

October 4-5

7 Leaders in Science to Gather For Fairchild Building Dedication

By ROBERT Di IORIO
Staff Writer

Seven men of science whose work has helped shape our time will participate Thursday and Friday, Oct. 4 and 5, in ceremonies dedicating MIT's new Sherman Fairchild Electrical Engineering and Electronics Complex, where work that will shape our future is already under way.

Participating in a symposium at 8pm Thursday in Kresge Auditorium will be the six men who have served as presidential science adviser—the post introduced by President Eisenhower in 1957.

A capacity audience is expected at the symposium, the first forum at which all six former presidential advisers will participate. However, some limited seating will be available in Kresge and arrangements have been made for closed-circuit television coverage. Viewers will be placed in the Kresge Auditorium foyer and in Lobdell Dining Hall in the adjacent Student Center.

In addition, WGBH-TV, Channel 2, will videotape the two-hour symposium. The station has announced it plans to broadcast the program at 4pm Sunday, Oct. 7.

Speaking at a luncheon Friday following the meeting of the MIT Corporation will be Dr. H. Guyford Stever, whose duties as director of the National Science Foundation have been expanded to include counselling the President on science matters. Dr. Stever, former president of Carnegie-Mellon University, served MIT for many years as professor, department head and associate dean of engineering.

The \$17.5 million Sherman Fairchild Complex, which will house



David



DuBridge



Hornig



Killian



Kistiakowsky



Stever



Wiesner

the Department of Electrical Engineering and the Research Laboratory for Electronics, is the largest single building project to be completed at the Institute since the present Cambridge campus was built in 1916.

The complex bears the name of the late Sherman Fairchild, the inventive genius and industrialist who was the founder and chairman of the board of Fairchild Camera and Instrument Co. and Fairchild Industries, Inc. He died in 1971. The building was made possible by a \$4 million grant from the Fairchild Foundation.

The Thursday symposium involving the former presidential science advisers—five of whom have present or former connections with MIT—is titled: "High Technology for a Livable World."

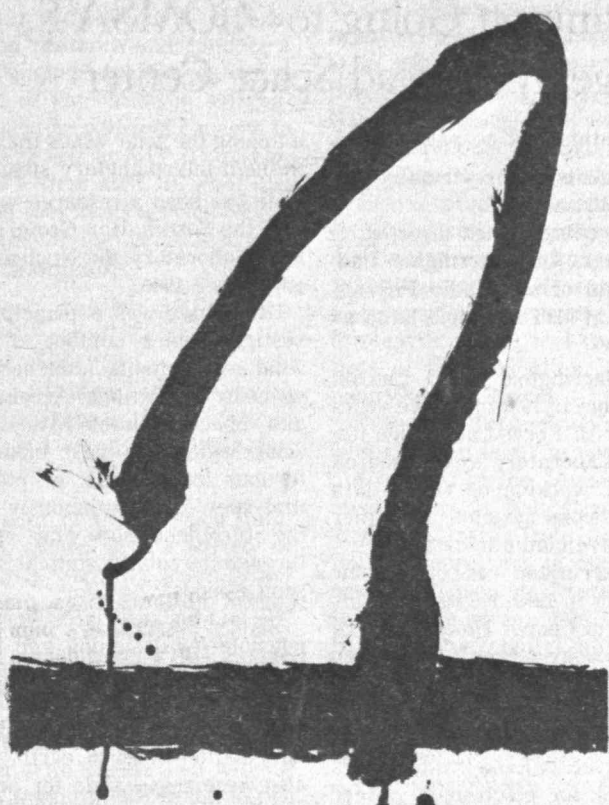
Host and chairman for the symposium will be Dr. Jerome B. Wiesner, president of MIT, who was science adviser to Presidents John F. Kennedy and Lyndon B. Johnson from 1961 to 1964.

The other participants will be: —James Rhyne Killian, Jr., honorary chairman of the MIT Corporation and head of the Corporation's Development Committee. He was the first presidential science adviser, serving from 1957-1959.

—Dr. George B. Kistiakowsky, professor emeritus of chemistry at Harvard University and visiting scholar at MIT's Center for International Studies, presidential adviser from 1959-1961.

—Dr. Donald F. Hornig, presi-

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Roots of Abstract Art in America 1910-1930
National Collection of Fine Arts Dec. 2 through Jan. 9, 1966
Constitution Avenue at 10th Street, Washington, D.C.

Robert Motherwell's lithograph, *Roots of Abstract Art in America*, is one of the graphic works available for loan to MIT students through the Stratton Collection lottery.

Students to Share Great Art Through New 'Loan Lottery'

Some 60 original prints from MIT's Catherine N. Stratton Collection of Graphics will be available for loan to students following an exhibition in the Student Center West Lounge beginning Monday, Oct. 1.

Such noted 20th Century artists as Calder, Arp, Miro and Stella are included in the collection which will be on display daily from 10am to 4pm through Thursday, Oct. 4.

Students may register first, second and third choices for prints on cards which will be provided. The drawing will take place after the exhibition has closed and winners will be notified Thursday evening.

The prints will be available for pickup Friday, Oct. 5, from 10am to 2pm in the West Lounge. Complete instructions for caring for the art works will be provided with each print.

Only full-time, officially registered MIT students may participate. Each student to whom a print is loaned must complete a loan form and contract agreeing to full responsibility for the art work.

Prints will be recalled during the week of May 13-17, 1974. Students will be billed for the replacement value of the print and/or frame if damage occurs during the period of the loan.

The graphics collection was established in 1966 and named for Mrs. Stratton, wife of MIT's eleventh president, Dr. Julius A. Stratton, as a tribute to her deep interest in the visual arts and their growth at the Institute. The collection is maintained by the Committee on the Visual Arts.

Harrington Going to COMSAT, Bridge Will Head Space Center

Dr. John V. Harrington of Lexington is taking a leave of absence as director of MIT's Center for Space Research to join the Communications Satellite Corporation (COMSAT) in Washington and Dr. Herbert S. Bridge of Sudbury has been appointed acting director beginning Nov. 1.

The announcement was made by Dr. Albert G. Hill, MIT vice president for research.

Dr. Harrington, who has been elected vice president for research and engineering by the COMSAT board of directors, is an internationally known communications

specialist.

He has been director of the MIT Center for Space Research since its establishment in 1963, the same year he was appointed professor in the Departments of Electrical Engineering and Aeronautics and Astronautics.

Dr. Bridge, a professor of physics who is widely known for his pioneering measurements of the interplanetary plasma, has been associate director of the Center since 1964.

The Center has served as a campus focal point for space-related research by faculty, staff

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Underwood-Prescott Award

Government Land and Water Use Policies Jeopardize Food Output, Scientist Warns

Government policies and regulations on land and water use are jeopardizing the nation's traditional ability to produce food in abundance, a prominent food scientist said yesterday (Sept. 25) in a talk at MIT.

Walter A. Mercer, vice president of the National Canners Association and director of its Western Research Laboratory, called for a federal land use program that would "preserve and if necessary subsidize the necessary acreage for food production as need and demands change." He also suggested "long-term land use" planning to consider the best uses of land to serve all needs.

Mr. Mercer, at MIT to receive the 1973 Underwood-Prescott Memorial Award, said that food production "is threatened by the misplacement of priority values on the use of land and water." These policies, he said, have given over increasing amounts of land

and water resources to the "highways, shopping centers and service facilities that go with urbanization."

It must be recognized "by the public, and the promulgators of laws and regulations," Mr. Mercer said, "that the first responsibility of the farmers and food processors of this nation is the production and distribution of wholesome, nutritious foods in supplies adequate for the pleasure and welfare of the consumers at home, and to supply the emergency needs of others in the world who are yet dependent on the harvest from our land."

"For this," he added, "enough land and water must be available now—and in the future."

Mr. Mercer also criticized what he said was a recent change in government policy reducing to a "low priority" the irrigation of new lands for agricultural use.

He said this was "tragically in-

congruous with the need to utilize to the fullest our ability to produce an abundance of food as a means of promoting American security and extending peace and freedom throughout the world."

Dr. Walter A. Rosenblith, MIT Provost, presented the 1973 Underwood-Prescott Memorial Award to Mr. Mercer at a luncheon attended by some 250 food scientists and food industry leaders. George C. Seybolt, president of Wm. Underwood Co., Watertown, Mass., introduced Dr. Rosenblith. The award included an honorarium and an illuminated scroll.

Following the luncheon, Mr. Mercer was the principal speaker at the Underwood-Prescott Symposium on "Ecology, the Environment and the Food Industry—New Horizons and Hazards in Resource Management." Other panelists included Mr. Evan F. Binkerd, vice president and director of re-

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Food Scientist Urges Land Use Program To Preserve Food Production Capability

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search, Armour Food Company, Oak Brook, Ill.; Dr. Robert J. Dimler, area director of the US Department of Agriculture's Northern Regional Research Laboratory, Peoria, Ill.; and Dr. Robert S. Timmins, president of Abcor, Inc., Cambridge, Mass.

Mr. Mercer was selected for the 1973 award by an MIT Department of Nutrition and Food Science faculty committee headed by Dr. Samuel A. Goldblith, Underwood-Prescott Professor of Food Science and associate head of the department. The committee cited Mr. Mercer "in recognition of your contributions to the field of food science with particular reference to canning in general and conservation of water supplies in particular."

The award honors the memory of William Lyman Underwood, grandson of William Underwood, founder of the Wm. Underwood Co., of Watertown, Mass., America's oldest food canner; and Dr. Samuel Cate Prescott, the first dean of the MIT School of Science. In one of the early industry-university research partnerships, they were the first to establish, in 1895, that spoilage in canned foods was due to bacteria, and they developed the temperature and time guides necessary to destroy the spore-forming organisms responsible for the spoilage.

In his Underwood-Prescott address entitled "Water Supply in Food Production and Food Manufacture and its Role in the Economy of Our Food Supply," Mr. Mercer said, "The question which must be answered now is whether or not this nation can regain, and then continue, its ability to produce the food surpluses which have been the basis for export sales, the ability to respond to the needs of hungry nations, and most importantly, the basis for the promise that we at home need never go hungry for lack of food production by our farmers and food processors."

At least 2000 pounds of water is required for the growing, preparing and processing of the food used in each meal set before an American family, Mr. Mercer said. "The consumers of this nation demand this abundance of food, and that it be available at reasonable prices."

"How strange then," he added, "that state and federal agencies can be pressured by politicians and self-appointed consumer advocates into promulgating regulations which hamper the production of food—and because of the economic impact of such regulations—increase the cost of food to consumers."

Mr. Mercer said there is great concern at the farmer's faltering confidence that he can continue to cope with "the capricious propagation of government controls in the face of his never-ending gamble with the weather, insects and disease, and the vacillations of the law of supply and demand."

Each year, he said, acres of valuable agricultural land once used in food production fall to urbanization. In the face of this decrease in the land area available for the production of food and fibre, Mr. Mercer said, the world's population continues to increase and more people mean greater demands for food.

"Planning for the maximum development of our water and land resources, for the longtime benefit of the greatest numbers of people at home and in the world," Mr.

Mercer said, "must bring together the farmer, the food processor, the urbanite and all others who are, consciously or not, dependent on the food that must come from the intelligent and protective planning for use of our water and land resources."

It is recognized, he said, that land must be used for recreational development, industrial dispersal, highways, airports, other service facilities "and the amenities of living demanded by an ever more affluent society."

"But," he added, "the location of all such uses must become a part of a long-term land use pattern that can best serve all needs."

"Obviously," he warned, "continuous encroachment on prime agricultural land will endanger the nation's ability to produce adequate food and fibre."

Mr. Mercer also cautioned that the matter of environmental control regulations has the potential for serious economic impact on the preservation of food by canning and freezing. He character-

may not be needed now or at any time."

The food processing industry, he said, is entirely dependent on an adequate supply of good quality water needed in the canning and freezing of foods. Today water conservation procedures developed by industry-supported research permit an estimated 73 percent reuse of processing and container cooling waters in the canning and freezing of foods.

Present and contemplated research point to a further reduction of the food processing industry's dependence on water and its contribution to environmental problems, Mr. Mercer said. "With its trained scientists and well-equipped laboratories," he said, "the food industry can solve the technological problems involved in the use of water and the management of its liquid and solid wastes."

"However," he added, "in some cases these technological solutions cannot come quickly enough to



Underwood-Prescott symposium participants at news conference Tuesday. From the left: Walter A. Mercer, 1973 Underwood-Prescott Memorial Award recipient; Dr. Robert J. Dimler, Evan F. Binkerd and Dr. Robert S. Timmins.

ized the food processing industry as economically vulnerable to "suddenly imposed, excessively restrictive environmental controls" because it is highly competitive, operating on a relatively low-profit margin and a low return on invested dollars.

"Although environmental controls can reduce pollution to any arbitrarily-established low level," Mr. Mercer said, "the central question is whether or not the reduction is worth the cost."

"The government and the people," he said, "must balance the desirability of lower and lower pollution levels against the undesirability of food plant bankruptcy, higher and higher prices for domestically processed food, and the use of natural resources for pollution abatement which

prevent the loss of food plants unable to survive the economic crunch which will result from compliance with proposed environmental controls."

Mr. Mercer said there are no simple, trauma-free solutions to today's social and economic problems. "Fisherman, farmer, food processor, housewife, ecologist and government worker, all must live in a common pool being ever narrowed by population and industrial growth."

"Surely," he said, "if we are to hold together the availability of those resources which are essential to our continued welfare, we must learn to work together in setting priorities on the development and management of our water and land, and the food which these can produce."

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dent of Brown University, presidential adviser from 1964-1969.

