a member of the Institute staff.

Professor Kerman joined MIT's teaching staff in physics in 1956 as assistant professor, became associate professor in 1960 and full pro-

fessor in 1964. He was a Samuel Guggenheim Memorial Fellow at the University of Paris 1961-62 and visiting professor at State University of New York at Stony Brook 1970-71. He served as an adjunct professor at Brooklyn College 1971-75.

Professor Kerman is chairman of the BEVALAC program committee at Lawrence Berkeley Laboratory at the University of California at Berkeley, chairman of the visiting committee at Brookhaven National Laboratory in New York, a former member of visiting committees at the Argonne National Laboratory in Illinois and at the Princeton-Penn Accelerator in New Jersey, and is a member of several physics panels of the National Academy of Science. He was also a foreign member of the Scientific Council, National Institute of Nuclear and Particle Physics, National Center for Scientific Research, Paris, France, 1972-76.

Professor Kerman is a Fellow of the American Physical Society, the New York Academy of Sciences and the American Academy of Arts and Sciences. He is consultant at Lawrence Livermore Laboratory in California, Los Alamos Scientific Laboratory in New Mexico and at Argonne, Brookhaven and Lawrence Berkeley.

Professor Kerman was associate editor of *Reviews of Modern Physics* 1968-71, a member of the executive committee of the American Physical Society's Division of Nuclear Physics 1970-72, and recently completed a term as a member of the division's publication committee.

Professor Kerman and his wife, the former Enid Ehrlich, have five children and live at 37 Rangeley Road in Winchester.

'Maggie's Back Book' Published

Maggie Lettvin, who has taught physical fitness to hundreds of MIT people, is the author of a new book, *Maggie's Back Book*, just published by Houghton Mifflin.

Ms. Lettvin, a lecturer in the Department of Athletics and faculty resident of Bexley Hall, is nationally known for her television show, "Maggie and the Beautiful Machine," shown by the Public Television Service. Her first book, *The Beautiful Machine*, covered general exercises and was published in 1973.

It's Sign-Up Time for the Spring Blood Drive

MIT's 30th annual spring blood drive will be held in the Sala de Puerto Rico in the Student Center from Wednesday, March 2 through Friday, March 11.

To allow as many people as possible to donate blood, hours for the drive will vary from day to day. On Wednesday, March 2, Friday, March 4, Monday, March 7, Tuesday, March 8 and Thursday, March 10 the drive will be open from 9:30am to 4:30pm. On Thursday, March 8 and Wednesday, March 9 appointments will be scheduled from 2:15pm to 8:30pm. On the final day, Friday, March 11, the drive will be conducted from 11am to 5:30pm.

Personnel officer Lewis A. Redding is in charge of employee solicitation for the blood drive. This week he will be contacting individuals in MIT's larger departments and administrative offices, asking them to act as focal points and to distribute appointment forms in their areas. Any employee willing to act as coordinator for the drive within his or her department should contact Mr. Redding at x3-2928.

Claudia Liebesny, director of personnel services, asks the cooperation of supervisors in releasing employees to donate blood where work loads permit.

The goal for the blood drive is 2,000 pints, according to Steven J. Piet, drive chairman. Only 1,465 pints were collected during last year's spring drive, so everyone's participation is needed to make this drive a success.

Two contests have been set up to encourage students to donate blood. The IFC (Interfraternity Conference) will award prizes to the three fraternities with the highest percentage of members donating blood. A fourth prize will go to the house with the greatest increase in percentage of donors over the last blood drive. There will also be a dormitory contest, where floors will compete against each other in the same living group as well as against floors from other living groups. The prizes have not yet been determined. People with questions should contact Robert Steidlitz, 266-2968 (IFC contest) or Carol Pododner, 494-0286 (dorm contest).

Beginning Wednesday, Feb. 23, *Maggie's Back Book* offers means of defining and alleviating lower back pain and includes more than 300 diagrams. The book is available at the Tech Coop.

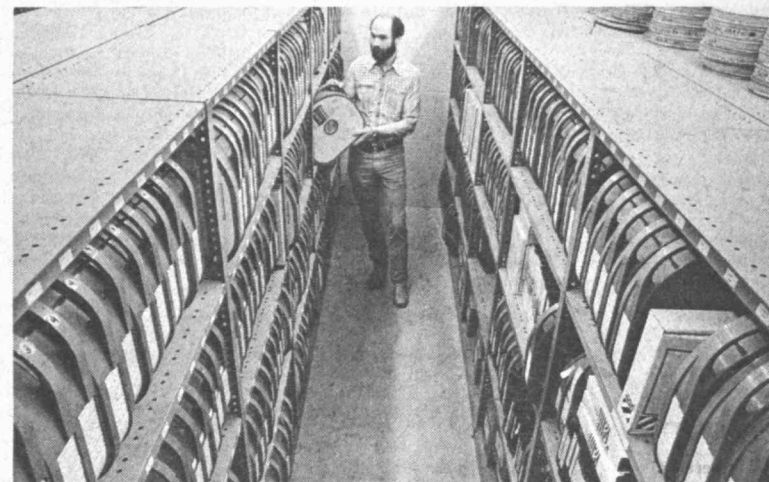
there will be an information booth in the lobby of Bldg. 10 during mid-day hours where questions concerning the drive can be answered or referred to the Red Cross. Appointment forms will also be available. People with questions can also call the TCA at x3-7911.

To make the blood drive run as smoothly as possible, Mr. Piet urges donors to schedule appointments in advance if possible.

"Walk-ins will be accepted," he said, "but if almost all appointments are scheduled in advance, almost everyone's forms will be ready when they arrive and donor's won't have to wait while their forms are typed out."

Mr. Piet also reminds those who donated during the IAP blood drive that they will be eligible to donate blood again during the second week of the blood drive.

Colloid, Surface Chemistry Lectures Are Widely Used



COLLOID AND SURFACE CHEMISTRY, the biggest seller among the 500 videotape and film lectures and demonstrations produced by the MIT Center for Advanced Engineering Study for rent or purchase, has just been bought by the University of Akron, marking the first sale of the complete 55-lecture series. The sale price: \$12,800. Above, Russell L. Seidel, distribution manager for the CAES self-study programs, removes one of the broadcast-quality master videotapes, preparing to have it copied for shipment to the library at the University of Akron, located in one of the nation's leading rubber manufacturing centers.

—Photo by Calvin Campbell

Colloid and Surface Chemistry, a series of 55 lectures and demonstrations, featuring Professor J. Th. G. Overbeek of the University of Utrecht in The Netherlands, has become the most widely used of the 25 videotape and film series available for sale or rent through the Center for Advanced Engineering Study.

John T. Fitch, director of technology-based educational development and marketing at the center, said thousands of students, practicing engineers and industrial scientists have seen some or all of the programs.

"Overbeek is the world's outstanding authority on the subject," Mr. Fitch said, "and an understanding of surfaces and colloids—particularly polymers—is of enor-

mous importance to a wide variety of industries.

"Chemicals, petroleum, metallurgy, paints, dyes, coatings, cosmetics, pharmaceuticals, food products—even the biological processes of life itself—are all affected by the phenomena Professor Overbeek discusses."

The series was recorded while Professor Overbeek was visiting professor in chemical engineering at MIT.

Topics covered in the Overbeek series are: surface chemistry, lyophobic colloids, electrokinetics and membrane phenomena, and lyophilic colloids, including polymers.

The 55 films or tapes are accompanied by study guides containing lecture notes, reading assignments, problems and problem solutions. The guides are published in four volumes of more than 1,000 pages. One set per student is recommended, and they are available from the center.

Further information on *Colloid and Surface Chemistry* and other MIT technology-based courses may be obtained by writing or calling Russell Seidel, Rm 9-230, x3-7444.

Administrative Procedures Class Offered

The Office of Personnel Development has announced that the training program for biweekly and exempt employees, called "Introduction to Administrative Procedures at MIT" will begin on Thursday, February 24th. The program, formerly referred to as the Mini-Course Pilot Program, originated as a recommendation of the Working Group on Office/Clerical Issues.

Eighty-four employees from as many different departments have participated in the program. Instructors for it are: George Prendergast, Office of Sponsored Programs; Robert Durland, General Purchasing; Richard May, Comptrollers' Accounting; Peter Bronchuk, Accounts Payable; Robert Sullivan, Travel; Ruth Walsh, Transfer Voucher Section; Joseph Cullinan, Comptroller's Payroll; and Howard Miller, Physical Plant.

Employees on the biweekly and exempt payrolls who are interested in the program should contact their administrative officers by February 18th.

Hermann Foundation Endows Professorship

(Continued from page 1)

and life," he said. "This enlightened philanthropy will exert an encouraging influence through generations of teachers and students in the health sciences of the future."

The Harvard-MIT Program seeks to join the complementary strengths of the two universities in the education of physicians, biomedical scientists, medical engineers and medical physicists. The Program also aims at the solution of important health and medical problems by promoting productive multi-disciplinary collaborative research.