—Dr. Lee A. DuBridge, former president of California Institute of Technology and former head of MIT's wartime Radiation Laboratory. He was presidential adviser in 1969 and 1970.

—Dr. Edward E. David, Jr., director and executive vice president of Gould, Inc., presidential adviser from 1970-1973. Dr. David received a master's and doctor's degree from MIT in 1947 and 1953, respectively.

Activities Friday will begin with tours and an open house at the Sherman Fairchild Complex, 50 Vassar St., from 9:30 to 11:30am.

The formal dedication ceremony will begin at 3pm on the plaza of the Sherman Fairchild Complex, weather permitting. The alterna-

tive location is Kresge Auditorium. Dr. Howard W. Johnson will preside.

Presentation of the building will be made by Walter Burke, president of the Fairchild Foundation. Dr. Wiesner will accept on behalf of the Institute.

The dedication address will be made by Dr. Julius A. Stratton, MIT president emeritus. Both Dr. Wiesner and Dr. Stratton are former directors of the Research Laboratory of Electronics.

An open house and tours from 3:45 to 6pm will conclude the ceremonies.

Woodwinds on Air

A weekly classical music program, "Festival for Woodwinds," will premier on WTBS Radio, 88.1 FM, tomorrow night (Sept. 27) at 9:30pm.



Professor Bridge



Professor Harrington

Harrington Going to COMSAT, Bridge Will Head Space Center

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and students from virtually all MIT departments.

Before being named director of the Center, Dr. Harrington had been head of the Radio Physics Division at MIT's Lincoln Laboratory.

Dr. Harrington joined Lincoln Laboratory in 1951 after five years with the Air Force Cambridge Research Laboratory as a research engineer working on radar data transmissions systems and other microwave communications.

Dr. Harrington was born in New York City in 1919. He received his BEE from Cooper Union Institute of Technology in New York in 1940, an MEE from the Polytechnic Institute of Brooklyn in 1948 and a ScD from MIT in 1957.

He served with the United States Navy as an electronics officer during World War II.

Dr. Harrington is a member of several professional societies and has been awarded the Air Force Medal for Exceptional Civilian Services and the Cooper Union Citation for Exceptional Professional Achievement. He is a Fellow of the Institute of Electrical and Electronics Engineers.

Dr. Harrington and his wife, the former Frances Cullinane, of Elizabeth, N.J., have five children and two grandchildren. They live at 10 Loring Road, Lexington, and plan to move to the Washington area at the end of October.

Dr. Bridge, an expert in the fields of cosmic rays and space physics, has had a key role in

Fortran, OS/TSO Courses Offered

Introductory courses in Fortran and OS/TSO will be offered by the Information Processing Center in October.

The single-session introductory Fortran course is scheduled for October 1, 2, 3, 5, 9, 11, and 12 in Room 39-530 from 9:30 to 11am. Fee is \$5.

The single-session OS/TSO course, which will be an introduction to the uses of the IBM System 370, will be held October 15, 17, 19, 24 and 26 in Room 39-530 from 11:30am to 12:30pm. Fee is \$5.

Irene M. Ezer, 39

Irene M. Ezer, 39, of Brookline, an Institute employee for 20 years, died unexpectedly on Tuesday, Sept. 18.

Miss Ezer who had recently been promoted to assistant to the Registrar in the Schedules Office, leaves two sisters, Alice Goodman of Brookline and Adele Bassin of Newton.

mapping the solar winds that blow through interplanetary space.

He has been a research worker with the Cosmic Ray Group of the MIT Laboratory for Nuclear Science since 1946.

Dr. Bridge was a principal investigator in a number of solar wind experiments launched into space by the National Aeronautics and Space Administration. The solar winds are vast clouds of tenuous ionized gas, or plasma, that spew out continuously from the turbulent sun and spread through the solar system at supersonic speeds.

He and his associates were responsible for designing and building devices to detect the speed, direction, energy and density of the particle clouds and transmit the information back to earth. They also were responsible for analyzing the data.

Dr. Bridge was born in Berkeley, Calif., in 1919. He received a bachelor of science degree from the University of Maryland in 1941 and was a member of the research staff at the Los Alamos Scientific Laboratory in New Mexico from 1943 to 1946, when he joined the Cosmic Ray Group at MIT headed by Professor Bruno Rossi. Dr. Bridge received a PhD in physics from MIT in 1950.

In the academic year 1957-1958, he was a visiting scientist at CERN, the European center for high energy physics research located near Geneva, Switzerland. He is a member of the American Physical Society.

Dr. Bridge is married to the former Jeanne Hall of Washington, D.C. They have three children and live at 258 Pelham Island Road, Sudbury.

TECH TALK

Volume 18, Number 12
September 26, 1973

Tech Talk is published 50 times a year by the News Office, Massachusetts Institute of Technology. Director: Robert M. Byers; Managing Director: News Office Publications: William T. Struble; Assistant Directors: Joanne Miller, Margo Foote (Photojournalist); Charles C. Ball, Dennis L. Meredith, Robert C. DiIorio; Business Manager: Paul E. Johnson; Reporters: Sally M. Hamilton; Damon P. Wright; Calendar of Events Want Ads: Susan E. Walker.

Address news and editorial comment to MIT News Office, Room 5-111, Massachusetts Institute of Technology, Cambridge, Ma. 02139. Telephone Ext. 3-2701 through 3-2707.

Mail subscriptions are \$5 per year. Checks should be made payable to MIT and mailed to Business Manager, Room 5-122, MIT, Cambridge. Telephone Ext. 3-3676.

Tech Talk is distributed free to all members of the MIT community. Additional copies are available in the Information Center (Room 7-111) or the News Office (Room 5-111). Large numbers of additional copies should be requested within two weeks of the issue date.

New Division's Quest: How People Learn

Division for Study and Research in Education Formed

By JOANNE MILLER

Staff Writer

How people learn and how the "how" affects what they learn is at the heart of MIT's new Division for Study and Research in Education, (DSRE) launched this fall as a new academic activity.

Establishment of the Division formally recognized MIT's long standing commitment to educational research and innovation. In its initial year the Division will have a three-pronged program: it will offer eight elective subjects, carry on research and conduct a broad-ranging seminar on some aspects of innovation in alternative education styles of concern to various groups at MIT. This seminar is a first step in what the Division sees as its service role to the needs of the Institute's academic community.

In some respects the Division supersedes, the Education Research Center (ERC). Most projects of ERC have either been located elsewhere in the Institute or transferred to other neighboring institutions.

The staff of the Division numbers 16, drawn from a variety of disciplines. Six have primary appointments at the Division, four of these with secondary departmental appointments. Six others have primary departmental affiliations and secondary appointments at the Division. Two are associated with the division without formal appointments to it and two are guests.

The primary staff includes: Professor William T. Martin, director, DSRE and mathematics; Professor Seymour A. Papert, DSRE and mathematics; Profes-

or Benson R. Snyder, DSRE and the School of Architecture and Planning; Malcolm R. Parlett, visiting associate professor DSRE; Jeanne S. Bamberger, research associate DSRE and humanities (music); Richard M. Guttmacher, executive officer DSRE.

The affiliated members are: Jerrold R. Zacharias, Institute Professor Emeritus; Professor Wilbur B. Davenport, School of Engineering and DSRE; Professor Donald A. Schon, urban studies and planning and DSRE; Edwin F. Taylor, senior research scientist in physics and DSRE; Ira P. Goldstein, assistant professor of electrical engineering and DSRE; Harold Abelson, instructor in mathematics and DSRE.

Also associated are Judah L. Schwartz, professor in the School of Engineering and Susan Carey, assistant professor of psychology. The guests are Professor Robert Karplus of the University of California (Berkeley) and George A. Hein of the Education Development Center, Newton.

"The joint appointments," Professor Martin said, "are central to the concept of the Division as a mechanism to synthesize knowledge and energy from within the Institute necessary to establish a coherent education research effort. At the same time, the continuing departmental affiliations emphasize the Division's intent to be closely integrated with the regular academic programs at MIT."

Professor Martin, former head of the Department of Mathematics and former chairman of the faculty, has been interested in educational innovation for many years. Since 1961 he has served with groups developing mathematics and science programs in Africa.

For the past year Professor Martin has been chairman of the Education Division Steering Committee, which did the comprehensive planning for bringing Division into being.

Professor Papert, who is also co-director of the MIT Artificial Intelligence Laboratory, has conducted extensive research—using computers—on how children learn. He came to MIT in 1963 after completing the PhD degree at the University of Cambridge, England, and postdoctoral studies in epistemology and cybernetics at several European universities. He also was a member of the Steering Committee.

Professor Snyder first came to MIT as psychiatrist-in-chief in 1959, and served as Dean for Institute Relations from 1969 to 1972. He conducted a long-range study of the interaction between the individual student and the educational institution resulting in a book, *The Hidden Curriculum*, published in 1970 by Alfred A. Knopf, Inc. Professor Snyder was a member of the Education Division Steering Committee.

Professor Parlett has been active in educational innovation both at MIT and in Europe. Most recently he has been a consultant to the Committee on Educational Policy at MIT and a member of the advisory committee of the Nuffield Foundation Higher Education Learning Project. He first became associated with MIT through the Education Research Center in 1966.

Mrs. Bamberger is the co-author of *The Art of Listening*, published by Harper and Rowe in 1969, second edition 1972. She was a student of Artur Schnabel and later studied with Roger Sessions while completing her MA degree in musicology and music theory at

the University of California, Berkeley. She has been a lecturer in music at MIT and associated with the Artificial Intelligence Laboratory since 1971.

Mr. Guttmacher was formerly associated with the Education Research Center, first as special assistant to the director and, since 1970, as executive officer. A graduate of George Washington University, he was the founder, director, and executive vice president of Bionetics Research Laboratories, Inc., before coming to MIT.

Professor Zacharias, a pioneer in educational reform, was responsible for the creation of a new physics curriculum for high schools and instrumental in development of other high school science programs. He was a member of the President's Science Advisory Committee from 1952-1964 and served as chairman of its Panel on Educational Research and Development from 1961-67. He is a member of the board of trustees of Education Development Center.

Professor Davenport is director of the Center for Advanced Engineering Study (CAES). A specialist in communications, he served for several years as head of the Information Processing Division at Lincoln Laboratory. He became professor of electrical engineering in 1960, was appointed associate head of the department in 1971 and served in that position until his appointment to CAES.

Professor Schon, who has made important contributions to understanding how social and technological changes affect society, joined the faculty in 1968 as a visiting professor. In 1972 he became Ford Professor in the Department of Urban Studies and Planning. Since 1966 he has served as director of the Organization for Social and Technological Innovation (OSTI).

Dr. Taylor, an experimental solid state physicist, has devoted much of his recent work to research and development in educational processes, including self-paced study and innovative teaching materials and formats. He is the principal investigator of a new introductory course in physics developed under an NSF grant, and is editor of *The American Journal of Physics*.

Professor Goldstein has been associated with the Artificial Intelligence Laboratory in development of monitors which understand and debug programs. His research has centered on interactive systems as they are used by both children and college students. He first came to MIT in 1969 as a teaching assistant.

Dr. Abelson is a mathematician who received his PhD from MIT in June. While still an undergraduate at Princeton University, he was the co-author of *Calculus of Elementary Functions*, a text for high school students. As a graduate student at MIT, he became interested in the Artificial Intelligence Laboratory where he has worked to create mathematical environments for children.

Dr. Schwartz was named in January to a new professorship concerned with teaching reform and infusing greater coherence among engineering, science, social concerns and humanism in the School of Engineering. Prior to that he had been a staff member at the Education Research Center and a senior research scientist in the Department of Physics.

Professor Carey is a specialist in cognitive processes. She was a re-



Sara Jane Neustadt, a former engineering writer at the University of Illinois, Champaign-Urbana, has been named an assistant editor of *Technology Review*. Miss Neustadt, a native of Rockford, Illinois, received her BS degree in advertising from the University of Illinois in 1971, and her MS degree in advertising in August, 1973. She is the former editor of the University of Illinois monthly bulletin of engineering research.

Council to Host Foreign Students

MIT Professor Paul A. Samuelson, Nobel Prize-winning economist, will be guest speaker at a party honoring incoming foreign graduate students and their wives to be hosted by the Graduate Student Council on Sunday, Sept. 30, from 4:30-6:30pm in the Sala de Puerto Rico. Professor Samuelson will speak informally about the American economy.

This year the annual party will welcome over 300 foreign graduate students from 63 countries. President Jerome B. Wiesner, department heads, deans and administrative staff are also expected to be present.

Disciple to Visit

Mahatma Gurucharanand, a close disciple of Guru Maharaj Ji, will follow a series of Boston area lectures with two, day-long programs of meetings with MIT students interested in the teachings and knowledge of Guru Maharaj Ji, on Thursday and Friday, Sept. 27, 28, in the Sala de Puerto Rico.

search assistant at the Harvard Center for Cognitive Studies from 1964-67 and later a teaching fellow and instructor while completing her graduate studies. She came to MIT in 1971 as an instructor in psychology and was appointed to the faculty as an assistant professor in 1972.

Dr. Karplus is professor of physics and associate director of the Lawrence Hall of Science at the University of California at Berkeley. He has achieved national prominence as a leader in science curriculum development at both elementary and collegiate levels and is the author of numerous publications and books in the field.

Dr. Hein is area director for the open education program at Education Development Center. From 1969-71 he was an associate professor in the School of Education, Boston University. He has lectured widely on educational innovation and has conducted numerous teacher workshops.

MIT Student is Frisbee Distance Champ

John Kirkland, 26, of Orlando, Fla., begins his senior year at MIT as the international frisbee champion for distance throwing.

Kirkland, who is in the interdisciplinary science program, won the championship at a meet in Houghton, Mich., Sept. 1 and 2. An estimated 500 competitors, including some from Europe, took part.

Another MIT student, Douglas McCrae, 19, of Melrose, Mass. and also a senior in interdisciplinary science, competed unsuccessfully.

Kirkland won the Julius T. Nachazel Memorial Trophy—named for a retired faculty member at Michigan Technological University—for distance throws of 102 yards right handed and 85 yards left handed. Both were record breaking lengths but another finalist immediately exceeded the right handed distance. The trophy rewarded the combined distance.

An avid frisbee player since 1956, Kirkland has a collection of 75 flying discs, including a rare "Mars Platter." He takes the game seriously and is studying the fluid dynamics of designing the optimal frisbee.

He also plans to establish an "Ultimate Frisbee Team" at MIT to compete against universities like Princeton, Rutgers and Yale where such teams already exist. Good frisbee players at MIT are invited to call Kirkland at 782-1202.



John Kirkland winds up for a frisbee toss.

—Photo by Margo Foote

THE INSTITUTE CALENDAR

September 26
through
October 5

Events of Special Interest

Computer-Controlled Solid-Waste Sorting*

Developed at MIT under EPA sponsorship, this process will be described in a movie and then shown in operation. Tues, Oct 2, movie 5pm, Rm 9-550; operation, 5:30pm, Bldg 31.

Welcoming Party—Foreign Students and Wives

President Jerome Wiesner and Prof. R. Samuelson will speak. Sun, Sept 30, 4:30-6:30pm, Sala de Puerto Rico. Students only.

Seminars and Lectures

Wednesday, September 26

The Optimal Finite Preview Problem and its Application to Man-Machine Systems*

Masayoshi Tomizuka, mechanical engineering. Mechanical Engineering Doctoral Thesis Seminar. 11am-1pm, Rm 3-444.

Kinetic Theory of Thermal Fluctuations in Fluids

Prof S. Yip, nuclear engineering. Nuclear Engineering Doctoral Seminar. 2pm, Rm 24-121.

Physical Processes in an M.H.D. Laser*

Andrew Lowenstein, aero/astro. Aero/Astro Doctoral Seminar. 3pm, Rm 33-206.

Myth and Knowing*

Prof. Jerome Lettvin, biology, electrical engineering, RLE. Concourse Forum. 3-5pm, 10-105 (Bush Rm).

Flow Measurement by Electro-Optic Techniques*

Dr. T. S. Durrani, research fellow, Southampton University, U.K.; Dr. C. Greated, Director of Fluid Dynamics, Edinburgh University, U.K. Nuclear Engineering and ANS Student Branch Seminar. Recent research results in fluid flow measurement using photon correlation methods on conventional laser Doppler Systems. 3:30pm, Rm NW12-227. Coffee.

Transcendental Meditation*

Bruce Lester trained instructor. Students International Meditation Society. Technique of Transcendental Meditation as taught by Maharishi Mahesh Yogi. 7:30pm, Stu Ctr Mezzanine Lge. Free.

Thursday, September 27

Bogolubov Equation—First Approximation for Real Gases*

Dr. Jury D. Nagornykh, research fellow, aero/astro. Aero/Astro Seminar. 3pm, Rm 33-206.

Hydrofoil Design For Minimum Control Power*

Dr. Paul Remington, Bolt, Beranek & Newman, Inc. Interdepartmental Acoustics Seminar. 4pm, Rm 5-134. Coffee, 3:30pm, Miller Rm (1-114).

Electro Potential Response in Isolated Dog Hearts*

Dr. Meyer-Waarden, Institute for Biomedical Engineering, Universität Karlsruhe. Biomedical Engineering Seminar. 4:15pm, Rm 37-186. Coffee, 4pm.

Attempts to Find High Temperature Superconductors

Prof John Bardeen, University of Illinois. Physics Colloquium. 4:30pm, Rm 26-100. Coffee, 4pm, Rm 26-110.

Friday, September 28

A Transportation Policy for the U.S.

Prof Secor Browne, aero/astro, former chairman CAB. Center For Transportation Studies Luncheon/Seminar Series. 12n, Stu Ctr Mezzanine Lge. Buffet lunch served to members. Fee \$2.

Temperature Fluctuation (Flickering) on Catalytic Wires and Gauzes*

Dan Luss, University of Houston. Faculty Visitation/Chemical Engineering Seminar. 2pm, Rm 54-100. Coffee after, Rm 12-011.

Future Trends in Electric Power

Harold Lurie, Director of Research and Development, New England Electric System, Westboro. Mechanical Engineering Seminar. 3pm, Rm 3-133. Coffee, 4pm, Rm 1-114.

Sensitization of the Electron Transfer Through Semiconducting Electrode-Electrolyte Interfaces*

Prof. Karl Hauffe, Institute for Physical Chemistry, University of Göttingen. Center for Material Science & Engineering Colloquium. 4pm, Rm 9-150. Coffee, 3:30pm.

Relativistic Electron Rings for Fusion Confinement**

Prof. H.H. Fleischmann, Cornell University. RLE Plasma Dynamics Seminar. 4pm, Rm 36-261. Freshmen encouraged to attend.

Monday, October 1

What Happens in an Employer Interview?

Staff, Career Planning & Placement Office. Career Seminar. Audio-visual presentation followed by discussion. 3pm, Bush Rm (10-105). Cider & cookies.

Department of Aero/Astro and Its Activities*

Prof Rene Miller, head aero/astro. Aero/Astro Seminar. 4pm, Rm 37-252. Coffee, 3:30pm.

Angular Dislocation in a Half-Space*

Dr. Maria Comninou, mathematics. Applied Mathematics Colloquium. 4pm, Rm 2-338. Coffee, 3:30pm, Rm 2-349.

In Vivo Neutron Activation Analysis

Robert Zemenhof, doctoral candidate, biomedical engineering. Harvard-MIT Program in Health Sciences & Technology/Interdisciplinary Program in Biomaterials Sciences Seminar. 4pm, Rm 37-212.

Ceramic Materials in MHD Power Generation Application

H.K. Bowen, MIT. Metallurgy and Material Science Colloquium. 4pm, Rm 6-120. Coffee, 3:45.

Semi-Empirical Study of Harbor Oscillation With Head Loss at the Entrance*

Prof C.C. Mei, civil engineering. Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics, Civil Engineering Seminar. 4-5pm, Rm 48-316. Coffee, 3:45pm, Rm 48-410.

Tuesday, October 2

Trapped Electron Modes in Linear Geometry

C. Primmmerman, nuclear engineering. Nuclear Engineering Doctoral Seminar. 12n, Rm 38-166.

Commitment: A Christian Science Approach*

Roy J. Linnig, Christian Science Board of Lectureship. 3pm, Rm 3-133.

Solution of Some Non-Classical Linear Quadratic Gaussian Stochastic Decision Problems*

Nils Sandell, Jr., electronic systems lab. Electrical Engineering Decision and Control Science Group Seminar. 4pm, Rm 37-212.

Wednesday, October 3

Finite Element Synthesis Methods

Shi-Tien Yang, nuclear engineering. Nuclear Engineering Doctoral Seminar. 3pm, Rm NW12-222.

Dynamic Range & Signal-To-Noise Ratio Considerations in Digital Representation of High Quality Audio Signals*

F.F. Lee, electrical engineering. Computer Information Processing Group Seminar. 3-4pm, Rm 36-428.

Myth and Knowing*

Prof. Jerome Lettvin, biology, electrical engineering, RLE. Concourse Forum. 3-5pm, Bush Rm (10-105).

Gas-Cooled Fast Breeder Reactors Thermal-Hydraulic Investigations

T. Eaton, nuclear engineering. Nuclear Engineering Doctoral Seminar. 4pm, Rm NW12-222.

Thursday, October 4

Physics—Shorts Talks and Discussions

G. Holton, Harvard University; H. Callen, University of Pennsylvania; C. Whitney, MIT; J. Luttinger, Columbia University; R. Cohen, Boston University. 1:15-4pm, Humanities Seminar Rm, 14E-303.

Solution of Second (Burnett's) Approximation for Mixtures of Gases*

Dr. Jury D. Nagornykh, research fellow, aero/astro. Aero/Astro Seminar. 3pm, Rm 33-206.

Statistical Thermodynamics a Century Ago

M. Klein, Yale University. 4:30pm, Rm 26-100. Coffee, 4pm, Rm 26-110.

Community Meetings

Committee Against Bias in Education*

Meeting, Wed, Sept 26, 7:30pm, Stu Ctr Rm 473.

Orientation to the IPC*

Slide-show tour of the Information Processing Center, outlining services available to the user. Thurs, Sept 27, 3-4pm, Rm 39-530. No registration necessary.

Introduction to FORTRAN**

Non-credit course, Information Processing Ctr. Oct 1, 2, 3, 5, 9, 11, & 12, 9:30-11:30am, Rm 39-530. Open to community with knowledge of fundamental programming concepts. Register, Lynne Penney Rm 39-427, x3-6320. Fee: \$5.

Women's Forum

Speaker: Vice President John M. Wynne, Equal Employment Officer. Mon, 12n, Bush Rm (10-105).

Urban Action Volunteer & Resource Center

Volunteers for community work urgently needed. Mon-Fri, 9am-5pm, Stu Ctr Rm 437, or x3-2894.

Course Evaluation **

Sponsored by TCA & SCEP. Come help out. Info, Robert, 494-8889 evgs, or lve msg at TCA, Stu Ctr Rm 450, x3-4885.

MIT Club Notes and Meetings

Bridge Club

ACBL Duplicate Bridge. Thurs, 6pm, Stu Ctr Rm 407. IMP-scored team games (similar to rubber bridge scoring). Smaller IMP team games, Fri, 9:30pm, & Sat, 2pm, Stu Ctr Rm 407. Club Tournaments, Sat, Sept. 29 & Thurs, Oct 11. Jeff, x3-5285 or 864-5571.

MIT Chamber Music Society*

Meeting, followed by chamber orchestra rehearsal & coaching in small groups. Mon, Oct 1, 7:30pm, Kresge Rehearsal Rm A.

Chinese Choral Society**

Singing. Sun, 3-6pm, Stu Ctr Rm 473.

Classical Guitar Society

Classes, group or private. Mon & Thurs, 5-8pm; Sat, 8am-12n; Rm 1-132, 134, 136. Vo Ta Han, 494-8353.

MIT/DL Duplicate Bridge Club**

Tues, 6pm, Stu Ctr Rm 473. Club Tournaments, Tues, Oct 2. Jeff, x3-5285 or 864-5571.

Women's Gymnastics Club*

Mon-Fri, 5-7pm, Dupont Gym. Info, Ursula, x3-5954.

Hobby Shop**

Mon-Fri, 10am-6pm, Rm W31-031. Fees: \$10/term for students; \$15/term for community. x3-4343.

Judo Club**

Sport and self defense. Mr. M.H. Yanagi, 5th degree Black Belt, chief instructor. Mon, Wed, Fri, 5pm; Sat, 1pm; Exercise Rm Dupont Gym. Beginners welcome. Info, Mike Portnoff, x3-7319.

MIT Karate Club**

Lunch-hour beginning classes, 12n-1pm. Tues, Thurs, Walker, 3rd fl; Wed, Fri, Dupont T-Club Lge. Come twice a week. John Miller, x3-1588.

Kung Fu Club**

Northern Praying Mantis. Tues, Thurs, 7-9pm, T-Club Lge. Info, H.C. Wong, 876-5071.

Outing Club*

Mon & Thurs, 5-6pm, Stu Ctr Rm 461.

Rugby Club**

Practices, Tues & Thurs, 5:30pm, Briggs Field. Games, Sat, 1:30pm, Briggs Field.

Science Fiction Society*

Fri, 5pm, Rm 1-236.

Scuba Club***

First pool session of year. Wed, Sept 26, 8-10pm, Alumni Pool.

Scuba Club**

Compressor hours: Mon, Fri, 4-6pm, Alumni Pool.

MIT Soaring Association*

General meeting & movie, Sunship Game. Thurs, Sept 27, 8pm, Rm 35-225.

Strategic Games Society*

Offers opponents and discounts on merchandise to members plus gaming periodical library. Sat, Sept 29, 1pm-12m, Stu Ctr Rm 473. Call Kevin Slimak.

Student Homophile League*

Discussion group, "Gay life in Boston," Thurs, Sept 27, 8pm, Rm 14E-307; party, Sun, Sept 30, 4pm, Rm 14E-307. The MIT gay phone is still active, 492-7871, Sun-Thurs, 8-11pm (most nites after 12m), for counseling, social activity info, help in "coming out", rapping.

Student Information Processing Board Meeting*

Mon, 7:30pm, Rm 39-200.

Tech Squares***

Western style square dancing. Tues, 8-11pm, Sala de Puerto Rico. Admission \$1, first time free.

Tiddlywinks Association*

Wed, 8-11pm, Stu Ctr Rm 491.

Volleyball Club**

Serious volleyball, and eventual participation in Boston tournaments. Sun (except vacations), 2-4pm, Dupont Gym.

MIT Wheelmen*

Wholesale parts orders placed, racing & touring events planned, informal discussion of everything about bicycling. Wed, 7:30pm, Rm 1-203.

White Water Club**

Pool session. Tues, Oct 2, 8-10pm, Alumni Pool.

MIT Zero Population Growth*

Orientation meeting, with slides and discussion. Tues, Oct 2, 8-10pm, Stu Ctr Mezzanine Lge.

Wellesley Events

Junior Show

Fri, Sept 28, Sat, Sept 29, 8pm, Alumnae Hall.

Piano Concert

Phyllis Moss. Sun, Sept 30, 8pm, Jewett Auditorium.