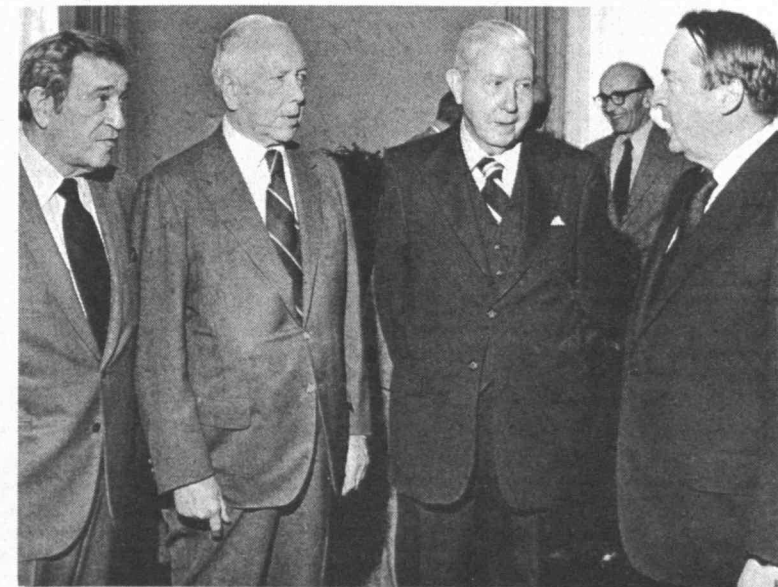
Formal recognition of the establishment of the Grover Hermann Professorship was given Monday (February 14) at a luncheon at the MIT President's House where the guest of honor was George B. Pletsch of Chicago, treasurer of the Grover M. Hermann Foundation.

Among those participating in the luncheon given by President Wiesner were:

Howard W. Johnson, Chairman of the MIT Corporation, the Institute's governing body, and a former MIT President; James R. Killian, Jr., former MIT Corporation Chairman and also a former MIT President; Dr. Julius A. Stratton, a noted engineering scientist and also a former MIT President; MIT Provost Walter A. Rosenblith; Dean Robert H. Ebert of the Harvard Medical School; Henry C. Meadow, HMS Senior Associate Dean for Administration.

Dr. Irving M. London, Professor of Medicine at Harvard University and MIT and Professor of Biology at MIT who is director of the Harvard-MIT

Program in Health Sciences and Technology; Dr. Irwin W. Sizer, noted microbiologist and Dean Emeritus of the MIT Graduate School; Dean William F. Pounds, Dean of the MIT Sloan School of Management which has been a leader in research and teaching in the management and analysis of national health care delivery systems; and Lt. Gen. James P. Lampert (USA, Ret.), MIT Vice President for Resource Development.



HERMANN PROFESSORSHIP. George B. Pletsch of Chicago, treasurer of the Grover Hermann Foundation, right, chats with MIT President Jerome B. Wiesner (left) and two former MIT presidents—Dr. Julius A. Stratton (second from left) and Dr. James R. Killian, Jr., (second from right)—at luncheon given this week to formally recognize establishment of the Grover Hermann Professorship in Health Sciences and Technology at MIT.

—MIT Photo by Calvin Campbell

of Political Science, and the Center for International Studies.

A native of Callicoon, N.Y. where his father was in the lumber and building materials business, Mr. Hermann in 1913 established the American Asphalt Paint Co. in New York and New Jersey. That firm became the American-Marietta Co. in 1940 in recognition of its Marietta Paint and Color Co. division at Marietta, O. Under Mr. Hermann's direction as president and later chairman of the board, the company became a leading manufacturer of paints, varnishes and protective coatings, and, through diversification, achieved a prominent position in production of dye stuffs, printing inks, chemical compounds, aggregates, Portland cement, metal alloys, and chemical and metallurgical limes. The 1961 merger with the Martin Company founded by the aviation pioneer, Glenn L. Martin, made the resulting corporation a leader also in aeronautical and aerospace research, design, engineering and manufacture. Mr. Hermann was Chairman of the Martin Marietta Board of Directors from 1961 to 1965 and Honorary Chairman until his retirement in 1966.

The Hermann Chair forms a part of MIT's five-year \$225 million Leadership Campaign, now completing its second year of garnering major new private resources to assure MIT's future strength and development. Included in the campaign goal are 50 endowed professorships. The Hermann Professorship brings to 17 the number of chairs thus far endowed or pledged through the campaign.

THE INSTITUTE CALENDAR X3-3270

February 16
through
March 1

Events of Special Interest

The Viking Relativity Experiment* — Irwin Shapiro, physics & geophysics. Undergraduate Physics Colloquium. Wed, Feb 23, 4:15pm, Rm 4-339. Social hour follows.

Women's Forum Medical Series** — Mon, 12n, Rm 10-105. Feb 28: Constance Bean, coordinator for health information & education, and Elizabeth Hormann, assistant coordinators, will talk on their roles as patient advocates for the Medical Department.

Annual Sea Grant Program Review and Site Visit* — Tues, Mar 1: presentations by Sea Grant staff & principal investigators of proposed research projects, progress reports on existing projects. 1-5:30pm, Holiday Inn, Somerville. Wed, Mar 2, 8am-5:30pm & Thurs, Mar 3, 8am-3:30pm, Rm 37-252: site visit team led by David B. Duane, associate program director, Office of Sea Grant, NOAA, US Department of Commerce. Info: x3-7041.

Seminars and Lectures

Wednesday, February 16

Nutrition During Lactation* — Judith Wurtman, nutrition & food science. Nutrition & Food Science, Clinical Research Center Seminar. 9am, Rm E18-408.

Palpobathymetry of the Atlantic* — John Sclater, marine geophysics. Oceanography Sack Lunch Seminar. 12n, Rm 54-915. Coffee, bring lunch.

Ga In As P/In P Double Heterostructure Diode Lasers* — J. J. Hsieh, Lincoln Laboratory. EECS Seminar. 1pm, Rm 36-428.

Some Critical Parameters for the Extrusion Texturization of Cottonseed Flours* — Gad F. Cegla, assistant research chemist, Food Protein R&D Center, Texas A&M University. Nutrition & Food Science Seminar. 4pm, Rm 4-145.

Technology and the Problem of Sudden Death* — Rober Mark, Matsushita Professor of Electrical Engineering in Medicine, director of Biomedical Engineering Center. Biomedical engineering Center for Clinical Instrumentation Seminar. 4pm, Rm 36-428. Refreshments 3:45pm.

Technical Opportunities in the Food Industry* — James M. Engen, associate director for corporate research & development, The Pillsbury Company. Career Seminar. 4pm, Rm 1-114.

Thursday, February 17

Intense Tunable IR Source for Laser Photochemistry* — R. L. Aggarwal, physics. RLE & Spectroscopy Laboratory Seminar on Modern Optics & Spectroscopy. 11am, Rm 66-110. Coffee 10:30am.

The Archaeology of Womens Identity: Images of Women in Scripture* — Sponsored by MIT Lutheran Chaplaincy. 12:30pm, Rm 14-0615.

Group Technology in Small Batch Manufacturing* — Alexander Houtzeel, TNO Co., Waltham. Special Seminar in Manufacturing. 3pm, Rm 37-187.

The South, the Nation and the Southern Takeover* — Paul Gaston, history, University of Virginia. Political Science & Humanities Seminar. 3pm, Rm E53-482.

Evolution of the Aircraft Gas Turbine Engine* — Morris A. Zipkin, general manager, advanced engineering & technology programs development, aircraft engineering group, GE Company, Cincinnati, Oh. Aero/Astro General Seminar. 3pm, Rm 37-252. Coffee preceding, Rm 33-222.

The Argument of Darwin's Origin and its Contemporary Reception** — Everett Mendelsohn, history of science, Harvard University. Darwinism and Culture Seminar sponsored by Seminar on Technology & Culture and Cambridge Humanities Seminar. 4pm, Rm 9-150.

Current Political Fatalism as Seen from the Perspective of Classical American Literature* — Leo Marx, William R. Kenan, Jr., Professor of American Cultural History. History of Industrial Society Workshop. 4pm, Rm 14N-304.

The Concept and Design of a Miniaturized Mass Spectrometer and its Operation on the Surface of Mars* — Klaus Biemann, chemistry. Physics Colloquium. 4:15pm, Rm 26-100. Refreshments 3:45pm, Rm 26-100.

Friday, February 18

The Design of Experiments to Measure the Reaction of Sulfur Dioxide and Oxygen with Fully Calcined Dolomites* — W. W. Doerr, G. Chemical Engineering Seminar. 2pm, Rm 66-110.

Radio Pharmaceutical Chemistry of ⁶⁸Ga Gallium* — M. J. Welch, Washington University School of Medicine. Harvard-MIT Program in Radio Pharmaceutical Development. 2pm, Rm NW12-222. Refreshments.

Degradation of Dilute Polymer Solution in Extensional Flow* — P. Leopalrat, G. Chemical Engineering Seminar. 3pm, Rm 66-110.

Millimeter Microwave Generation from an Intense Relativistic Electron Beam in a Rippled Magnetic Field* — Philip Efthimion, Columbia University. MIT Fusion Center-Dynamics Seminar. 3:30pm, Rm 36-261. Refreshments 3pm.

Stalking the Wild Entasis: Analogs of the Active Sites of Iron Containing Proteins* — Richard Frankel, Francis Bitter National Magnet Lab. Center for Materials Science & Engineering Colloquium. 4pm, Rm 10-105. Refreshments 3:30pm.

Tuesday, February 22

Observational Aspects of Interstellar Chemistry* — Barry E. Turner, National Radioastronomy Observatory Physics Seminar. 4:15pm, Rm 37-252. Refreshments 3:45pm.

Chromosomal Proteins and Chromosomal Structure in Drosophila* — Sarah Elgin, The Biological Laboratories, Harvard University. Biology Colloquium. 4:30pm, Rm 6-120. Coffee 4pm, Bldg 56, 5th fl vestibule.