Augustan Policy and Literature

Sir Ronald Syme. Greek and Latin Dept Lecture. Wed, Oct 3, 7:30pm, Pope Rm.

Social Events

Pot Luck Coffeehouse**

Live entertainment, cider, coffee, donuts. Fri and Sat 8:30pm-12m, Stu Ctr Mezzanine Lge. Performers & others interested in helping out, call Doug, x8766 Dorm. Free.

24-Hour Coffee House*

The MIT 24-Hour Coffee House has re-opened. Inexpensive food, candy, and non-alcoholic drinks are sold. Relax, play games, and read. Open: 24 hours daily, center lge, 2nd fl, Stu Ctr.

Friday Afternoon Club**

Music, conversation and all the cold draft you can drink. Fri, 6pm, the Thirsty Ear, Ashdown basement. Admission: \$1 men, 50 cents women. Must be over 18.

Muddy Charles Pub**

Join your friends for music, beer, wine, snacks, conversation at the Muddy Charles Pub, 110 Walker. Hours: Mon-Fri, 11:30am-2pm and 4-8pm; call GSC, x3-2195.

Movies

Macbeth*

Humanities. Thurs, Sept 27, 7pm, Rm 10-250. Free.

Fiddler On The Roof

LSC. Fri, Sept 28, 6:30pm, 10pm, Rm 26-100. Admission 50 cents. ID's required.

Les Visiteurs Du Soir (Marcel Carne)
Film Society. Fri, Sept 28, 7:30pm, 9:30pm, Rm 6-120. Donation \$1.

DeSade
SCC Midnite Movie. Fri, Sept 28, 12m, Sala. Free, MIT or Wellesley ID. Bring your own blanket.

The Adversary and Documentaries
SANGAM & VSEI. Documentaries: **Taj Mahal, Kashmir.** Sat, Sept 29, 6:30pm, Rm 26-100. Donation \$1.75, proceeds to education program in India.

Woodstock
LSC. Sat, Sept 29, 6:30pm, 10pm, Kresge. Admission 50 cents. ID's required.

Our Man Flint
LSC. Sun, Sept 30, 8pm, Rm 10-250. Admission 50 cents.

Five Easy Pieces
LSC. Fri, Oct 5, 7pm, 9:30pm, Rm 26-100. Admission 50 cents. ID's required.

Our Daily Bread (King Vidor)
Film Society. Fri, Oct 5, 7:30pm, 9:30pm, Rm 6-120. Donation \$1.

Music

Auditions—Zamir Chorale of Boston*
Professional Hebrew chorus, students & working people. Arrange auditions by calling x8564 Dorm or 489-2386. Tenors especially welcome.

Concert*
John Buttrick, piano; Eric Rosenblith, violin; Scott Nikrenz, viola; Stefan Popoff, cello. Music by Mozart, Beethoven, Faure. Fri, Sept 28, 8pm, Kresge Auditorium. Free.

Recorder Ensemble**
Music provided, but bring instruments and any music you particularly wish to play. Every Mon, 7pm, ESG Hdqtrs, 6th fl bldg 24. All aficionados are welcome, freshmen encouraged to attend. Details, David Dreyfus, x3-7787.

Theater and Shows

MIT Community Players*
Henrik Ibsen's **A Doll's House**, directed by Lee Barton. Thurs-Sat, Oct 4-6, 8pm, Kresge Little Theater. Tickets: \$2.50, \$2 MIT students. At door or Bldg 10, 12n-2pm.

MIT Community Players
Auditions for **Rashomon**, Mon, Sept 24-Thurs, Sept 27, 7:30-11pm, Rm 1-132. Production & backstage positions also open. Information, Dave Mauriello, producer, x3-6850.

MIT Dramashop*
One-act plays: "The Dumb Waiter", by Harold Pinter & "Muzeeka", by John Guare. Fri, Sept 28, Sat, Sept 29, 8:30pm, Kresge Little Theater. Critique and coffee hour. Free.

Dance

Folk Dance Club*
International, Sun, 7:30-11pm, Sala. **Balkan**, Tues, 7:30-11pm, Student Center Rm 491. **Israeli**, Thurs, 7:30-11pm, Sala. **Afternoon dance break**, Fri, 12:30-1:30pm, Kresge Oval.

Yoga*
Intermediate & advanced: Mon, Oct 1, 5:45-7:05pm, 7:05-8:15pm; beginners: Fri, Oct 5, 5:45pm; Rm 10-340. Open class Thurs, 9:30am, Rm 10-340. Eileen Turchinetz, 862-2613.

Exhibitions

Creative Photography Gallery*
Prints from the Prospect Gallery. Mon, Oct 1-Sat, Oct 13, W31-310. Hours: 9am-10pm, Mon-Fri; 12n-6pm, Sat, Sun.

Elephant Skull*
An exhibition of sculpture and numerous etchings by Henry Moore, presented by the Committee on Visual Arts. Mon-Sat, 10am-4pm, through Oct 12, Hayden Gallery. Free.

Lightworks*
Committee on Visual Arts presents a collaborative experimental exhibition by MIT students under the direction of Robert Preusser, Visual Design. Mon-Sat, 10am-4pm, through Oct 5, Hayden Gallery. Free.

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

Music Library Exhibit
Pictorial Exhibition, Mozart's Opera the Magic Flute. Daily, Rm 14E-109.

Athletics

First Bicycle Race—MIT Wheelmen*
First race of season, 24miles, trophy to winner. Sun, Sept 30, 9am, South Natick Center. Info, Brad, x3-6646.

V Soccer*
WPI Tues, Oct 2, 3:30pm, Briggs Field

Men's V Sailing*
Dinghy Invitational. Sun, Sept 30, 9:30am, Charles River Lower Basin.

Water Polo*
MIT Tournament—Dartmouth, Northeastern, Brown "B". Fri, Oct 5, 4pm, Alumni Pool

Fall Baseball*
Mass Bay Comm Col. Fri, Sept 28, 4:30pm, Briggs Field. **St. Anselm's.** Fri, Oct 5, 4pm, Briggs Field.

Fall Tennis*
Mercyhurst. Tues, Oct 2, 3pm, Dupont Tennis Courts.

Religious Services and Activities

The Chapel is open for private meditation from 7am to 11pm every day.

Campus Crusade for Christ/College Life Family Time*
Singing, sharing, prayer & teaching from God's Word. Fri, 7-9:30pm, Rm 1-132.

Christian Bible Discussion Group*
Thurs, 1pm, Rm 20B-031. Prof. Schimmel, x3-6739, or Ralph Burgess, x3-2415.

Seminars on the Catholic Faith
Catholic Belief I. Introduction or refresher seminar on the teachings of the Catholic Church. Tues, 7pm, Bldg W2, 2nd flr seminar Rm. **Father MacNevin**, x3-2981. **Knowing and Believing.** Readings and discussion on the interaction of religion and culture. Thurs, 7pm, Bldg W2, 2nd flr seminar Rm. **Steven Murphy**, x3-2981.

Christian Science Organization*
Meetings, including testimonies of healing. Tues, 7:15pm, Rm 8-314.

Diving Light*
Satsang (discourses) on the knowledge of Shri Guru and Maharaj Ji, 15 year old perfect master. Mightly, 7:30pm, Rm 2-390.

Hillel Holiday Services*
Rosh Hashanah: Wed, Sept 26, 5pm; Thurs, Sept 27, 8am, Mincha 6pm, Ma'ariv 7:30pm; Fri, Sept 28, 8am, Mincha (all Kresge), Ma'ariv 6:20pm, Kosher Kitchen; Sat, Sept 29, 9am, Mincha 4pm, Chapel. **Yom Kippur:** Fri, Oct 5, 4pm, Kosher Kitchen, Kol Nidre 6:10pm, Kresge. Meals after all services. To order, Herbie Levine, x8403 Dorm. **Regular Services:** Mon-Fri, 8am, Rm 7-108; Fri, Traditional 6:45pm, Kosher Kitchen, Non-Traditional 8:45, Chapel; Sat, 9am, Chapel.

Islamic Society*
Juma prayers. Fri, 12:15pm, Kresge. Rehearsal Rm B. Discussion on the Qur'anic Interpretations. Sat, 5pm, ISC Lge, 2nd fl Walker.

Protestant Worship Services*
Sun, 11am, Chapel

Roman Catholic Masses
Sun, 9:15am, 12:15pm, 5:15pm; Tues, 5:05pm; Thurs, 5:05pm; Fri, 12:15pm. Chapel.

United Christian Fellowship*
Christians for dinner and sharing. Thurs, dinner, 5pm, Walker, followed by singing, sharing, praying 6pm, Rm 14E-307.

Westgate Bible Study Meeting*
Includes study of the Gospel of Mark. Wed, 8pm, apt 1202 Westgate I.

Announcements

Course VI Student-Faculty Committee**
EE open house meeting to attract new members, students & faculty invited. Tues, Oct 2, 4pm, Rm 10-105 (Bush Rm). Refreshments. Info, x3-7312.

Skills Training Program
Registration for the Oct Classes in Typing (beg, intermed, and technical) Dictaphone Transcription, Shorthand, and Eng as a Second Language, is Fri, Sept 28. Come in or call the Training Section E19-734, Ext. 3-1912.

Student Art Association Offers New Course**
Instruction in primary water color techniques, with emphasis on personally expressive statements about the environment. Field trips, no art background necessary. Instructor: Lessel Mansour. Mon, 7:30pm, Stu Ctr Rm 429. Fee: \$15 MIT students, \$20 community.

Upward Bound Program
Volunteers needed to tutor Cambridge High School students in evenings at MIT. Marth or Marshall, x3-5125.

Stratton Collection Student Lottery
Display of prints which may be "borrowed" by students, Mon, Oct 1-Thrus, Oct 4, Stu Ctr West Lge. Lottery, Thurs, Oct 4. Must be full-time student.

Barker Engineering Library Tours
Wed, Sept 26, 10:15am; Fri, Sept 28, 2:15pm. Orientation Rm, 5th fl. Tours 30-45min.

MIT Community Players
Seamstresses are needed to work on costumes for Oct 4-6 production of Henrik Ibsen's **A Doll's House**. Evenings, this week. If interested, contact Lee Barton, 868-0387; or Jane Howard, x3-2311 or 492-6832.

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 October 3 through October 12 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, September 28.

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. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.)

NUTRITION AND FOOD SCIENCE

The Department of Nutrition and Food Science Electronics Laboratory offers undergraduates an unusually flexible scope of activities. Students need not be experienced, as this is a teaching oriented laboratory. At the same time the lab provides stiff challenges to students interested in electronics. Some of the on-going projects are (1) A temperature control system that provides degree precision has been constructed and students interested in developing a micro-calorimeter or sub-nanowatt sensitivity based on this thermal control system needed; (2) Students who would like to learn to build instruments such as counters, pulse generators, multi-plexers, etc. are welcomed; (3) Students with some digital circuit experience are needed to interface a PDP-11 computer to an amino acid analyzer; and (4) Computers removed from "Minuteman" 1 ICBM's are being adapted for use as biomedical data acquisition and analysis processors; software and hardware types are welcomed. Contact Jim Williams, 20B-140, x3-5384.

FOSTER-MILLER ASSOCIATES, INC., Waltham
Institutionalized Hitchhiking—Foster-Miller would like to propose to the Department of Transportation (DOT) to do a study on the feasibility of an institutionalized hitch-

hiking scheme, with hitchhiking stations to be built at convenient locations along major commuter routes. The study would consider the scheme from the community's as well as from the individual's standpoint. Factors to consider include: economics, congestion, noise, air pollution, and other "amenities;" ticketing to provide for driver reimbursement; identification methods to insure maximum safety for both driver and passenger; and station location and design.

PHYSICS DEPARTMENT

Junior or Senior Physics major wanted to assist in development of materials for an individualized version of PSSC physics now being used on a trial basis at 25 schools. Opportunity entails writing of study guides, test questions, problems, and solutions—about 8-10 hours a week. Sound knowledge of basic physics, ability to write clearly and creatively, and above all, sympathy for the student taking physics for the first time, is desirable. As the project evolves, the opportunity may involve some work on evaluation of the course as implemented in high schools, two-year colleges and four-year colleges. Contact Chuck Friedman, 20B-136, x3-6395.

DEPARTMENT OF TRANSPORTATION

Cambridge DOT has suggested a number of project areas including: (1) traffic flow-theory; (2) assist in designing a cost-effective computer system for the Federal Aviation Administration; (3) development and implementation of algorithms to store maps in digital form; plot maps on CRT's; electrostation printers and drum plotters; (4) minicomputers as mode simulators; (5) study of intracity travel patterns as a function of the size and

shape of a city; and (6) comparative study of energy costs and requirements for high-speed travel between Dallas and Fort Worth, Texas.

NUTRITION AND FOOD SCIENCE

Freezing and drying of books and papers—Books and papers which have been wet due to floods, fire or other natural disasters are usually frozen as soon as practical so as to prevent or limit mold growth. The reclamation of these items requires careful drying so as to preserve as much quality as possible. Among the techniques used or suggested are circulating air drying in closed rooms with dehumidifiers, freeze-drying, and hot air drying. The project will investigate: (1) freezing methods for minimum paper damage; and (2) freeze-drying and microwave tunnel drying. Contact Dr. James Flink, 16-114, x3-6735.

MASSACHUSETTS AUDUBON SOCIETY

Lincoln Through its "Intern Program," the Massachusetts Audubon Society has opened up project opportunities with many organizations in new England. Some of the opportunities might be appropriate for UROP participation in the areas of planning resource management and environmental problem solving.

The Society's Intern Coordinator, Mr. John Cook, has identified a number of potential project sponsors: Leominster Preservation Commission; Leominster Conservation Commission; Massachusetts Office of State Planning and Management; Roy Mann Associates; Beaver Brook Associates; Maine State Planning Office; Spruce Mountain Environmental Center; New England
(Continued on page 6)

New UROP Listings

(Continued from page 5)

River Basin Commission; Ecology Action for Rhode Island, and others. More detailed information is available at the UROP Office. Undergraduates should contact the UROP Office and then be prepared to contact Mr. Cook at the Audubon Society.

MOLECULON RESEARCH CORPORATION Cambridge
Moleculon specializes in research development and consulting in chemistry in allied fields for prival industrial clients and government agencies. The company is interested in involving undergraduates and faculty in the following projects (1) Synthesis and Characterization of Tetrabenzimidazole—a cyclic porphorin-type component made by the self-condensation of 2, 3-diamino-benzoic acid. Work is required in the areas of synthesis and characterization of TBI before commercial utility or acceptable proof of structure is achieved. Experience in organic synthesis and characterization needed. (2) Market Research on Propolastic Film—this novel class of composite materials is undergoing detailed investigation and development and a considerable amount of market research is needed. Student should have background in management; strong technical background not essential.

CENTER FOR ASTROPHYSICS Cambridge

Opportunities exist for undergraduates in many or all aspects of several radio astronomical experiments. Principal projects now underway involve microwave spectroscopy of the interstellar medium: (1) measurement of atomic emission lines from fully-ionized gaseous nebulae and partially-ionized, cooler matter, (2) study of emission and absorption lines of recently discovered molecules in an attempt to extract physical, chemical (and biological?) information concerning dense, cold interstellar gas clouds, (3) participation in engineering tests of new radiometric equipment in order to develop optimum observing procedures at high microwave frequencies. Experiments are usually undertaken at Haystack Observatory, Westford, Mass., Agassiz Station, Harvard, Mass., or the National Radio Astronomy Observatory, Green Bank, W. Va.

Foreign Study Opportunities

SCHOLAR INCENTIVE PROGRAM 1974-75

The American-Scandinavian Foundation sponsors an exchange program with Sweden designed to provide opportunities for younger American students. Scholar In-

centive Fellows are expected to plan programs which emphasize participation in Swedish university life, attend lectures and take advantage of course offerings. Applications are invited from senior-level undergraduates and beginning graduate students who have not obtained the Master's degree or its equivalent. Conditions of award: 1) the work in Sweden be recognized by a US institution as meeting partial requirements for the PhD or another advanced degree, and 2) correspondence be forwarded from the appropriate US graduate institution indicating its willingness to recognize the year of study toward advanced degree requirements. Student should undertake correspondence with appropriate institutions in Sweden regarding their proposed programs. Study programs conducted in English or English-language institutions, or which are intended to lead to a Swedish degree will not qualify for support. Three awards will be given, each in the amount of \$3500 for one academic year. Deadline: Dec. 1.

Application forms for the above awards may be obtained from The American-Scandinavian Foundation, 127 E. 73rd St., New York, N.Y., 10021. For further details see Prof. Locke or Paula Kelly, Foreign Study Office, Rm. 10-303, X3-5243.

CLASSIFIED ADS

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Only Institute Extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the Tech Talk Office, Room 5-111, and presenting Institute identification. Ads may be telephoned to Ext. 3-3270 or mailed to room 5-105. **Please submit all ads before noon, Friday, September 28.**

For Sale, Etc.

Parts for '66 VW sqbk. Ed, x3-7238

Fender Bassman, post-CBS, brain and bottom, \$225 or best; hmdc cabinets, w/15" woofers, gd but nd more sound. Andy, 899-9389.

Realistic stereo tape deck TD 109, nrly nw, \$100. Fred, x3-7037.

Bike, m, sgl spd, w/bkts. Rick, x0503 Dorm.

Humidifier, \$15. George, x3-7855.

Sofa bed, grn w/red cvr, \$20; refrig, sgl dr, \$20; ski rack, \$15; Datsun orig equip tire, 5.60x13, \$15; or best. Paul, x3-3781.

Layfayette LSC-100B amfm stereo phono sys, yr old, w/Sony hphones, \$85 or best. Richard, x3-1834.

K tbl & 4 chrs, \$30; assorted Kware & misc hsewares, cheap; trntbl, cheap. Call, 232-7959.

Frstn 650x13 stud snows, mtd Mustang whls, used 1 wntr, \$20. x8-2671 Draper.

Adult tricycle, f, orig \$135, brly used, \$80 nego. Audrey, x3-4837.

TV, 17", Magnavox, \$65; recln chr, \$50; mtching coffee tbl, \$10; nego. Call 734-5018 evgs.

Mandolin, flat back, Amer, \$35. Valdi, x3-3539.

Registrar's Notice

Applications for advanced degrees in February, 1974, must be returned to the Registrar's Office, Room E19-335, by Friday, Sept. 28.

Bike, Atala 101, \$300. Dennis, x8-1560 Draper.

Formica dinette tbl w/4 chrs, uphol st & bk, 30x40, ext 48, \$65 or best; GE tv, 19", b&w, \$25 or best; 14 dresses & p suits, sz 14, worn once, \$5 ea or best. Mrs. Shechter, 298-0484.

Gdyr tires, 4, 6.00x13, 3 mos, \$30 or best. Raul, x3-5053.

Coffee urn, 80 cup, Cecilware, 5 gal, stainless, LP gas auto, w/brnr, stand, used 6 wks, few yrs old, \$400 new, best reas. x8-4414 Draper.

Singer vac clnr, tank type, all attach, gd cond, \$20. Call, x3-2041.

Hotpoint stove, used, dbl oven, push bttn, exc cond, \$250 or best. Izzy, x8-2878 Draper.

Elec motors, 2, 115v, 1/6 hp, exc cond, \$10, \$6. Call, 782-2373.

Wndw fan, 20". Ray Eng, 923-1635.

Moving: crush vlvt hide-a-bed sofa, Simmons, \$135; 19" color tv, stand, anten, \$175; 3 oriental rugs, 2 nw, \$150; 2 nite stnds, \$30; 2 DR chrs, \$12; game tbl, \$6; 5 shlv bkese, \$10; Kenmore vac, \$20; 2 scat rugs, \$1/ea; intensity lite, \$5; or best on all. David, x3-6028.

Typwrtr, man, w/case, exc cond, \$54; police monitor radio, dusty but n, \$49. Nick, x3-2843.

Hoover upright vac, w/attach, \$35. x8-3463 Draper.

Cannon pelix, F1.2, 53mm, 55-135mm, Cannon zoom lens, filter, close-up lens, cases for all, exc cond, \$300 or best. Ashok, x3-2943.

Desk, wd, 4 drwr, \$15; astrophysics journals, 1968-date, \$50; '65 chevy, std, v gd cond, \$400. x3-7538.

"Magic" tennis rckt, nvr misses, Arthur Ashe competition head, \$30 or best. Chuck, x3-1852.

Girls tap shoes, sz 11 1/2, 12 1/2, 13; army boots, sz 9; mens sneakers, 8 1/2; track sneakers, sz 10; \$3 ea. x8-4095 Draper.

TV, Zenith, b&w, 21", old but works ok, \$10. Jim, x3-1926.

Bike, Peugeot U08, n derailleurs, tires, just ovrlhd, \$110; camera, Olympus 35SP, exc cond, \$85; drapes, 3 pr, 54" grn fbrglas, \$15 all; carpet, 9x12, bge nylon, just clnd, \$30. John Strayhorn, x3-2054.

BF Gdrch Silvertown tire, 855-15, n, ww, ask \$20. Jerry, x7763 Linc.

Mpl desk, sm, mtch armchr, \$45; 9x12 ww carpet, pad, lt grn, \$30; lg wlnt chest drwrs, \$35; ham r sta: HQ-110C, Johnson Ranger I, Layfayette He-35, mike, bug, rotor, etc, \$250. Call, 494-8790 evgs.

Chest drwrs, sm, \$12; UHF converter, \$7; frpl scr, \$5. Bob, x3-2575.

Snows, 2 pr: Frstn, 7.35x15, 4K, \$25; Gen, G85-15, stud, 8K, mtd 122 Volvo, \$35; stu bed, ideal sm rm, pers less 6', w/fttd cvr, \$25; var drapes, rods, nego. Al, x3-5095.

Bike, m or f, 3 mos, \$40; stud snows, 2 pr, 15", gd cond, best. Mike, x3-7597.

Text books, cheap. Colin, x3-7084.

Tires, 2, E78-14, Sears dynaglas stud snows, sgl seas, \$50 or best; couch & bureau, old but reas cond, \$20 ea or best. Ed, x3-2270.

Broiler oven, sm, exc cond, \$12. Pete, x8406 Dorm.

Tbl lamp, \$3; hairdryer, \$2; 2 pr bge drapes, \$6; 4 pr 90" nylon crtns, \$10; misc nylon crtns, \$2. Betty, x3-6067.

Bike, 10spd, Columbia, gd cond. Call, 731-4429 evgs.

GE refrig, full sz, avcdo, few yrs, exc cond, \$70; GE ac, lg, almost works, best; wndw fan, 29", w/thermostat, \$5; old hrdwd mirror, bevelled glass, \$20; child's oak & wrought iron sch desk, \$7; bentwd highchr, \$30. Call, 354-6311.

Heathkit color bar & dot gen, blt from kit 1G-25, exc cond, \$100. Craig Latham, x8161 Dorm, lve msg.

Ptd wd bkese, v sturdy, \$12; Danish mod chr, grn \$ bl ptrn, lk n, \$12; blk metal bkese, \$8; perma-press sheet set, k, wht percale, b nw, 1/3 off. Jeannie, x8-2577 Draper.

Bed, tw, gd cond, w/fr, hdbd, \$10. Diana, x3-7555.

Fiberglass kayaks. Ed Foster, x8-4432 Draper.

Crib & highchr, gd cond, reas. x8-2465 Draper.

TV, RCA, port, 19", gd cond, \$25. x3-3494.

Leath shoes, 3 pr, f, 6 med, too sm; navy, lg flat heel, \$10; red wd heel, \$7; gr & wht spectators, \$6. Barbara, x3-6047.

Snows, for Volvo 142, mtd, E78-15, 4 ply, 2K, \$40 or best. x341 Linc.

Popular Photog mags, '70-'72, free. Ken, x3-6385.

GE dish wash, 3yrs. f load, butcherblk top, \$150; carpet, 9x12, d gold shag, dbl rub pad, was \$12/sq yd, yr old, \$100. Betty, x3-2068.

Bed, tw, Slumberland, matt, box spr, fr, exc cond, \$30. David Johnston, x3-6389.

Hydro-Jet port whrlpl bath, nrly nw. Fisher, x3-5571.

Box spr & matt, tw, gd cond, \$30. x7618 Linc.

TV, Zenith, b&w, port, w/stnd, UHF, VHF, \$35. Call, 289-5641 aft 6pm.

Skates, 2, half-price: boys hockey, sz 11, \$8; girl fig, sz 8, \$8; stainless stl highchr, \$8. Brian, x5326 Linc.

Bike side bkts, \$4; Sylvania tv, 23", w/stnd, 2 1/2 yrs, \$90; VW Dover ski racks, 2, w/locks, 1 mo, \$9 ea. Liz, x3-6162.

Waterbed: 10" qn matt, 400w thermostat htr, flbrd, seamless fr liner, mahog stain fr, patch kit, guarantee, used few wks, \$100 or best. Phil, 494-9185.

GE show & tell, nw, \$40; w/11 films & rcrds, exc cond, \$15; wlnt brass pole lamp, imprtd globes & brass extension incl, \$25. Jim, x3-7138.

BF Gdrch radial TA's, 2, FR60, used 3K, both \$40. Carol, x3-5804.

Canoe, 12', cedar & fbrglas, exc cond, gd buy. Joe, x8-3636 Draper.

Sony 9" tv, \$100. F. Garcia, x3-3288.

Solid teak door, 33x80, for desk or tbl, \$45. Call, 868-0764 evgs, wknds.

Movie film, 16mm, 4 rolls, 100'ea, Tri-X, slightly outdated, \$20. x0640 Dorm.

Bike, f, 3 spd w/bkts, \$25 or best; oak armchr, \$5; elec carving knife, \$2; also want dehumid, curtains for 4x8 & 4x4 wndws, pref red. Doug, x3-7193.

Clarinet & tenor sax in exc cond, wl sell or trade for 10 spd bike, m, or 19" color tv. Larry, x7500 Linc.

Gdyr 600-13, 2, stud, mtd Toyota Corona, lk n, \$45 firm; slide rules, \$5; metric socket set, 3/8 drive, 9-19 mil, \$5. Call, 828-1567.

Bureau, y drwr, \$15; desk, child's, old, \$10; loden coat, wht, sz 16, \$5; gold velvet tw hdbd, \$7; Knitking knit mach, n, \$75 or best; want fold chrs. Smith, x3-4603.

Vehicles

'62 Chevy impala, running, best; Sears batt, Die-hard, 5 yr wrnty, yr old, \$20; pair 7.55-14 tires, mtd, 1K, \$30. x346 Linc.

'64 Pontiac catalina, p st & br, auto, r, n tires, \$175. Frank, x3-7027.

'64 Olds cutlass, V8, r, cln, runs ok, ask \$110. Victor, x9768 Dorm

'64 Falcon, gd cond, n tires, \$300. Chris, x3-1439.

'65 Ford fairlane, 6 cyl, gd tires, runs well, \$230. Daniele, x3-3880.

'65 Rambler wgn, 72K, 6 cyl, std, gd transp, \$140; also car vac, \$4. Marcel, x3-7472.