Women in Politics* — Elaine Noble, Mass. State Representative. Association for Women Students Lecture with Q/A period. 8pm, Rm 26-100. Men encouraged to attend.

The Holocaust/Education Towards Values* — Arjeh Carmon, prof of philosophy. MIT Hillel & Israeli Student Organization Seminar. 8pm, Stu Ctr West Lng. Info: x2-2982.

Wednesday, February 23

Reaction-Generated Poisons and Modulators in Immobilized Enzyme Catalysis* — Jay Bailey, chemical engineering, University of Houston. Chemical Engineering Seminar. 11am, Rm 66-110.

The Politics of French Science and its Relation to European Policy* — Elaine Morin, French scientific attache, French Consulate, Boston. CIS Seminar. 12n, Rm E53-482.

Lateral Mixing of Water Masses in Thermohaline Fronts* — Terrence M. Joyce, physical oceanography, WHOI. Oceanography Sack Lunch Seminar. 12n, Rm 54-915. Coffee, bring lunch.

The (¹⁴C) Deoxyglucose Technique for the Measurement of Local Cerebral Glucose Utilization and its Use in Mapping Regions of Altered Functional Activity in the Central Nervous System* — Louis Sokoloff, chief, Laboratory of Cerebral Metabolism, National Institute of Mental Health. Laboratory of Neuroendocrine Regulation, Nutrition & Food Science Seminar. 12:30pm, Rm 66-110.

An Introduction to Liquid Crystals* — David Litster, physics. EECS Optics Seminar. 1pm, Rm 36-428.

Time-Ordered Communications for Air Traffic Control in a Low Cost Terminal for General Aviation* — Walter Lee, MITRE Corp. Aero/Astro General Seminar. 3pm, Rm 37-252. Coffee 2:30pm, Rm 33-222.

Leibniz and the Concept of Process* — Jerome Lettvin, electrical and bioengineering, communications physiology. Technology Studies Seminar. 4pm, Rm 20D-205. Coffee 3:30pm.

Thursday, February 24

Laser-Induced Nuclear Orientation Effects* — D. E. Murnick, Bell Laboratories. RLE & Spectroscopy Laboratory Seminar on Modern Optics & Spectroscopy. 11am, Rm 66-110. Coffee 10:30am.

Space Flight Via Maxwell's Equations: Flameless Rocketry; Acceleration of Reaction Mass* — Gerard K. O'Neill, Jerome Clarke Hunsaker Professor of Aeronautics & Astronautics, visiting. Special Aero/astro Seminar. 3pm, Rm 37-252.

Darwinism as a World View* — John C. Greene, history, University of Connecticut Graduate School. Darwinism and Culture Seminar sponsored by Seminar on Technology & Culture and Cambridge Humanities Seminar. 4pm, Rm 9-150.

Probing the Kondo Magnetization Cloud* — Charles P. Schlichter, U. of Illinois, Urbana-Champaign. Physics Colloquium. 4:15pm, Rm 26-100. Refreshments 3:45pm, Rm 26-110.

Friday, February 25

How Industry Views Chemical Engineers* — Keith W. McHenry, Jr., vice president, R & D, Amoco Oil Co. Chemical Engineering Seminar. 2pm, Rm 66-110.

Recent Developments in Turbulent Boundary Layer Theory* — Frank M. White, mechanical & ocean engineering, University of Rhode Island. Mechanical Engineering Seminar. 3pm, Rm 3-133.

Molecular Design of Solid State Systems: Synthesis and Solid State Properties of Some New Pi-Donor-Acceptor Compounds* — L. V. Interrante, General Electric Corporate R & D. Center for Materials Science & Engineering Colloquium. 4pm, Rm 10-105. Refreshments 3:30pm.

Monday, February 28

Reflections on Greece* — Kosta Tsipis, postdoctoral fellow, CIS. CIS Seminar. 12n, Rm E53-482.

Theoretical and Practical Issues in the Design and Use of River Basin Simulation Models* — Roberto Lenton, civil engineering. Ralph M. Parsons Laboratory Water Resources & Environmental Engineering Seminar. 4pm, Rm 48-316. Coffee 3:45pm, Rm 48-410.

Tuesday, March 1

Safety Device for an Automated Radio-Therapy System* — Edward M. Tang, G. Mechanical Engineering Seminar. 12n, Rm 3-465. Coffee & tea. Smoke-free.

Science Studies in Britain: A Retrospective 1966-1976* — Roy MacLeod, reader in history & social studies of science; associate fellow, Science Policy Research Unit, University of Sussex. Technology Studies Seminar. 4pm, Rm 20D-205. Coffee 3:30pm.

Fourier Transform Doppler Spectroscopy: How to Shed Light of Molecular Collisions* — James L. Kinsey, chemistry. Seminar in Physical Chemistry. 4pm, Rm 4-370. Coffee 3:45pm, Rm 6-321.

Compartmentation as a Regulatory Mechanism in Neurospora* — Rowland H. Davis, developmental & cell biology, University of California, Irvine. Biology Colloquium. 4:30pm, Rm 6-120. Coffee 4pm, Bldg 56, 5th fl vestibule.

Wednesday, March 2

Air Transportation and Space Development for the 1980s* — Pierre Marion, president of European Aerospace Corp, Washington, D.C. Aero/Astro General Seminar. 3pm, Rm 37-212. Coffee preceding, Rm 33-222.

Community Meetings

Informal Shakespeare Reading* — Come read Shakespeare Wed, 7pm, Wood 211, East Campus. Feb 16 will read *Antony & Cleopatra*. Please bring own copy if have one. Info: Nina, x5-6241 Dorm.

Women Graduate Students — Spring discussion group Tues, Feb 22. No planned topic, drop by for coffee & conversation. "Changing Careers" discussion with Holly Heine, dean for student affairs, & Ann Friedlaneder, economics & civil engineering. Both meetings 4-6pm, Rm 8-314. All are welcome.

Day of Inquiry: The Future of Committed Lifestyles in the Catholic Church — Sponsored by MIT Catholic Chaplaincy and Vocational Information Center of the Archdiocese of Boston. Sun, Feb 27, 11am-5pm, St. Clement's Student Center, 1105 Boylston St., Bos. Inquiry into the present state of committed lifestyles in the Catholic church and the forms they may assume in the future, through general panel discussion & smaller, intensive discussion groups. Info: x3-2981.

Prenatal and Parent Education Group Meetings** — Sponsored by Medical Dept. Tues, Mar 1: Elizabeth Noble, physical therapist, author of *Essential Exercises for the Childbearing Year*, will speak on "The Pelvic Floor" and its importance in marriage, childbirth and postpartum. Simple exercises taught. 12n, Infirmary conference rm (x3-1316 for directions.)

Wive's Group** — Group leaders: Charlotte Schwartz, sociologist & Myra Rodrigues, social worker, both from Medical Dept; Carol Hulsizer, faculty spouse in residence, Ashdown Hse. Wed, 3-5pm, Stu Ctr West Lng. Babysitting Stu Ctr Rm 473. Cheryl, x3-4911. Feb 16: Hubert Jones, urban studies & planning, director of Community Fellows Program, will discuss "The Work of the Mass. Advocacy Center — Citizens Making Government Work".

Low Back Problem Exercise Class* — Thurs, 1-2:30pm, Stu Ctr West Lng. Bring 3 pillows and an OK from your doctor. \$15/ea class. Info: x3-4138, Mon, 9am-5pm.

TOPS* — Tech Organization of Professional Secretaries. Meetings Thurs, 12n, Walker Blue Rm.

Social Events

French Party* — Sponsored by Cercle Francophile (French students). Sat, Feb 19, 9pm-1am, French Hse (New Hse, 475 Mem Dr.) Free.

Bagels & Lox & Matza-Brey Brunch* — Sponsored by MIT Hillel. Sun, Feb 20, 11am, Rm 10-105. Admission \$1.50, \$1.25 Hillel members.

Faculty Club Special Dinner*** — New Orleans Buffet Tues, Feb 22. Steamship round, shrimp creole, salad buffet, dessert cart. Served 5:30-8pm. Cost: \$6.50 + tax, children .05¢/lb.

A Night in the Tropics* — Fri, Feb 18, 9pm, Burton Hse dining hall. Sponsored by Class of 1978. Music by MIT Logarithms & WTBS, live rock/disco DJ. Dancing, music, raffle of trip for 2 for the long weekend (incl hotel, meals, airfare, + \$100). Tropical drinks, beer, punch. Admission: \$1 buys admission & raffle ticket. Available Bldg 7 Lobby donut stand. Info: Al, x5-9472 Dorm.

The Mezz** — SCC coffeehouse. MIT talents performing in relaxed atmosphere. Wine, cheese, coffee & donuts. Fri, Feb 25, 8:30pm, Stu Ctr Mezzanine Lng.

Strat's Rat — Sponsored by Student Center Committee. Fri, Feb 25, 8:30pm-1am, Sala. Light & dark beer only 35¢/16 oz. We play requests all night. Free with college ID.

Second Annual Ebony Affair* — Sponsored by Black Graduate Student Association. Semi-formal dance (shirt, tie, jacket) Sat, Mar 5, 10pm-2am, Lobdell. Tickets available now at Graduate Student Office. Cost: MIT students \$2.50, faculty, staff & others \$3.50. Set-ups available, BYOB and food.

Movies

Dog Day Afternoon** — LSC. Fri, Feb 18, 7 & 10pm, Kresge. Admission 75¢, MIT or Wellesley ID required.

The Exterminating Angel (Bunuel)* — MIT Film Society. Fri, Feb 18, 7:30 & 9:30pm, Rm 6-120. Admission \$1.25.

Summer of '42** — SCC MidNite Movie. Fri, Feb 18, 12m, Lobdell. Free.

The Wind and the Lion** — LSC. Sat, Feb 19, 7 & 10pm, Rm 26-100. Admission 75¢, MIT or Wellesley ID required.

Taming of the Shrew** — LSC. Sun, Feb 20, 6:30 & 9:30pm, Rm 26-100. Admission 75¢, MIT or Wellesley ID required.

The General* — LSC. Original uncut silent film starring Buster Keaton with John Kiley playing accompaniment on the Holt Kemp organ. Mon, Feb 21, 11pm, Kresge. Admission \$1.50, 75¢ with MIT ID. Tickets available at LSC office, Stu Ctr Rm 457, or at door. Info: x3-3791.

The Cabinet of Dr. Caligari* — MIT Film Section. Wed, Feb 23, 7:30pm, Rm E21-010. Free.

Straw Dogs** — LSC. Fri, Feb 25, 7 & 10pm, Rm 26-100. Admission 75¢, MIT or Wellesley ID required.

Simon of the Desert (Bunuel); An Andalusian Dog (Bunuel); A Day in the Country (Renoir)* — MIT Film Society. Fri, Feb 25, 7:30 & 9:30pm, Rm 6-120. Admission \$1.25.

Day of the Jackal** — LSC. Feb 26, 7 & 10pm, Rm 26-100. Admission 75¢, MIT or Wellesley ID required.

Lucia** — ISA Film Festival. Sun, Feb 27, 2pm, Rm 54-100. Free.

The Graduate** — LSC. Sun, Feb 27, 6:30 & 9pm, Rm 26-100. Admission 75¢, MIT or Wellesley ID required.

Lobby 7 Events

Folk Dance Club* — Will be dancing Fri afternoons in Lobby 7 throughout the winter months. Come and join in! Fri, 12n-2pm, Bldg 7 Lobby. Free.

Music

MIT Women's Chorale* — Sponsored by MIT Women's League. Auditions for soloists only, Thurs, Feb 17, 7:30pm, Rm 10-342. Refreshments.

Thursday Noon Hour Concert Series* — Concerts in Chapel, 12n, Feb 17: John Tyson, recorder & harpsichord recital. Feb 24: James Johnson in an organ recital of music by Bach & Hindemith.

Winter Concert* — MIT Concert Band, conducted by John Corley. Best premiere of Nuncio Mondello's *Largo and Allegro*; also works by Holm Milhaud, Nelhybel, Jenkins & Beversdorf. Sat, Feb 19, 8:30pm, Kresge. Tickets free, available in Bldg 10 Lobby. (Repeat of Wed, Feb 16 performance at Wellesley College, 8pm, Houghton Memorial College.)

Concert* — Erich Gruenberg, violin & Valerie Tyron, piano, in a program of music by Pugnani-Kriesler, Reizenstein, Travis & Beethoven. Sponsored by Music Section. Thurs, Feb 24, 8pm, Kresge. Free.

Logjam '77* — An evening of music by MIT Logarithms, Mt. Holyoke 8's, Yale Alley-Cats, Wheaton Whims, and Princeton Katzenjammers. Sat, Feb 26, 7:30pm, Kresge. Free.

MIT Chamber Players* — Marcus Thompson, conductor, Barry Verd guest conductor. Program of Mozart, Heitor Villa-Lobos, Schubert.

Davidovsky & Bartok. Sun, Feb 27, 8pm, Kresge. Free.

Chamber Music Society Concerts* — Wed, 5:15pm, Music Library. Call x3-3210 for information.

Renaissance Vocal Music* — Sponsored by Chamber Music Society. Auditions & rehearsal Sun. 7:30pm, Rm 4-160. Yves, x3-5810.

Theater and Shows

Loot* — MIT Community Players production of Joe Orton's play. Fri-Sun, Feb 18-20 & Thurs-Sat, Feb 24-26, 8pm, Kresge Little Theatre. Admission \$3, \$2.50 w/MIT ID.

Exhibitions

Works on Paper by Sculptors* — From the MIT Collection. Thurs, Jan 13-Sat, Feb 26, Hayden Corridor Gallery. Open daily.

The Iceberg and Its Shadow: Two Views* — Monumental glass structure environment by Calif artist Larry Bell. Exhibit Sat, Jan 15-Sat, Feb 26, Hayden Gallery. Hours: Mon-Sat, 10am-4pm.

Faculty Club Exhibit* — Paintings by Anne Brock on exhibit during Feb, 9am-11pm.

Forgotten Photographs* — From the collection of R.P. Kingston. On exhibit at Creative Photography Gallery thru Thurs, Mar 3. Hours: Mon-Fri, 9am-10pm; Sat, 10am-6pm; Sun 12n-8pm, Bldg W 31.

Double Articulation* — Exhibition of new wall reliefs, prints and drawings by John Avery Newman, CAVS Fellow, Thurs, Feb 17-Fri Apr 1, CAVS. Hours: Mon-Fri, 9am-5pm. Public opening Thurs, Feb 17, 4-6pm.

MIT Historical Collections* — Permanent exhibition Mon-Fri, 9am-5pm, Bldg N52, 2nd floor. Bicentennial Exhibits: Katharine Dexter McCormick, '04; Vannevar Bush, '16; Karl Taylor Compton; Norbert Wiener, and 1876 Exhibit, Bldg 4 corridor. The New Technology Exhibit 2nd floor balcony of Lobby 7. Energy Exhibit Bldg E40, 1st floor.

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

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

Music for Winter* — Compositions on the theme of winter. Music Library, Rm 14E.

Dance

Workshop in Israeli Dancing* — Taught by Moshe Eskayo, sponsored by Folk Dance Club. Sun, Feb 27, 2 sessions between 11am & 6pm, Sala. Info: Todd, 994-8993 or Nina, x5-6241 Dorm.

MIT Dance Workshop — Tues & Thurs evgs, 5-7pm, duPont Armory dance studio.

MIT Folk Dance Club — International: Sun, 7:30-11pm, Sala. Balkan: Tues, 7:30-11pm, Stu Ctr Rm 491. Informal: Fri, 12n-2pm, Kresge Oval (Bldg 7 Lobby in bad weather). Israeli: Thurs, 7:30-11pm, Sala.

Renaissance Dance* — Sponsored by MIT SCA. Beginners welcome. Wed, 8pm, Burton dining hall. Info: Beth Parkhurst, 964-1840.

Athletics

Home Schedule* — Wednesday, February 16 — M JV, V Basketball.

Suffolk, 6:15 & 8:15pm, Rockwell Cage. V Hockey. Nichols, 7pm, ice rink. Rifle. Harvard, 7pm, duPont rifle range. Thursday, February 17 — JV, V Wrestling. Springfield, 6 & 7pm, duPont wrestling rm. Saturday, February 19 — W & M V Basketball. Bates, 6 & 8:15pm, Rockwell Cage. M JV Basketball, Bates, 6:15pm, Rockwell Cage. M JV & V Fencing. Stevens Tech, 3pm, duPont fencing rm. W V Fencing. Stevens Tech & Brandeis, 1pm, duPont fencing rm. M Gymnastics. Central Conn, 2pm, Alumni Gym. V Hockey. Clark, 7pm, ice rink. JV Hockey. Gov. Dummer, 2pm, ice rink. V & JV Squash. Wesleyan, 2pm duPont squash courts. Tuesday, February 22 — W V Basketball. Brandeis, 7pm, Rockwell Cage. V Hockey. Fitchburg State, 7pm, ice rink. V & JV Squash. Trinity, 4pm, duPont squash courts. Wednesday, February 23 — M JV Basketball. Phillips Andover, 3pm, Rockwell Cage. W V Swimming. Holy Cross, 7pm, Alumni Pool. Friday, February 25 — Pistol. Air Force, WPI, Boston State, 7pm, duPont pistol range. V, JV Squash. Yale, 7pm, duPont squash courts.

Maggie's Self-Designed Fitness Class — Classes 12n-1pm & 1-2pm, duPont fencing & wrestling rms; 5-6pm, duPont T Club Lng. PE credit course, but all are welcome.

Women's Ice Hockey — Just forming, all women welcome. Practices Wed, 7am. Info: Elizebeth English, 354-2781 or Mimi Kellogg, 783-2588.

BU Hillel vs. MIT Hillel in Volleyball — Sun evg, Feb 27, Walker Gym. Info: x3-2982.

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 Mar 2 through Mar 13 to the Calendar Editor, Room 5-111, Ext. 3-3270, before noon Friday, Feb. 25.

Chamber Players Announce Varied Concert Program

The MIT Chamber Players under the direction of Marcus Thompson will give a concert of instrumental, vocal, and electronic music at 8pm on Sunday, February 27, in Kresge Auditorium at MIT. The concert is open to the public free of charge.

The concert will mark the first time that the Players will perform an electronic work—Synchronisms No. 2 for instruments and electronic sounds (1964) by Mario Davidovsky with guest conductor Barry Vercoe. Tenor Rufus Hallmark will sing a group of Schubert lieder and for one of them, *Nachthelle* (Night Brightness), will be joined by a chorus of 12 male voices—the first time that members of the MIT Choral Society have performed at a Chamber Players concert.