'65 Chevelle malibu wgn, wht, 8 cyl, gd cond, n tires, \$250 or best. Frank, x3-2795.

'65 Chrysler, 4 dr, p st & br, 2 mtd stud snows, exc cond, \$450. x7663 Linc.

'67 Saab 96, 48K, \$325. x3-7282.

'68 VW sqbk, 15K rebld eng, n paint, \$1,000 or best. Raymond, x8-4244 Draper.

'68 MGB, exc mach, n paint, full access, \$1,200. Call, 653-8199.

'68 Fiat, spt cpe, 56K, many n prts, v gd cond, \$800. Herman, x3-1545 days.

'69 Austin America, lo miles, trans nds work, exc cond, best. x3-2351.

'69 Ford LTD, 4 dr, 54K, p st & br, ac, n shocks, tuned, v comfy, exc cond, \$1,400 or best. Tsai, x3-1916.

'70 Buick, gs, 50K, 2 dr hdt, b&w, 2 michelin stud snows, positraction rear, \$1,600. Herman, x3-5784.

'70 VW van, fac rebld guaranteed eng, ask \$1,800. John, x3-3610.

'70 Plymouth duster, navy, 22K, orig owner, auto, p st, 2 mtd snows, exc cond, \$1,500. Call, 494-8395.

'70 Ford gal, 8 cyl, auto, r, p st, exc cond, \$950 or best. x3-4532.

'70 Honda CL450, n tires, batt, n hooker htrs, 10" hndlbns, v gd cond, \$650. x7117 Linc.

'72 Suzuki 125, lk nw, must sell, \$500 or best. Kaaren, x3-6742 morn.

'72 Yamaha 350, 7K, \$650. Kevin, x8-4458 Draper.

'72 Skamper, 15' hrdtp tent trailer, delux, slps 8, 3 brnr stove, sink, refrig, water & elec hookup, awning & spare, exc cond, ask \$1,350. Call, 749-5347 aft 6.

'72 Yellowstone trailer, 18', slps 8, used 6x, spotless, \$2,500. Gene, x7787 Linc.

Housing

Belmont, victorian, 3 story, 7BR, mod K & B, LR, DR, den, ideal loc, wk to sch, n bus, n Bel Ctr, \$45,900. Owner, 489-2818.

Bkline, off Comm Ave, 2 Rm apt, furn, pking, \$140 incl util. Call, 566-1276 aft 5pm.

Bri-Allston area, 1, 2, & 3 BR apts. Judy, x3-6101.

Camb, Tang Hall, sub apt 2E, full time grad stu only, avail 10/1. x3-4207.

Revere, hse, 5 Rm, n tile B, encl prch, nr water, stores, T, \$225 + util. Call, 646-5348 aft 4.

Woburn, 2 BR, mod, ac, gd loc, ww, htd, avail 11/1, \$213. Call, 935-2895.

Gunstock, NH, ski chalet, mi to ski, use indoor pool, sauna, etc, \$200/wk. x8-4415 Draper.

Animals

Beagle & basset hound, f, 3 mos, loves childrn, frndly, shots, free to gd home. Rhoda, x3-5763.

Siberian husky, AKC, m, 7 mos, hsrbrkn, potential show dog, exc w/fam. Bob, x5892 Linc.

Wl someone PLEASE take my pregnant cat or tell me where I can take her, v affect, moving to Calif & can't take. Jennifer, x3-5232.

Eng spr span pups, AKC, champ Calif line, liver & wht, 6 wks, \$75-\$150. Call, 484-1913 aft 10am.

Kittens, 2, m, 7wks, wht w/striped spots, free. John or Mike, 547-3414.

Lost and Found

Lost: sm change purse, red leather, w/imp key, reward. Call, 661-1210 days.

Wanted

Exp, accurate typist to transcribe tape. Suzanne, x3-5762.

MIT Outing Club nds cheap gas stove for nw cabin, also K utensils. Claire, 494-8571.

Rmmate, f, mod Burl apt, own rm, ww, furn, tennis ct, pool, 10min Linc Lab, \$120 + util, Wendy, x3-6089.

Color tv, inexp, port, wl repair. Michael Ciaglo, x3-5668.

Blender, vac clnr or elec brm, pole lamp. Eugenia, x3-5935.

Rider to LA, Calif, lve 9/19 am, Judy, x3-1491.

Rmmate, share lg hse Belmont w/4 grad stu, own rm, 2 1/2 mi H Sq, n bus, \$110 + util. Call, 489-1253.

MIT instructor & infant son interested in living w/fam or sm grp. Martha, 547-1594.

Arch Dept "Played Form" chamber grp nds piano for rehearsals & informal concerts. If you can loan or donate one, pls contact Aron Faegre, Arch Dept Hdqtrrs, x3-7791.

Baby stroller. Peter, x3-6267.

Gd snows on 4 bolt 15" VW rims. Bill, x3-3223.

Rspnsbl person(s) to drive Buick 6 from So. Ill. to Bos, as soon as poss. Sandy, x3-2574.

Housing for poli sci prof & wife, for Oct, apt or hse sub. Jessie, x3-3141.

Ride/riders, w/ alternate, Saugus to Camb, 9-5. Kitty, x3-4876.

Rent garage in Camb. Steve, x3-4157.

Ride, dly, Manchester-By-The-Sea to MIT, rd trip, w/ share exp. Sally, x3-3277.

Rmmate, m, W Som, 2 BR hse, \$110 + util. John, x327 Linc.

Used freezer, gd cond. Call, 965-1495.

Ski lodge, N Conway area, 12/1-5/1, 10 people, exc ref. x3-4621.

Rmmate, 3BR apt, n Cent Sq, 10 min w/ MIT, share w/2 f undergrad. Call, 492-3629.

Nikonos II undrwtr camera, used. x3-7053.

Used drafting tbl, equip. Chuck, 247-8275.

Apt for visiting poli sci prof, now thru Dec 31. Betty, x3-3141.

Babysitter, 2 boys (16 mos, 4 yrs), nr MIT, while mom in sch, 25 hrs/wk, hrs flex. x3-3665.

American flyer model trains, all shapes, sizes. Earl, x8-1566 Draper.

F seeks rm in Camb apt. Rachel, x9625 Dorm, lve msg.

Miscellaneous

Grp preparing to sue Mass Blue Cross/Blue Shield for non-paymt for sterilization ops wants to know if you've had trouble in this regard. Steve Keese, x3-4885.

Guitar lessons, finger picking, folk & clas, can incl music theory. Bob Maunus, 247-7717.

Wl babysit full or pt time in Wstgte apt. B.C., x3-5348.

Parking

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

Wl swap Albany for East. Ray, x3-7235.

Wl swap West for 4648 parking. Carol, x3-4675.

Wl swap West for Albany. x3-2760.

Wl swap West for Albany. Eileen, x3-2021.

Wl swap Monroe for Albany sticker. Pam, x3-1676.

Wl swap Windsor for West garage sticker. Sandra, x3-3528.

Wl swap Albany for East. Carol, x3-7222.

Wl swap Sloan for Albany sticker. Allyn, x3-2884.

Wl swap Albany for East. Rita, x3-7138.

Wl swap West for Kresge. Roxie, x3-3403.

Wl swap Monroe for East, West, Albany. Mike, x3-4115.

Wl swap West or Windsor for Albany. Anne, x3-6187.

Wl swap West for Albany sticker. Irene, x3-1971.

Wl swap Windsor for anything but Monroe. Kevin, x3-5668.

Wl swap Windsor for anything but Monroe. Paul, x3-7287.

Wl swap Albany for Kresge. Eleonor, x3-7053.

Positions Available

Employees at the Institute should call their Personnel Officer for further information.

Virginia Bishop 3-1591
Mike Parr 3-4266
Phillip Knight 3-4267
(Secretary - Joy Dukowitz)

Sally Hansen 3-4275
Jack Newcomb 3-4269
Evelyn Perez 3-2928
(Secretary - Mary Ann Foti)

Dick Higham 3-4278
Pat Williams 3-1594
Claudia Liebesny 3-1595
(Secretary Dixie Chin)

New applicants should call the Personnel Office on extension 3-4251 to make appointments and confirm openings.

The following positions are on HOLD pending final decisions:

73-821-R Appl Prog - Exempt
73-934-R Work Cntrl Coord (xmpt)
73-896-R Clerk Typist II

The following positions have been filled since the last Tech Talk and are no longer available:

73-909-A
73-908-R Tech Assist - Acad Staff
73-848-R Syst Prog - Admin Staff
73-776-R Admin Staff
73-744-R Inf Staff Nrs (P-T xmpt)
73-890-R Inf Staff Nrs (cancelled)
73-893-R Sec IV or Sen Sec V
73-832-R Secretary IV
73-704-R Secretary IV
73-812-R Secretary IV
73-864-R Secretary IV
73-763-A Secretary IV
73-878-R Secretary IV
73-902-R Secretary IV
73-911-R Secretary IV
73-939-R Secretary IV
73-765-R Secretary III-IV
73-783-R Secretary III-IV
73-872-R Secretary III-IV
73-826-R Secretary III
73-836-R Secretary III
73-850-R Secretary III
73-884-R Secretary III
73-928-A Secretary III - Temp
73-889-R Senior Clerk IV
73-914-R Senior Clerk III
73-865-R Senior Clerk III
73-898-R Senior Clerk III
73-883-R Senior Clerk III
73-955-R Senior Clerk III (P-T)
73-794-R Clerk II (P-T)
73-936-R Lib Gen Assist III (temp)
73-590-R DSR Staff
73-887-R Counter Person
73-856-R Secretary IV
73-852-R Secretary III
73-910-R Secretary III
73-537-R DSR Staff
73-849-R DSR Staff (cancelled)
73-779-R Secretary III
73-846-R Secretary III-IV

Staff Recruiter (Admin. Staff) will report to the Employment Officer; will be responsible for coordination of search for well-qualified persons to fill non-academic staff positions. Particular emphasis will be given to assisting laboratories, centers, and departments in fulfilling Affirmative Action Plans with respect to research staff openings. Person will work closely with Personnel Officers and departments in defining description of positions and qualifications required. Frequent travel will be expected; experience in Personnel and/or recruiting required. Technical background with degree in Engineering or Science preferred. Please submit resume. 73-643-A (7/18).

Administrative Staff member will work in the area of resource development dealing with individual contributors. Develop strategies and programs, prepare reports, provide advice and counsel of a legal nature for resource development activity. Some travel required to represent MIT. Must have legal training and preferably some experience as a counselor in practice or a job situation utilizing legal training. Writing and organizational ability, motivation, enthusiasm required. 73-480 (5/30).

DSR Research Staff Engineer - Temporary in Mechanical Engineering will design and develop a high priority medical technique for heart attack victims. Work will consist of development of interfacing, control and timing circuits; aid in the system evaluation once system is complete. BS (EE) with computer hardware emphasis; experience with mini-computer hardware; interest in developing a detailed circuit and following it to completion required. Temporary 10/73 to 7/74. 73-897-A (9/19).

DSR Staff member will plan, manage, and execute high-quality research projects having a strongly experimental orientation. Familiarity and experience with low-speed flight and wind tunnel testing methods and advanced piloting aviation type aircraft; Ph.D. in Aerodynamics and five years applicable research and development experience required. 73-488-A (6/20).

Biochemist - DSR Staff member will participate in lipoprotein studies, and will supervise the activities of several technicians in a clinical research setting. Ph.D. or M.D. in Biochemistry required, as well as experience with lipoprotein and supervising. 73-515-R.

DSR Staff member at NEROC Haystack Observatory will guide and participate in the development of electronic instrumentation and recording equipment for very long baseline interferometer experiments. Develop needed computer software; assist in the design and conduct experiments; analyze and interpret the data from observations. Strong background in EE and physics, Ph.D. preferred. Research experience in radio astronomy, and specifically in interferometric techniques is required. High level of analytical capability and the ability to utilize large-scale computers is needed. 73-901-A (9/12).

Manager of Subsystem Development - Administrative Staff in the Programming Development Office will provide technical direction of the design, development, and maintenance of software subsystems under the OS/360, OS/VS2, and Multics Operating Systems. Minimum of 7 years professional experience, and 2 years experience in technical management. 73-912-R (9-12).

Systems Analyst - DSR Staff at the Cambridge Project will adapt Time Series processor programs for use with the Consistent System on Multics. Knowledge of calculus, econometrics, statistics, and linear algebra; extensive PL/I programming experience on Time Sharing Systems; familiarity with TSP-CSP required. Position is temporary until 6/74. 73-845-R (8/29).

Environmental Engineer - Administrative Staff in Physical Plant will organize and direct an Institute-wide energy conservation program. Survey campus buildings to determine areas of possible energy economy; plan procedures; maintain the Institute's compliance with environmental requirements. BS in Electrical Engineering with a basic knowledge of building Mechanical systems for heating, ventilating, and air conditioning. Experience in engineering design or operation of academic, industrial or commercial buildings. Experience in energy conservation helpful. 73-875-R (9/5).

Administrative Staff - Assistant Director in an administrative office dealing in resource development will handle specific tasks of educational fundraising; extensive writing of letters, memoranda, statements on priorities, some proposals and informational studies. Must have a minimum of three years active, consecutive experience in fund-raising, preferably in a university environment. Effective writing skills, ability to communicate verbally, professionalism and career motivation important. Exposure to data processing systems useful, BA required; advanced degrees welcome. 73-479-R (9/5).

Editor - DSR Administrative Staff will be an Assistant to the MIT Sea Grant Program Executive Officer. Assemble information and write the Marine Information Transmitter Newsletter; prepare and edit newsreleases, annual reports, proposals, and other publications. Function as an Advisory Service Representative, to organize and conduct meetings and symposia; select, edit, disseminate publications on marine resource information, working in the Reading and Reference Center; maintain liaison with National Sea Grant Office. 73-1017-R (9/26).