The program will also include three additional Schubert lieder to be sung by Professor Hallmark; Mozart's Quintet for two violins, two violas, and cello in G minor, K. 516 (1787); *Bachianas brasileiras* No. 6 (1938) by Heitor Villa-Lobos; and *Contrasts* (1942) by Bela Bartok.

Chamber Player concerts give MIT student musicians an opportunity to perform alongside young professionals from the Boston area and members of the MIT music faculty. The February 27 concert will involve the talents of three MIT professors: violist Marcus Thompson, associate professor of music who formed the Chamber Players in 1974 and serves as group director; tenor Rufus Hallmark, assistant professor of music; and composer Barry Vercoe, associate professor of music and director of the MIT Experimental Music

Studio.

In the viola quintet, one of six for a combination that Mozart initiated, Professor Thompson will play second viola to David Allcott, an undesignated sophomore from West Allis, Wis. Mr. Allcott is a pupil of Boston Symphony Orchestra principal violist Burton Fine. The addition of a second viola to the familiar string quartet texture adds tonal weight and a more serious character to Mozart's style. String quartets, by contrast, are generally brighter in mood and texture, not unlike the difference that we expect between music for the violin and the viola. Other members of the quintet will be Janet Packer, violin; Julie Keller, second violin, a junior in biology-nutrition from Winona, Minn., and Lynne Knoles, cello.

Bachianas brasileiras No. 6 by Villa-Lobos is a highly virtuosic solo work for flute and bassoon.

In addition to *Nachthelle*, Professor Hallmark will sing Schubert's *Winterabend* (Winter Evening), *Bei dir* (With You), and *Im Fruhling* (In the Spring) with Joel Freilich at the piano. These four lieder, selected from the more than 600 written by the composer, tend to be on the lighter side of Schubert's songs. Most of them deal with nature or a happy love or both.

Professor Hallmark's scholarly area of research and writing is German lieder. He is currently preparing an article on a Schubert song he sang at a Chamber Players concert last February. He is tenor soloist with the Boston Camerata and active in recital work.

Mr. Freilich, of South Euclid, Ohio, a senior in civil engineering,

is of German descent and has studied German language and literature in high school and at MIT. For a year and a half he lived in MIT's German House.

Davidovsky's *Synchronisms* No. 2 is a short piece using traditional instruments—a flute, clarinet, violin, and cello—in conjunction with electronic sounds.

The composer said of the work, "The attempt here has been made to preserve the typical characteristics of the conventional instruments and of the electronic medium respectively—yet to achieve integration of both into a coherent musical texture. In the planning and realization of these pieces, two main problems arise—namely proper synchronization (a) of rhythm and (b) of pitch."

The work was synthesized by analogue and not computer equipment. Therefore the pitch and rhythm of electronic sounds are not notated in traditional musical form. This gives rise to performance problems. In consideration of this, the work has segments where the performers are free to vary their speed with that of the tape and to become somewhat out of sync with it. At the end of these segments, synchronism is regained by the technique of repeating short motifs until a tape cue is heard.

Concluding the program will be Bartok's *Contrasts* for clarinet, violin, and piano, written for and dedicated to Benny Goodman and Joseph Szigeti, a famous concert violinist who was particularly concerned with promoting new music for the violin. *Contrasts* will be played by Stephen Umans, clarinet, a research associate in electrical engineering and computer science; Janet Packer, violin, and Seth Carlin, piano, all regular performers with the Chamber Players.

Violin and Piano Concert Scheduled in Kresge

Violinist Erich Gruenberg and pianist Valerie Tryon will give a concert at 8:00pm on Thursday, February 24, in Kresge Auditorium.

The concert, sponsored by the MIT Music Section, is open to the public free of charge.

The program will include *Prelude and Allegro* by Fritz Kreisler; *Sonata for Solo Violin*, Opus 46, by Franz Reizenstein; *Duo Concertante* by Roy Travis; and *Sonata in A for Violin and Piano*, Opus 47, "The Kreutzer," by Beethoven.

Fritz Kreisler was a celebrated violinist who wrote some very popular violin music. He also published a number of works in the classical vein and attributed them to various old composers. One of these, *Prelude and Allegro*, he attributed to the celebrated Italian violinist and composer, Gaetano Pugnani. In 1935 Kreisler voluntarily admitted that he had composed these works himself. A 1976 Decca release is "The World of Fritz Kreisler," featuring Mr. Gruenberg.

Composer and pianist Franz Reizenstein left his native Germany in 1934 and settled in London. The *Sonata for Solo Violin*, Opus 46, is his final completed composition, written

only a few months before his death in 1968. The sonata has five movements, quick alternating with slow, and the listener can easily detect numerous interconnecting ideas. The Bach-like opening of the work, for example, reappears in a speeded, summing-up version at the very end. Mr. Gruenberg describes the composition as one that is "splendidly aware of what the violin can do and makes full use of its resources."

Roy Travis, a contemporary American composer, wrote *Duo Concertante* in 1967. He has master's degrees from Columbia University and the Juilliard School of Music. Professor of music at UCLA, he has worked regularly at the university's electronic music studio. He has drawn inspiration from studies of Greek drama and African tribal music.

The distinguished violinist Erich Gruenberg performs as soloist and is leader (concert master) of the Royal Philharmonic Orchestra. He was born in Vienna and in 1946 went to England where he now makes his home. Within a year of arriving in England he won the Carl Flesch International Violin Competition. This established him as a soloist of

the first rank.

Mr. Gruenberg has toured Europe, Scandinavia, Turkey, India, and North America, and gave the first performance in Russia of Benjamin Britten's *Violin Concerto* with the Moscow Radio Orchestra. His extensive repertoire ranges from music by Bach through to Bartok, Walton, and Messiaen. In addition to his career on the concert stage, he held the position of leader of the London Symphony Orchestra when Pierre Monteaux was chief conductor. He is now leader and chairman of the Artistic Advisory Panel of the Royal Philharmonic Orchestra. He plays a Stradivarius violin made in 1731.

Pianist Valerie Tryon regularly tours in Britain and North America giving solo recitals and concert appearances with major orchestras in addition to frequent broadcasts for the BBC and CBC. She attended the Royal Academy of Music in London and studied under Jacques Février in Paris. In 1956 she won a prize at the Liszt Competition in Budapest and since then has been particularly associated with Liszt's music. She made her Cheltenham Festival debut in 1959 and has performed professionally since then.

Israel's Dalia Atlas Returns As Visiting Conductor

Dalia Atlas, founder, conductor, and musical director of the Israel Pro Musica Orchestra and the Technion Symphony Orchestra and Chorus, is visiting conductor at MIT for the months of February and March.

Miss Atlas is rehearsing with the MIT Symphony Orchestra for four concerts to be given in March. Concerts are planned for March 10 at Wellesley College; March 12 at MIT's Kresge Auditorium; March 13 in Portland, Maine; and March 15 at Faneuil Hall in downtown Boston.

She and the orchestra are not strangers; in December, 1974, she was guest conductor of the MIT Symphony Orchestra.

During that visit, she said, "I fell in love with the MIT orchestra. The students are so marvelous and have such a good foundation for making music. Coming to MIT this time is, for me, like coming home."

Born in Haifa, Miss Atlas studied at the three major musical institutions in Israel: The Rubin Academy of Music in Jerusalem, the Tel Aviv Academy of Music, and the Haifa Conservatory. She became proficient in piano, composition, voice, and music education; so much so that she was encouraged to pursue careers in each field. But conducting was her first desire. Her conducting teacher, Professor Hans Swarowsky of Vienna, told her that to gain recognition as a woman conductor she would have to be much better than a man. This did not deter her.

In 1960 Miss Atlas began formal training to become a conductor. Within one-and-a-half years, from 1963-64, she won prizes in three international competitions: The Guido Cantelli competition in Novara, Italy; the Royal Liverpool Philharmonic competition in England; and the Dimitri Mitropoulos competition in New York City. In each instance she was the first woman to be awarded such recognition. The Mitropoulos award was presented by Leonard Bernstein with the remark: "She is too brilliant to be passed by."

She was offered positions as assistant conductor at the Metropolitan Opera House and to work for a year with Eugene Ormandy and the

Wyner to Give Kresge Recital

Lyric soprano Susan Davenny Wyner will give a song recital at MIT on Wednesday, March 2.

The concert, at 8pm in Kresge Auditorium, is sponsored by the Music Section and will be open to the public free of charge.

Miss Wyner will sing songs by Schubert, Debussy, Elliott Carter, Stravinsky, and Brahms. Pianist Yehudi Wyner will provide accompaniment. Further information on the concert will appear in the next issue of *Tech Talk* on March 2.

Philadelphia Orchestra, but declined both to return to Israel.

She based this decision on her belief that "everybody who belongs to a place should give to it." Her gift to Israel is what she loves most—music. She also returned to her homeland so her children—two sons and a daughter—could be raised there.

In 1963 she founded a chamber orchestra, the Israel Pro Musica, and built it into a major national orchestra. Formed to bring "music to the people" and educational concerts to Israeli youth, the orchestra has performed at kibbutzim, development towns, army camps, and other



Israeli Conductor Dalia Atlas with symphony score.

out-of-the-way places. It has also toured Europe.

In an effort to establish a practical connection between music and science, she founded in 1963 a symphony orchestra and a choir at Technion—Israel Institute of Technology, MIT's counterpart in Israel.

She has been guest conductor of the Royal Liverpool Philharmonic, BBC Northern Orchestra, Berkshire Music Center Orchestra at Tanglewood, and Pro-Arte Orchestra in New York City, as well as the Israel Philharmonic Orchestra, the Israel Radio Symphony, and other major Israeli orchestras. In May, 1977, she will conduct the Michigan Chamber Orchestra, and during the 1977-78 season, the New Philharmonia Orchestra in London and the Houston Symphony Orchestra.

Ocean-Related Books Issued

Two books dealing with ocean-related subjects have been published recently by MIT Press.

Federal Port Policy in the United States, by Henry S. Marcus, James E. Short, John C. Kuypers and Paul O. Roberts, examines US federal port policy and the impacts of regional, state and local policies on federal decision making. Professor Marcus of the Department of Ocean Engineering is a member of the MIT Center for Transportation Studies, which is headed by Professor Roberts, a member of the Department of Civil Engineering. Mr. Short is a doctoral candidate in political science at MIT and Mr. Kuypers is a management analyst for the Military Traffic Management Command.

Parable Beach, A Primer in Coastal Zone Economics, by John W. Devanney III, Glen Ashe and Beth Parkhurst, is an allegory. A hypothetical coastal town is faced with two development proposals, one for a large apartment/recreation complex, the other for an offshore drilling operation. The book traces the process by which the town evaluates the proposals.

Professor Devanney is with the MIT Department of Ocean Engineering and Mr. Ashe and Ms. Parkhurst were his assistants.

Evaluation Workshop Planned for Libraries

At the request of the Libraries, the Office of Personnel Development will present a workshop entitled, "Improving Performance Evaluation."

The workshop will be open to all library employees and will be repeated several times between February 15 and February 23.

The workshop will explore some of the major difficulties associated with performance appraisal and will explore techniques which could be utilized by both supervisor and employee to contribute to an effective review process.

D76-208, Technical Writer, Aero./Astro. Innovation Ctr. (11/13)
 D76-210, Radiochemist, Nuclear Reactor Lab. (11/3)
 D76-212, Fusion Reactor Res., National Magnet Lab. (11/10)
 D76-220, Research Analyst, Ctr. for Policy Alternatives (11/24)
 D76-225, Sci. Applications Prog., Lab. for Nuclear Sci. (1/5)
 D76-232, High Energy Physics Res., Bates Linear Accelerator (1/5)
 D76-233, High Energy Physics Res., Bates Linear Accelerator (1/5)
 D76-235, Technical Officer, Tech. Adaptation Prog. (1/5)
 D76-239, Systems Theory Res., Elec. Syst. Lab. (1/12)
 D76-243, Metallurgist, National Magnet Lab. (1/12)
 D76-244, Manager, Combustion Facility, Energy Lab. (1/12)
 D76-246, High Magnetic Field Res., National Magnet Lab. (2/9)
 R77-5, Energy Syst. Analyst, Energy Lab. (1/19)
 R77-6, Staff Scientist, Arteriosclerosis Ctr. (1/19)
 R77-9, Systems Analyst, Elec. Eng. (1/26)
 R77-12, Immunologist, Ctr. for Cancer Res. (2/2)
 R77-13, Prog. Lab. for Nuclear Sci. (2/2)
 R77-14, Staff Petrographer, Earth & Planetary Sci. (2/2)
 R77-17, Program Mgr., Energy Lab. (2/9)
 R77-17, Systems Theory Res., Elec. Syst. Lab. (2/9)

EXEMPT:
 E76-41, Principal Oper., Physical Plant (12/1)
 E77-1, Food Serv. Super., Food Service (1/19)
 E77-3, Mech. Shop Super., Physical Plant (1/26)
 E77-5, Real Time/Diagnostic Syst. Prog., Haystack Observatory (2/2)

HOURLY:
 H77-6, Tech. A, Elec. Eng. & Computer Sci. (2/9)
 H77-24, Waitress/Waiter, Endicott House/Dedham (2/9)

The following positions have been FILLED since the last issue of *Tech Talk*:

A76-44	Admin. Staff
A76-51	Admin. Staff
B76-640	Sr. Clk. IV
B76-661	Sr. Clk. IV
B76-592	Sec. IV
B76-646	Sec. IV
H77-17	Designer
B77-20	Lib. Asst. IV
B76-653	Tech. Asst. IV
B76-643	Clerk
B77-34	Sec. IV
B77-6	Sec. IV
E77-2	Super. Animal Lab.
B76-617	Sec. IV
H77-2	Animal Tech.
B77-23	Sec. IV
B76-630	Sec. IV
A76-58	Admin. Staff
B77-19	Sr. Clk. IV
D76-57	Spons. Res.
D76-161	Spons. Res.
D76-224	Spons. Res.
D76-245	Spons. Res.
B76-626	Sec. IV
A76-53	Admin. Staff
B77-51	Sr. Lib. Asst.
C76-14	Acad. Staff

The following positions are on HOLD pending final decision:

B77-39	Sec. III-IV
B77-34	Sec. IV
B77-24	Clk. III
B77-18	Sr. Clk. III
B77-42	Sec. IV

Employment Q&A

By LEWIS A. REDDING and DONNA J. TAYLOR

Q: What are the recognized Institute holidays for the 1977 calendar year?

A: The Institute holidays for 1977 are:
 Martin Luther King Day Friday, January 14, 1977
 George Washington's Birthday Monday, February 21, 1977
 Patriot's Day Monday, April 18, 1977
 Memorial Day Monday, May 30, 1977
 Independence Day Monday, July 4, 1977
 Labor Day Monday, September 5, 1977
 Columbus Day Monday, October 10, 1977
 Veterans Day Friday, November 11, 1977
 Thanksgiving Day Thursday, November 24, 1977
 Christmas Day Monday, December 26, 1977
 New Years Day Monday, January 2, 1977

Q: What is the Institute policy regarding coffee breaks for employees?

A: There is no formal policy concerning coffee breaks. While most offices and departments allow their employees some reasonable period of time in the morning and/or afternoon for coffee breaks, such periods of respite are at the discretion of the supervisor.

Q: Would my salary be affected should I laterally transfer within the Institute?

A: In a straight lateral transfer, as from one Grade IV position to another, salary remains at the same level in the new position as it was in the old. In the rare circumstance that a department is unable to meet a Transfer's current salary, the decision to accept the proffered position at a lower salary rests with the Transfer applicant.

Q: What are my benefits under the MIT Health Plan for outpatient treatment of mental and nervous conditions?

A: Under the MIT Health Plan diagnostic and evaluation services available at the MIT Medical Department are covered in full. If members are referred to an outside therapist by an MIT Health Plan physician, they are reimbursed up to \$15.00 per visit for individual or family therapy and up to \$7.50 per visit for group therapy to a maximum of \$750.00 per calendar year. However, the therapist must participate in the Blue Cross/Blue Shield program and visits must be authorized by an MIT Health Plan physician. This benefit is in effect for all members of the MIT Health Plan regardless of payroll status.

For information about the outpatient coverage for mental and nervous conditions under the Blue Cross/Blue Shield Master Medical Plan, please refer to the Question and Answer column in the January 19, 1977 issue of *Tech Talk*.

For further information contact the MIT Health Plan Office, x3-1322.

Q: Can I begin a career related course or program under the Tuition Assistance Program if I have not yet completed six months of employment at MIT&

A: If you wish to receive tuition assistance for a career related course or program, you must first complete a full six months of employment at MIT before enrolling in the course or program. For example, if you started work at MIT on August 1, 1976, you would be eligible to apply for tuition assistance for a career related course or program beginning no earlier than February 1, 1977. Of course, tuition assistance for a job-related course is available immediately upon employment.

For further information call Judy Silverman, x3-4276.
 Mr. Redding is a Personnel Officer and Ms. Taylor is Assistant Benefits Officer.

CAVS Alejandro Sina Has One-Man Show at ICA

"Gaslight Phenomena," an exhibition of kinetic light works by Alejandro Sina, a fellow at the MIT Center for Advanced Visual Studies since 1973, is on view at the Institute of Contemporary Art (955 Boylston St.) in Boston through May 1. The exhibition is the artist's first one-man show.

Sina is a sculptor/engineer who works with kinetic forms. He is interested in gas discharge and electrical phenomena as creative media for participatory sculptures and large-scale outdoor projects. Using electricity, inert gases, discharge mechanisms, and electronic apparatuses, he creates sculptures of great beauty that are also fun to experience.

Whenever possible, he makes viewer participation an integral part of experiencing his works. Many pieces require activation by the viewer. With some, the touch of a finger, nose, or elbow produces a beautiful visual display. By altering the touch, one can draw with lightning streams.

Other works explore the effects of moving lines of light, especially the way gas tubes create the illusion of a two-dimensional surface.

Sina's large-scale and environmental projects come closer to the sensation of light and color in nature, by virtue of scale and incessant motion. Examples of his monumental work include *Neon Rainbow*, a 300-foot long night event designed with Otto Piene, CAVS director, and exhibited over Briggs Field for Arttransition in

October, 1975; *Neon Argon Cluster*, a 40-foot hanging light sculpture suspended from the dome of Lobby 7 in January, 1976; and argon clusters, suspended for 90 feet in the atrium of the Hyatt Regency Hotel in Cambridge, and installed in December, 1976. For the current show he designed *ICA Noble Gas Cluster* for the ICA foyer and stairway. It is a color and light environment two-and-a-half stories high.