Administrative Staff - Associate Director of the Alumni Fund will be responsible for Staff support to alumni boards and committees engaged in the annual solicitation programs for the Fund. Duties require extensive interaction with senior alumni and corporation executives throughout the country, and extensive interaction with senior members of the MIT faculty and administration. Incumbent must be an alumnus/alumna of MIT. The position will entail a moderate amount of travel. 73-1018-R.

Placement Counselor - Administrative Staff Part-Time will coordinate and develop the Family Day Care program of child care in the home. Interviews participants, help with licensing, keep records, manage the budget for the program; arrange workshops, discussion groups, lectures. Interviewing skill, knowledge about problems of children and parents, ability to work independently important. Half-time position. 73-1015-R (9/26).

Technical Assistant - Academic Staff in Biology will assist in biochemical research on embryonic development of chick red blood cells. Analyze proteins and nucleic acids, use radioactive labelling, electrophoresis and other techniques. Knowledge and experience of chemistry essential; biology and biochemistry desirable. Minimum two years experience preferred. 73-1002-R (9/26).

DSR Staff at the Aeroelastic and Structures Research Laboratory will be Project Engineer at a large subsonic wind tunnel. Plan, prepare, run and report production and research wind tunnel experiments. Related in the study of the aerodynamics of buildings and aircraft. B.S. degree in Aeronautical Engineering or equivalent experience required. 73-1004-A (9/26).

Administrative Staff in the Provost's Office will work with faculty responsible for a variety of fieldwork activities and will assist in the development of fieldwork placements. Prepare budgets, handle accounts, initiate and maintain communications; coordinate the evaluation of the fieldwork experience. Graduate work or equivalent experience and familiarity with MIT administrative and academic operations are preferable. Person must be able to work and think independently. Program has extremely limited clerical support, therefore candidate must be willing to do a large part of the support

work. Temporary position: Sept. 1973 - August 1974. 73-963-A (9/19).

Infirmity Staff Nurse - Part-Time Exempt in the Medical Department; Emergency Nurse with opportunity to learn Nurse Practitioner functions in off hours of the Clinic. Hours: Sat and Sun and holidays rotating 8-4p.m. or 4-12. Ideal for Nurse attending school. 73-1020-R, 73-1021-R (9/26).

DSR Staff member at Project MAC will do research on the implementation of new ideas about English language grammar and semantics. The implementation will be done in a LISP environment. Familiarity with LISP Computer program; ability to learn theories of English language; skills in system building required. 73-916-R (9/12).

Technical Assistant V or Exempt in the Center for Cancer Research will supervise the animal room, feed, water, house small animals, bleed and collect sera, transplant tumors. A conscientious individual with good manual dexterity required; ability to work with animals and maintain careful records important. 40 hour work week. 73-1007-A (9/26).

Staff Nurse - Exempt in the MIT Infirmity Emergency Clinic will be responsible for evaluation of patients and to administer first aid. Assist with minor surgical procedures, perform laboratory tests. Individual must be a Mass Registered Nurse; previous I.C.U. experience preferred. 4pm - 12am weekdays, 8-4pm or 4pm - 12am on weekends/Holidays. 73-1013-R (9/26).

Architect/Programmers - Administrative Staff in the Planning Office will work on the development of architectural programs for Institute buildings. Research and conduct pre-programming investigation of existing spaces and develop design Criteria and Standards for new facilities. Degree in Architecture; background in research methods; experience in design and general architectural procedures required. 73-879-R (9/5).

Planner/Architect - Administrative Staff in the Planning Office will concentrate on long-range planning for the Institute. Survey and analyze existing environmental conditions, define problems, develop plans and design concepts; degree in Architecture required; degree in Planning preferred. Minimum of 5yrs. experience and the ability to work independently important. 73-880-R (9/5).

Micro Automation Systems Programmer - DSR Staff member will develop a PDP-10/PDP-11 operating system for the project; design and implement a computer operating system. Experience on the PDP-10 and PDP-11, as well as a background in automata theory is required. 73-512 (6/20).

Administrative Staff - Associate in the Analytical Studies and Planning Group which provides staff support to the senior officers and to the Academic and administrative programs, plans, and organization. The ASPG is a part of the Office of the President and the Chancellor and reports to the Vice President C.B. Simonides. Candidates for this position should have an education background equivalent to graduate study, and/or working experience in areas such as management, program planning, analysis and evaluation. Systems analysis and computational background and skills would be especially helpful. Superior communication and writing skills are essential. This position offers very useful career preparation for senior responsibility in universities and other complex organizations. 73-461-R (5/30).

Administrative Staff Planner will direct long-range physical planning for the Institute; monitor and coordinate the various efforts of the planning team; develop budgets and schedule of events. Will act as liaison between government agencies and community groups. Must have a Masters degree in Planning and a minimum of 5 years experience. 73-535-R (6/13).

Administrative Staff - Systems Programmer will work full time in the Programming Development Office on the 370/165. The job will consist of programming and maintenance, systems assurance, and user interface functions. Applicant should have some project management experience, an understanding of operating systems, and a good working knowledge of assembler language. 73-795-R (8/15).

Administrative Staff Programmer for the MIT Information Processing Center must have experience and thorough knowledge of large-scale time-sharing computer system. PL/I language, documentation and communication skills are necessary qualifications. The Users Services Group requires an individual who understands and is responsive to the needs of the Center's users. This person will be challenged in entering a new area of time-operation for this group which includes the following:

User Assistance - assisting users by providing programming information and debugging help and tracking down special problems.

User Information - instructional documentation and conducting seminars, workshops, and other courses. 73-640-A (7/11).

DSR Staff member in the Energy Laboratory will assist in the construction of a mathematical energy model for US supply and demand. Gather data, participate in econometric model building and analysis of various energy sectors. S.D. degree in economics with econometrics and mathematics background desired. Experience in FORTRAN programming and use of Econometric Software Package necessary. Ability to interact and communicate with a large interdisciplinary group working on the project important. 73-752-A (8/8).

DSR Staff - Systems Analyst at Cambridge Project will adapt Time Series Processor programs for use within the Consistent System on Multics. Knowledge of calculus, econometrics, statistics, and linear algebra; extensive PL/I programming experience on Time Sharing Systems; familiarity with TSP-CSP required. This position is temporary until 7/1/74. 73-749-R (8/8).

DSR Staff in Metallurgy will carry out original research on single crystal growth of semiconductor materials from the heat-emulating advanced techniques of Peltier cooling and heating at the interface. Will use scanning electron microscopy, Hall measurements, and other instrumentation. Degree in chemistry or Metallurgy. Several years experience with semi-conductor crystal growth and characterization. 73-870-R (9/5).

Research Assistant - DSR Staff at the Energy Lab will participate in and coordinate an ongoing research and development program in thermal systems and heat transfer. Work includes heat transfer equipment design, test instrumentation, testing, analysis, optimization studies and direction of related efforts by graduate students and engineers. Candidate must be familiar with power plant engineering, heat transfer instrumentation, detailed analysis of fluidized bed heat transfer phenomena and convective heat transfer. Experience in directing work by graduate students and graduate engineers. 73-801-A (8/22).

Infirmity Nurse - Exempt Staff will do bedside nursing in the Infirmity. Assist surgeons in the operating room, administer first aid and emergency treatment after clinic hours. Mass Registered Nurses license required, as is previous nursing experience, preferably emergency room or industrial nursing. This position is on permanent night shift (11pm-7am) with weekend rotation. (73-731-R (8/8).

Industrial Hygienist - Academic Staff will work in the Environmental Medical Service to study and control occupational disease and other environmental factors such as noise, heat, pressure and toxic materials that may be physically or chemically hazardous to employee health. Will work closely with physicians, depts, supervisors. BS in Chemical Engineering is required. 73-336-A (4/29).

Technical Assistant - Academic Staff in the Biology Department will conduct research in Bacteriology and Enzymology. M.S. degree and two years research experience preferred; Biochemistry and Bacteriology courses required. 73-943-R (9/19).

Computer Operators IV will operate IBM Model 135 and all peripheral equipment associated with it, including disk drives, tape units, card reader/punch, printers. Must have a good knowledge of DOS job control, multi-programming experience and be capable of understanding operating instructions. 4pm - 12:30am shift. 73-92-R (8/29)/midnight to 8am shift. 73-917 (9/19).

Senior Keypunch Operator III will operate the IBM 029 keypunch machine. Will punch into computer input cards formatted and unformatted documents. Minimum of two years experience operating IBM 029 or comparable equipment; familiarity with the creation of program drum cards desired. 73-574-R (6/27).

Secretary IV in the Research Laboratory of Electronics will provide secretarial support for a faculty member and research staff. Type technical manuscripts, set up material from rough data and verify footnotes and references; maintain busy calendar; independently handle other procedures. Excellent typing skills required; technical typing experience preferred. 73-780-R (8/15).

Secretary IV will perform secretarial duties for the administrative officer of an academic department. Maintain department contract and personnel

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records. Excellent shorthand, dictaphone, typing skills needed. Organizational ability, familiarity with keypunch or computers desirable. 73-390-R (5/9).

Secretary IV in the Patent Section of the Office of Sponsored Programs will handle all office procedures for an attorney. Answer routine correspondence on own or from oral instructions. Maintain patent applications and case files; prepare documents for filing with patent office; transcribe dictation involving technical and legal terminology. Excellent, rapid typing and good shorthand are required for typing long patent applications, occasionally under pressure. Previous experience desirable. 73-819-R (8/22).

Secretary IV Part-Time - in Civil Engineering will handle all the general secretarial duties for staff members in the departmental Student Information Office. Previous experience and good typing a must. 20 hour work week. 73-882-R (9/5).

Secretary IV to two physicians in the Medical Department will transcribe medical reports and case histories, schedule appointments, handle other general secretarial duties. Experienced secretary with excellent typing and the ability to transcribe medical terminology required. 73-873-R (9/5).

Secretary IV will perform secretarial duties to the Director of the Artificial Intelligence Lab. Take and transcribe technical dictation; type manuscripts on a typewriter and/or computer terminal; edit with the computer manuscripts for inclusion in reports and proposals; coordinate the work of other secretaries in the section; answer routine correspondence. Accurate, proficient typing skills required. Previous experience desired. 73-808-R (8/22).

Secretary IV will work in Center for Theoretical Physics for three-four professors. Must be able to work well in busy, pressured office; establish work priorities; type technical manuscripts, correspondence, class notes, papers. Some telephone work. Typing and shorthand must be excellent. 73-630-R (7/11).

Secretary IV in Physics Department to head of the Optical Maser group will assume wide responsibilities for output of large volume of work for a very active group. Ability to work under heavy pressure; will coordinate the workload of another secretary. Experience and good shorthand and typing skills are a must. 73-632-R (7/11).

Secretary IV in the Clinical Research Arteriosclerosis Center, will perform secretarial duties for the clinical director. Transcribe from dictaphone, patient records; type manuscripts, speeches, proposals; schedule appointments; maintain bookkeeping records. Knowledge of medical terminology preferred. Previous medical secretarial experience is desired. 73-698-R (9/19).

Secretary IV to a professor and two other faculty members in the new Division for Study and Research in Education. Transcribe confidential psychological interview material; prepare class materials. Previous experience, ability to establish priorities required. Shorthand strongly preferred. 73-944-A (9/19).

Secretary IV to a professor and several faculty members in the new Division for Study and Research in Education will type classroom materials, reports, proposals; handle all general secretarial duties. Good typing and dictaphone skills important; ability to establish priorities required. 73-959-A (9/19).

Secretary IV at the Center for International Studies will handle general secretarial duties for a professor and staff. Excellent typing and shorthand required for correspondence and manuscripts. 73-973-R (9/26).

Secretary IV to a physician in the Medical Department will be responsible for secretarial support to the GYN clinic. Schedule appointments, transpondence and reports. Excellent typing skills; ability to transcribe medical terminology required. Maturity, tact and organizational skills important. 73-971-R (9/26).

Secretary IV to two professors in the Lab for Nuclear Science will handle all general secretarial duties for several small projects. Good shorthand or ability to take dictation and highly skilled typing required. Initiative and organizational abilities important. 73-297-R (9/26).

Secretary IV to the headquarters staff of Housing and Food Services will type correspondence, special reports, budgets; assist in compiling and organizing data for special reports; handle all general office duties. Secretarial training; excellent typing and shorthand skills; knowledge of accounting and bookkeeping required. Ability to work independently important. 73-986-R (9/26).

Secretary IV in the Office of the Dean of the School of Architecture and Planning will perform general secretarial duties, maintain budget records, set up luncheon meetings, open houses. Excellent typing, dictaphone and statistical skills needed. Previous bookkeeping experience. Knowledge of MIT helpful. 73-981-R (9/26).

Secretary IV at the new Center for Cancer Research will type manuscripts and handle all general secretarial duties for several people. Ability to edit and correct grammar important; medical secretarial experience preferred; ability to work independently desired. 73-1006-A.

Secretary IV - (Part-time) in Civil Engineering will handle all the general secretarial duties for staff member in the departmental Student Information Office. Previous experience and good typing is a must. 20 hour work week. 73-882-R (9/5).

Secretary IV Part-Time Temporary in Humanities will provide support for two new programs in the School of Humanities and Social Science. Compile and make arrangements for publication of the Technology Studies Bulletin once or twice a year; maintain files and records. Accurate typing and dictaphone skills; ability to work with a minimum of supervision. 20 hour work week; temporary til 5/74. 73-1022-R (9/26).

Secretary IV to the Institute Secretary for Foundations will be responsible for budget accounting, file maintenance; research in reference materials. Maintain communications and smooth relations with top level offices of the Institute. Excellent secretarial skills, ability to organize and to use discretion required. Knowledge of MIT desirable. 73-976-R (9/26).

Secretary IV to Physician in Medical will schedule Faculty Health and DSR physicals; transcribe case histories, reports, and correspondence; handle all general secretarial duties. Individual must be an experienced medical secretary with excellent skills and knowledge of medical terminology. 73-1010-R (9/26).

Secretary III-IV in Physical Plant will perform secretarial duties for the Support Service Group and coordinate the work for one other clerical employee. Type correspondence and reports, answer phone and handle general inquiries. Excellent typing skills required, speedwriting or shorthand desirable; ability to work independently important. 73-804-R (8/22).

Secretary III-IV Part-Time in one-person office in Biology. Will handle general secretarial duties including heavy typing responsibilities. Technical typing skills, accounting and organizational abilities are desired. 20-hour work week. 73-998-R (9/26).

Secretary III-IV opening in an academic department working for 2-3 professors. Good skills of shorthand and typing, organizational ability and experience required. 73-323-R.

Secretary III-IV to a professor in Metallurgy and Materials Science will type manuscripts and correspondence; handle all standard office duties. Good skills; shorthand desirable. Ability to organize important. 73-837-R (8/29).

Secretary III-IV Part-Time in Biology will type manuscripts, letters; supervise grant accounts and handle bookkeeping. Previous secretarial experience required; ability to transcribe from tapes desired; shorthand preferred. 9-5, 3 day week. 73-942-R (9/19).

Secretary III to Director and five faculty members of the Flight Transportation Laboratory, Aeronautics and Astronautics will handle all general secretarial duties, maintain petty cash records and inventory of office supplies. Previous office experience desired; good typing required. 73-933-R (9/19).

Secretary III at the Graphic Arts Service will perform reception duties; assist Purchasing Agent, handle general secretarial duties for the Director & Production Manager. Excellent typing skills are required for back-up to the typesetting operation. Ability to work effectively with customers important. 73-935-R (9/19).

Secretary III in the Industrial Liaison Office will handle all standard secretarial duties for one staff member servicing major industrial concerns in their dealings with MIT. Business or secretarial school background, shorthand skills, ability to organize own work load required. 73-940-R (9/19).

Secretary III in the Artificial Intelligence Laboratory will provide secretarial support for two professors. Type manuscripts, letters, technical reports; coordinate travel arrangements. A mature, flexible individual with technical typing skills is required. 73-938-R (9/19).

Secretary IV in Mathematics will handle general secretarial duties for a group of professors and instructors. Type mathematical papers, oversee the department Reading Room, make travel arrangements, maintain files and records. Shorthand, experience or the ability to learn technical typing required. Organizational ability will be important for working for several busy people. 73-742-R (8/8).

Secretary III to the Vice President for Administration and Personnel and to the Administrative Assistant in that office will handle heavy load of typing, transcribe from dictating equipment, maintain active calendar, serve as office receptionist, maintain files and answer phones. Good language skills, ability to take accurate messages essential. Knowledge of Institute policy and resources desirable to provide assistance to a large number of callers and visitors. Will use IBM Executive typewriter. 73-737-A (8/8).

Secretary III to two professors and the Soils Division Head in Civil Engineering. Duties will include typing, answering phones, filing. Ability to coordinate duties and recognize priorities important; strong typing skills a must. 73-789-R (8/15).

Secretary III in the Industrial Liaison Office will take and transcribe dictation, handle travel arrangements, perform secretarial duties for one staff member dealing with major industrial corporations. Secretarial or business school background, 1-2 years experience preferred. Shorthand, good typing, spelling, and ability to master office procedures essential. 73-683-R (7/25).

Secretary III to one staff member will take and transcribe dictation; type correspondence; handle travel arrangements; handle other general office duties. Ability to organize and work independently; good secretarial skills required. Previous working experience and secretarial training preferred. 73-581-R.

Secretary III for a group of faculty members and research staff in the Research Laboratory of Electronics. Type technical manuscripts, including setting format and verifying footnotes and references; handle all other general office duties. Excellent typing experience preferred. 73-861-R (9/5).

Secretary III in the Libraries will perform general secretarial duties relating to library personnel activities. Maintain files; act as liaison between student captains and supervisors; handle reception duties for office. Accurate typing required; previous office experience; tact in dealing with people important. 73-960-R (9/19).

Secretary III in the Medical Department will transcribe clinic notes and case histories; assist with secretarial duties in a variety of areas; provide support during vacations, sickness, and lunch breaks. Accurate typing essential; previous transcribing experience and a knowledge of Medical terminology required. 3 1/2 hour work week, 8:30-5:00. 73-1012-R (9/26).

Secretary III to the Assistant and the Administrative Officer of the Medical Department. Type administrative reports, correspondence and a variety of confidential material. Assist with statistical reports and surveys. Good typing skills, ability to handle a variety of assignments important. 73-1009-R (9/26).

Secretary III to a professor and one faculty member in the Sloan School of Management organization studies group will handle all general secretarial duties; keep class records. Good typing skills important. 73-1000-R (9/26).

Secretary III in Aeronautics and Astronautics will provide secretarial support for staff of a research group. Good typing skills, experience in handling accounts helpful. Ability to work independently important. Shorthand preferred. 73-956-R (9/26).

Secretary III - Part-Time - Temporary for two professors in Political Science will type manuscripts and handle other general office duties. Excellent typing essential, ability to work independently important. 28 hr/wk temporary through 1/74. 73-950-R (9/19).

Documentation Editor V in the Office of Administrative Information Systems will assist in the development of presentation materials. Edit and develop finished copy from draft documentation. Review submitted documentation for clarity and completeness, recommend changes. Minimum 3 years EDP experience; operations experience with programming knowledge preferred. 73-867-R (9/5).

Technical Assistant V in Humanities will polish, mount, and photograph archeological specimens; analyze and catalogue specimens and photographic work. BS degree in Anthropology and Archeology with knowledge of operating an electron microprobe and X-ray diffractometer required. 73-964-A (9/19).

Administrative Assistant V to Administrative Officer in Civil Engineering will advise and direct secretarial personnel, prepare confidential material, monitor & maintain budget records, maintain data base for department master file on Multics and will be required to write short administrative computer programs. Some background in programming or systems required (FORTRAN IV), ability to keypunch, good typing, shorthand and administrative skills required. Knowledge of MIT extremely helpful. 73-1019-R (9/26).

Veterinarian Assistant IV in the Institute Veterinary Service will assist in conducting animal physical examination, treatments and minor surgical procedures. Individual must hold an Associate in Science certificate in Animal Medical Technology from a recognized university or training center. 73-958-A (9/19).

Senior Clerk IV - Temporary in Personnel Office Special Services Section will coordinate the United Way/United Black Appeal campaign; handle publicity; type letters and instructions; keep accounts and prepare summaries of pledges. Accurate typing and computation skills; ability to work independently required. Knowledge of MIT organization units helpful. Job duration - 10/1 to 12/14. 73-949 (9/19).

Editorial Assistant IV - Part-Time at the Research Laboratory of Electronics will edit manuscripts; proofread bibliographies; compile indexes. Assist a professor in his academic correspondence. Knowledge of Russian language and serious training in linguistics and literary studies. 25 hour work week. 73-977-R (9/26).

Technical Assistant Trainee IV in Psychology will participate in the planning of new research; run subjects; code, tabulate, analyze data; act as liaison with nursery and grade schools; perform literature searches on selected subjects. B.A. degree, research and quantitative skills, previous work with pre-school children; minimum 3 years post B.A. experience required. 40 hour work week. 73-983-R (9/26).

Reactor Operator Trainee IV in Nuclear Engineering will serve as shift operator on the MIT Reactor after passing A.E.C. Operators' Examination. Two years of technical college education or its equivalent background will be necessary for preparing for operators' licensing. Knowledge of electronic circuits would be helpful. Ability to work under pressure of emergencies important. 40 hour work week. 73-988-R, 73-987-R (9/26).

Accounting Clerk III in the Comptroller's Accounting Office will work in Grants and Contracts Billing Section. Prepare various financial and fiscal reports involving the various Department of Defense agencies. Business school graduate or individual currently attending evening business school is desired. Ability to communicate effectively over the phone important. 73-906-R (9/12).

Technical Typist III in the Office of Administrative Information Systems will type technical memoranda, data processing control documents and manuals. Maintain documentation library, including filing, organization and maintenance of programmer reference library. Good typing skills, experience in a data processing environment desirable. 73-684-R (7/25).

Senior Clerk III will take and process orders at Graphic Arts. Price and schedule Xerox work, handle requisition details. Knowledge of photography or any other reproduction process preferred, but not essential. 73-946-A (9/19).

Senior Clerk III will work at one of the reception desks in the Medical Department. Answer phones, schedule appointments, handle a variety of clerical duties. Ability to learn a great deal of information pertaining to the department. Knowledgeably to assist patients is required. Previous work experience essential. 3 1/2 hour work week, 8:30-5:00. 73-1011-R (9/26).

Clerk II - Part-Time in Biology will maintain account files for Financial Officer; assist in preparation of special budget reports (primarily Xeroxing and collating), will help with report mailing. Ability to work independently, light typing, skills desired. 20 hour work week, 1-5 preferred. 73-999-A (9/26).

Library Assistant III - Part-Time in the Rotch Library will be responsible for periodical materials; process serials and journals, maintain display and workroom areas. Will also assist with circulation duties one evening per week. Previous library experience preferred, knowledge of foreign languages, accurate typing helpful. 20 hour work week. 73-992-R (9/26).

Library General Assistant III in the Library Acquisitions Department will dispatch books, serial and journal

orders to vendors; search for book titles; perform varied clerical assignments. Experience and accuracy in typing; capacity for detail required. 73-982-R (9/26).

Technical Statistical Typist III for the School of Management and the Economics Department will use IBM magnetic keyboard typewriter for technical (Mathematical) manuscript typing. Excellent typing skills; ability to work independently and maintain records and files required. 73-993-R (9/26).

Senior Clerk III at the MIT Press will handle complete production of 40-50 titles including estimating, scheduling, composition, printing and binding. 1-2 years experience in book production desired. Accuracy in typing and work with figures important. 73-1008-R (9/26).

Accounting Clerk III at the MIT Press will apply cash vouchers to individual customers on computerized system; mail refund checks to customers. General office experience helpful, knowledge of basic bookkeeping important. 73-974-R (9/26).

Clerk Typist II in Civil Engineering will handle clerical duties of typing and light bookkeeping. Accurate skills, ability to organize and to listen and discuss problems concerning the use of the computer important. No prior knowledge of computers needed. 73-990-A (9/26).

Clerk II in the Medical Department Record Room will be responsible for pulling and filing medical records. Assist with maintenance of files and answering phones. Speed and accuracy in dealing with details important. Ability to work on your feet all day required. 40 hour work week. 73-970-R (9/26).

Clerk Typist II in the Office of Laboratory Supplies will type purchase orders; price requisitions, process invoices and handle other general duties. Adding machine or calculator experience; ability to operate a No. 32 NCR bookkeeping machine required. 73-997-R (9/26).

Library General Assistant III (Part-Time) - in the Catalogue Department of the Libraries will handle materials in the Cyrillic alphabet; perform bibliographic searching; type master catalogue entry; perform other clerical duties of reclassification and cataloguing. Experience and accuracy in typing on Cyrillic Selectric; ability to interpret complex directions important. Library experience of value but not essential. 14 hour work week. 73-885-R (9/5).

Nurse Aide III in the Out-Patient Clinic at the Medical Department will maintain adequate supplies, assist nurses in patient care; transport patients by stretcher or wheelchair; clean, sterilize equipment and instruments; prepare prepackaged medicine envelopes. Maturity important in dealing effectively with patients and staff. 3 1/2 hr. work week; 8:30-5:00pm. 73-913 (9/12).

Tea Hostess/Host I - Part-Time - Temporary in Earth and Planetary Science will make and serve tea, coffee, cookies for daily tea "hour" for faculty, staff and students. Responsible for keeping kitchen clean and supplies on hand. A courteous, neat, personable individual desired. This job runs for the academic year only. 1-2pm to 5pm. 15-20 hours/week. 73-989-R (9/26).

Diet Aide in Nutrition and Food Science will prepare special diets for consumption by human experimental subjects under the direction of the Dietician or Senior Diet Aide. 40 hour work week. 73-931-R (9/9).

Waitresses/Waiters (Part-Time) at the Faculty Club will set up silver & china on dining room tables. Take member orders; serve food and beverages. Clear, clean and reset tables. Experience, but not necessary. Shifts: M-R 11am-8pm (5 jobs); M-F 5pm-9pm (1 job). All positions may require weekend work. 73-919, 73-920, 73-921, 73-922, 73-923, 73-962.

Driver-Utility - Temporary in the Research Laboratory of Electronics will drive, pickup and deliver items, transport people and deliver mail. Handle and move material as required. Clean and maintain work area and equipment. A basic knowledge of material and equipment handling, rigging carpentry, painting and use of handtools desirable. High School graduate, unrestricted Mass driver's license class 1 or 2, 3 years commercial driving experience required. 40 hour work week. 8:00-4:30. 73-930-R (9/26).

General Helper at Graphic Arts will perform a variety of routine jobs such as cleaning, oiling and supplying raw materials to the bindery, press room, ozalid room. Works in various groups doing repetitious work as assigned. Graduation from high school or its equivalent required. 40 hour work week. 8am-5pm. 73-948-A (9/26).