A native of Chile, Sina studied at the Universidad de Chile in Santiago and came to the United States on a Fulbright Scholarship in 1973. He has participated in a number of group shows and large-scale art events as a CAVS fellow.

Grants from the National Endowment for the Arts and the Thorne Foundation supporting the exhibition enabled Sina to fabricate many pieces that had previously been confined to the drawing board.

The artist will give a slide presentation and discuss his work at 2pm on Friday, February 25, in the gallery.

Admission to the ICA is free from 2-5pm on Fridays and is free for students with IDs on weekdays from 10:30am to 5:30pm during February. Admission for non-members is \$1; for students, senior citizens, and children, \$.50. The ICA is open Tuesdays through Saturdays from 10:30am to 5:30pm, and Sundays from noon to 5pm. The exhibit of Sina's work is on view from February 9 through May 1.



Incoming editors of the *Sloan Management Review* are, from the left, Lindsay Jo Fried, David P. St. Charles and Wayne A. Zafft. All are first-year master's degree candidates at the Sloan School.

Management, Marketing Featured in Sloan Review

A discussion of the evolution of formal management systems...an examination of marketing audits...an investigation of effective conflict management...a new approach to identification of useful product design data...promotion beliefs of managers as they relate to career advancement...and a hard look at the details of the Arab boycott.

These topics highlight the Winter 1977 issue, published this month, of the *Sloan Management Review*, the professional management journal of MIT's Alfred P. Sloan School of Management.

"The State of Practice in Planning Systems" by H. Igor Ansoff, professor of management at Vanderbilt University, traces the historical development of formal management systems as a coherent, logical process. Dr. Ansoff gives his readers the tools to diagnose the present state of a firm's planning systems, and concludes with brief descriptions of emerging systems expected to find widening application as management systems continue their evolution.

"The Marketing Audit Comes of Age," by Professor Philip Kotler of Northwestern University and William Gregor and William Rodgers of the Management Analysis Center, explains the marketing audit—an effort to assess the effectiveness and efficiency of marketing policies—as a tool for evaluating and improving a company's marketing operations. More specifically, the authors examine how a marketing audit differs from other types of marketing reviews, its methodology, and who are the best persons to conduct such an audit. Finally, the authors ask—and answer—the question: What are the major benefits of a marketing audit, and what are the major limitations?

Personality conflict—the type of conflict most common to project teams—is the subject of a study by Raymond E. Hill, associate professor of management at The University of Michigan. In his observation of project teams at a large oil company, Dr. Hill distinguishes between the coping responses of high producing managers of project teams and lower producing ones. He isolates those characteristics in managerial style which result in effective conflict management, and makes observations useful to all managers concerned with conciliation in the workplace.

In a lively piece entitled, "Has A Customer Already Developed Your Next Product?" Eric von Hippel, assistant professor of management at the Sloan School, challenges conventional wisdom that first-to-market products are usually designed by the manufacturers of such products. As a result of extensive research, the author finds that in some industries, successful designs for successful products are typically available for free from customers. Building on this information, he provides man-

agers with a method for identifying and utilizing such sources of product design data—information which can contribute significantly toward a manager's goal of maximizing profits.

An exploratory study of the promotion beliefs of managers as a factor in career progress is the subject of the study by Gary Gemmill and Donald DeSalvia, both associate professors of organization at Syracuse University. According to organizational folklore, public image and political skill are of primary importance. But after questioning 209 managers in two manufacturing firms, Drs. Gemmill and DeSalvia conclude that the belief that an aspiring manager must be primarily concerned with managing his public image and honing his political skills may not only be grossly inaccurate, but may also be detrimental to moving upwards.

Finally, in a provocative SMR Forum entitled, "The Challenge of the Arab Boycott," Jack G. Kaikati, a member of the marketing faculty at Southern Illinois University, examines the details of the Arab League boycott of Israel, some corporate response strategies, and the legal issues of boycott compliance as they affect American managers.

The *Sloan Management Review*, now in its 18th year of publication, publishes three times in the academic year. The outgoing editors, all graduating master's candidates at the Sloan School, are Paula B. Cronin of Cambridge, Mass., Robert B. Garman of Bradford, N.H., and Anne C. Quinn of Cambridge. The incoming editors, all first-year master's candidates at the Sloan School, are Lindsay J. (Jo) Fried of Staatsburg, N.Y., David P. St. Charles of Coburg, Ontario, Canada, and Wayne A. Zafft (SB '72) of Boston. Gay Van Ausdall is the managing editor. Single issues of the Review are available for \$5 a piece at the Review office, E52-062. Annual subscriptions are \$14.

CU Directors

At its annual business meeting in January, the MIT Employee's Federal Credit Union elected its 1977 board of directors.

The board officers are: Herbert J. Arbo, Lincoln Laboratory, president; Joseph R. Cullinan, Accounting Office, vice president; Philip J. Keohan, comptroller, treasurer, and Nancy Woodman, Benefits Office, secretary.

Other directors elected are: Andelo D. Larraga, Department of Physics; Henry J. Leonard, Physical Plant; Frank O'Brien, Research Laboratory of Electronics; Dominic DiMartino, Environmental Medical Service, and Salvatore Lauricello, Housing and Dining.

Sea Grant Site Visit to Review Proposals

The MIT Sea Grant Program's annual site visit and program review will take place Tuesday through Thursday, March 1-3. The Institute community is welcome to attend as Sea Grant researchers and program staff members present their proposals for marine related research and projects to advance wise use of the oceans.

Each year at this time, a panel of experts from outside MIT visits to review the program's proposed and continuing projects for the coming year in marine-related research, education and advisory services.

This year's review is particularly important, as this is the first site visit since MIT was designated a Sea Grant College, the highest support award conferred by NOAA's Office of Sea Grant in the US Department of Commerce.

Site visit presentations will emphasize Sea Grant's research activities in four main thematic areas: development of technology for ocean use, developing and using the ocean's mineral resources, application of technology to improved harvesting and use of living marine resources, and the creation of tech-

nology and policy perspectives for coastal zone development.

Sea Grant's programs in marine-oriented education and advisory services also will be discussed.

The site review session for Tuesday, March 1, will be at the Holiday Inn, Somerville, Mass, 1:00-5:30pm. Further presentations will be in the Marlar Lounge, Room 37-252, Wednesday, March 2, 8:00am-5:30pm and Thursday, March 3, 8:00am-3:30pm.

David B. Duane, associate program director for the Office of Sea Grant in Washington, D.C., will lead the 1977 site review panel. Joining him from the national office will be Dr. Richard C. Kolf, associate director, Project Support Programs and coastal zone co-

ordinator; and Mr. Robert J. Shephard, NOAA Marine Advisory Service program manager.

Other site visit participants are: Dr. Sanford S. Atwood, president of Emory University, Atlanta, Georgia; Dr. Joe N. Busby, dean emeritus, Florida Cooperative Extension Service; and Dr. John C. Ludwick, Slover Professor of Oceanography and Director of the Institute of Oceanography at Old Dominion University, Norfolk, Virginia.

Also, Dr. Patric L. Parker, professor of chemistry and marine studies, University of Texas; Mr. Warren F. Rathjen, chief of the Fisheries Development Services Branch, New England Region, of the National Marine Fisheries Service; and Mr. Donald H. Rosenberg, director, Alaska Sea Grant Program.

For more information on scheduled site visit events, contact the Sea Grant Program Office, x3-7041.

Held Named Acting Head Of Psychology Department

Dean Harold J. Hanham of the School of Humanities and Social Science has announced the appointment of Professor Richard M. Held as acting head of the Department of Psychology to replace the late Professor Hans-Lukas Teuber.

Dr. Held, professor of experimental psychology and well-known authority in the field of perception, was chairman of the Psychology Department at Brandeis University before he came to MIT in 1962.

Professor Held received a BA from Columbia University in 1948, a BS in civil engineering from Columbia in 1944, an MA in psychology from Swarthmore College in 1948 and PhD in experimental psychology from Harvard University in 1952.



Dr. Held was at Brandeis from 1953 to 1962, rising from instructor to professor in the Department of Psychology. In 1955-56 he was a member of the Institute for Advanced Study at Princeton.

In 1962-63 he was a senior research fellow of the National Science Foundation and visiting professor in the MIT Department of Psychology. He became a full-time faculty member at MIT in 1963.

Professor Held served as acting head of the Department of Psychology in 1971-72 when Professor Teuber was on leave. He has served as a member of the School Council of the School of Humanities and Social Science since 1973.

He has been a member of the National Academy of Sciences since 1973, and a fellow of the American Academy of Arts and Sciences since 1967.

Film to Conclude Black Series

A 30-minute feature film on Thurs., Feb. 24, at noon in Rm 9-150, will be the last in a series of events sponsored by the MIT Minority Interest Group in observance of Black History Month.

"Civil War: Promise of Reconstruction" foreshadows the hopes and great failures of the Reconstruction period. Set in the midst of the Civil War, the film dramatizes an attempt by a group of Gideon missionaries to help blacks attain self-sufficiency on an island plantation off the coast of South Carolina.

An open discussion will follow and refreshments will be served. All are welcome.

5 Groups to Sing At Logjam '77

Logjam '77, an evening of music performed by college singing groups, will be held at 7:30pm on Saturday, February 26, in Kresge Auditorium at MIT.

The evening, sponsored by the MIT singing group Logarhythms, is open to the public free of charge.

The Logarhythms will be joined by the Mount Holyoke V-8's, Yale Alley-Cats, Vassar Nightowls, and Princeton Katzenjammers in an evening of music ranging from old ballads and barbershop selections to music written by contemporary artists. Most groups will sing a

cappella; some will be accompanied by guitar and string bass.

The Logarhythms were formed in 1949 as an octet. The group has since grown to 12 members, and has toured the East Coast many times. During spring break they will travel to Orlando—where they will sing at Disneyworld—Tampa, St. Petersburg, and Miami, Florida. The Logarhythms will sell T-shirts boosting the group during intermission of the Logjam '77 concert. Proceeds will help finance the Florida tour.



VALENTINE'S DAY SERENADE—MIT Logarhythms serenade Gail Macdonald, administrative assistant in the Student Financial Aid Office. The Logs made their services available to MIT offices on February 14. Money raised through song will help defray expenses of the Logs' spring tour to Florida.

—Photo by Calvin Campbell

This Week in Sports Winter Sports Night

The Alumni Association, AMITA, the MIT Club of Boston and the department of Athletics are co-sponsoring a Winter Sports Night at the du Pont Athletic Center tonight. A buffet supper will be available on Court No. 3 in the du Pont Gym from 5:30 to 8:00pm. All you can eat for \$3.25 (foot-long hotdogs, soft drinks, beer, etc.). It is not necessary, however, to attend the buffet. After 8:00pm, hotdogs and soft drinks will be available in Rockwell Cage. The schedule of events is as follows:

5:30-8:00	Buffet supper	duPont Gym Court 3
7:00-8:00	Gymnastics Exhibitions by Men's and Women's Teams	duPont Gym Court 1
7:00	Hockey vs. Nichols	Ice Rink
	Men's and Women's Fencing vs. W.P.I.	duPont Fencing Room
	Rifle vs. Harvard	duPont Shooting Range
	MIT Varsity Squash vs. MIT Faculty "B" Team	duPont Squash Courts
8:00	Wrestling vs. Springfield	duPont Gym Court 2
8:15	Men's Basketball vs. Suffolk (JV game at 6:15)	Rockwell Cage

Men's Basketball

After losing their game in overtime to Nichols last Tuesday night, the MIT men's basketball team came back to win Saturday night's game with Gordon 99-56. This gives the Tech team a 6-10 season record with only five games left to play.

The Tech team trailed Nichols 29-34 at the half but by the end of the second half the score was tied at 66-66. Although the teams were evenly matched, Nichols was able to squeak by the Tech hoopmen with a final score of 80-79. High scorers in the game were senior Captain Pete Maimonis (Brookline, Mass.), junior Rich Van Etten (Brandon, Fla.), freshman Ray Nagems (San Diego, Cal.) and senior John Cavolowsky (Dedham, Mass.).

In last Saturday night's game at MIT, the Tech team overpowered Gordon College 99-56. MIT led 47-28 at the half and piled up 52 more points in the second half. Gordon didn't have a chance in this game. High scorers again were Chavolowsky with 22 points and Nagem and Maimonis with 21 points each.

Tech meets Suffolk University tonight at 8:15 in Rockwell Cage.

Men's Gymnastics

The MIT men's gymnastics team brought home their first win of the season against the University of Vermont. The Tech team accumulated a score of 152.25 to Vermont's 118.35.

Top performances were turned in by junior Co-Captain John Troiani (Bryn Mawr, Pa.) with a 7.6 in floor, sophomore John Felleman (Sudbury, Mass.) 5.5 on the sidehorse, and junior Larry Yablong (Wilmette, Ill.) with a high score of 8.05 on the rings. MIT dominated the vaulting with senior Co-Captain Dave Lu (Bethesda, Md.) receiving an 8.9 for his performance. High scorer on the parallel bars was freshman Hrvoje Petek (Buffalo, N.Y.) with a 6.6 and on the high bar it was Dave Lu again with a score of 6.5.

Women's Gymnastics

The women's gymnastics team also brought home their first win of the year last Saturday against Mt. Holyoke. In the extremely close three-way match held at MIT, the Tech team scored 90.0 points, topping Mt. Holyoke's 85.3 score but bowing to Northeastern's high score of 94.35.

Sophomore Elaine Sears (Sudbury, Mass.), who qualified for the Easterns in the uneven parallels last year, may be on her way again. It takes a minimum of two 8 point or better scores to qualify for the Eastern Championships. In Saturday's meet she received a score of 8.3 on the bars. She has two regular season meets left in which to get her second 8.06+ score.

The women's gymnastics team, in only its second year of varsity competition, has improved much this season under the direction of Coach Jane Betts. MIT's best seasonal performances came during the Mt. Holyoke-Northeastern meet. The strongest team event was the balance beam. Strong performances with very few faults were given by junior Captain

Helen Miyasaki (Ft. Eustis, Va.), sophomore Elaine Sears and senior Joan Hughson (Wakefield, Mass.).

There will be a men's and women's gymnastics exhibition tonight at 7:00pm in the duPont Gym. The Tech women's gymnastics team's next competition will be this Saturday against the University of Maine (Orono) at Salem State.

Hockey

The MIT hockey team (10-4-1) just secured their first winning season in over a decade. The Tech team trounced Assumption (one of the leading teams in Div. III) with a score of 7-1. Earlier that same week, MIT was victorious over Curry College 2-1.

Sophomore center Dave Tohir (Bethel Park, Pa.) made the hat trick in the Assumption game. Frosh defenseman Al Strong (Troy, N.Y.) had two goals in this game, giving him a total of 11 goals this season, four of them game-winners. Sophomore wing Kevin Dopart (Fall River, Mass.) also brought in two goals. Junior goalie Dan Costa (Fairbanks, Alaska) made 44 saves in Saturday night's game and graduate goalie Paul Estey (Toronto, Ontario) now leads Division III in all-time goals against an average of 2.57.

The MIT hockey team has only four games left in their regular season and they have already beaten Fitchburg State, Clark and Bunker Hill once before, earlier in the season. They meet Nichols College tonight at 7:00 at MIT.

Track

MIT's indoor track team (8-1) completed their best season since the 1971 squad posted a 6-1 mark. The track men wrapped up their dual/triangular meet season by overpowering Bates College 77-36. Bates had just edged Bowdoin College (MIT's loss) the week before by one point for the Maine Collegiate Championship.

Once again, MIT was paced by triple winner senior Rich Okine (Aflao, Ghana), 50 yd. dash, 45 yd. high hurdles and the triple jump. Senior Co-Captain Frank Richardson (Sac City, Io.) scored a double win in the mile and two-mile. Records were set by junior Reid von Borstel (Edmonton, Alberta), varsity high jump 6'7 $\frac{3}{4}$ " and a new freshman standard was set by Jim Turlo (Belmont, Mass.) 6'6 $\frac{3}{4}$ ". MIT's qualifying individuals are next slated for action in this Saturday's Annual Eastern Intercollegiate Championships at Tufts.

Wrestling

The MIT wrestling team (5-11) overpowered the Boston State team last Saturday 25-11. Sophomore Norm Hairston (Gary, Ind.) moved up to the 126 lb. class, beating his opponent 7-5. Hairston's season record is now 12-3. Senior Co-Captain Werner Haag (Trenton, N.J.) won an 8-1 decision over the Boston State man in the 142 lb. weight class. Haag is now 8-2-2 in regular season competition.

The Tech Team meets perennial power Springfield in their last regular season match in 8:00 in the duPont Gym tonight.

Brock Paintings At Faculty Club

Recent non-objective acrylic paintings by Anne H. Brock of Medfield are on view at the MIT Faculty Club through February.

The paintings are characterized by sweeping arcs of color, a delicate transparency, and depth. Many were inspired by nature.

"They all seem to evoke a landscape-like quality," Mrs. Brock said of her paintings. "Color and motion are the two characteristics I really work on. I start with three basic colors and white, and the paintings grow from that. Each design is three-dimensional in concept. I'm always conscious of the way design is working in depth."

The paintings are all acrylic on bristol board, canvas, or masonite. Several incorporate collage.

Mrs. Brock received the AB degree in art from Brown University in 1951 and took affiliated courses at the Rhode Island School of Design. She has also studied drawing and painting at the School of the Museum of Fine Arts and at Castle Hill Center for the Arts in North Truro.

This is her second exhibit at the MIT Faculty Club. In 1976 she was part of a three-woman show at Off The Square Gallery in Cambridge, and for several years she has shown her work at the Medfield Community Art Exhibit. In 1972 and 1973 she participated in the Massachusetts Federated Women's Clubs Exhibits, winning first prize in oils in 1972.

Mrs. Brock is a member of the Wellesley Society of Artists and The Copley Society.

Forum to Hear Hottel, Michaels

Hoyt C. Hottel, professor of chemical engineering, emeritus, and Harvey Michaels, '74, will speak at the Cambridge Forum lecture series this month.

Mr. Michaels, assistant to the director of the Energy Policy Office of the Commonwealth of Massachusetts, will address the topic, "Should We Switch to Solar Energy?" on Feb. 16. On Feb. 23, Professor Hottel, a noted authority on solar energy and director of the MIT Fuels Research Laboratory for 35 years, will speak on "Should We Have Solar Heated Housing?"

The forum is open to the public without charge. It is held every Wednesday evening at 8pm at 3 Church Street, Harvard Square.