

Preparations continue this week in Killian Court for MIT's first outdoor commencement in more than 50 years. This week workmen are installing a giant "sail," to protect participants against the weather.

—Photo by Calvin Campbell

Baruch To Speak At '79 Technology Day

Dr. Jordan J. Baruch, assistant secretary for science and technology in the United States Department of Commerce, will be the keynote speaker at the annual Technology Day program for Massachusetts Institute of Technology alumni on Friday, June 8.

Dr. Baruch, an MIT graduate, is currently directing a study of industrial innovation in the United States and will speak on the topic, "Federal Policy and Industrial Innovation," at 10:30am in Kresge Auditorium.

In the afternoon, starting at 2:30pm, he will moderate a panel discussion of "Technology in Innovation," sponsored by the MIT School of Engineering. At 4pm, the eight departments within the school will demonstrate the technology they are developing, and how it can be used, at an open house.

In a concurrent program sponsored by MIT's School of Science,

there will be a panel discussion at 2:30pm focusing on some of the more innovative research that has led to new applications of knowledge, followed by tours of instructional and research facilities.

Technology Day for alumni highlights MIT's alumni week, which includes class and departmental reunions and the traditional Tech Night at The Boston Pops on Thursday, June 7.

A feature of the concert will be the appearance of an MIT alumnus, John W. Miller, Jr., principal bassoonist with the Minnesota Symphony Orchestra, as soloist. Mr. Miller is a member of the 15th reunion class, having received a bachelor of science degree in humanities and engineering in 1964.

Dr. Baruch, the Technology Day speaker, received three degrees in electrical engineering from MIT—the SB and SM in 1947 and

the PhD in 1950. He has taught at MIT and at Dartmouth, where he was on the faculty of the Amos Tuck School of Business Administration and the Thayer School of Engineering.

He has worked with numerous councils for the National Science Foundation and the National Bureau of Standards. His memberships include the Institute of Electrical and Electronics Engineers, the National Academy of En-

(Continued on page 8)

Chain Letters Violate Policy

Prayer chain letters have been circulated throughout MIT in recent months via the Institute Mail Service. Staff and employees are reminded that the use of MIT materials and services for such a purpose is not permitted.

Ted Doan, manager of building services has received numerous complaints concerning these letters and many people are genuinely disturbed at receiving them and the implied threat involved if the chain is broken.

Killian, Edgerton To Sign Books

Two of MIT's most famous people—Dr. James R. Killian, Jr., and Dr. Harold E. Edgerton—will hold an autographing party Thursday, May 31, 12:30-1:30pm at the Tech Coop for their new book, *Moments of Vision: The Stroboscopic Revolution in Photography*.

The book, just published by the MIT Press, includes nearly 200 photographs—12 pages in color—and a text by Dr. Killian describing the development of stroboscopic photography and its applications as they have evolved.

"Doc" Edgerton is Institute Professor Emeritus and professor of electrical measurements emeritus in the Department of Electrical Engineering and Computer Science. Dr. Killian, former president of MIT and chairman of the Corporation, is now honorary chairman of the Corporation.

Killian Court To House 113th Commencement

Commencement at MIT this year, in order to accommodate more than 6,000 spectators, will be held outdoors in the Institute's flower-lined Killian Court, weather permitting, starting at 10am Monday, June 4.

It will be the first time since 1927 that an MIT Commencement has been held outside.

The move outdoors was made at the request of graduating seniors who sought a site that would allow seating for a maximum number of relatives and friends. The 6,000 expected in Killian Court is nearly twice the number who were able to attend in past years when Graduation Exercises were held inside (Boston Symphony Hall 1928-1948, MIT's Rockwell Cage 1949-1978).

In case of inclement weather, alternate arrangements have been made to hold an abridged Commencement in Rockwell Cage. A final decision will be delayed until the last possible moment. The location of commencement will be recorded on the SNOW line (253-7669).

In all, some 1,400 seniors and graduate students will take part in Commencement, receiving their degrees personally and individually from MIT President Jerome B. Wiesner as their names are called by the deans of their respective schools. By tradition, MIT Commencements are centered on students and their families. The short commencement address is always presented by the president, not by an outside speaker. Nor does MIT confer honorary

degrees.

A highlight of Commencement this year will be the academic procession and recession, which, because the exercises are outside, will follow along Cambridge sidewalks leading to Killian Court. Principals, guests of honor, Corporation members, faculty and graduates, wearing colorful academic robes and regalia, will march from the 77 Massachusetts Avenue entrance to MIT to Memorial Drive and left on Memorial Drive to Killian Court. The recession will follow a reverse route.

By MIT tradition the chief marshal who leads the procession

(Continued on page 8)

West Garage Closed Monday

West Garage will be reserved Monday, June 4, for use by participants and guests at Commencement Exercises.

West Garage permit holders are asked to make use of other parking facilities such as Westgate West, Tang and the 243 Vassar Street lots.

The parking attendant at West Garage will provide information and distribute some one-day passes for other locations where limited accommodations may be possible.

The Campus Patrol solicits the cooperation of the community for this special event.

Commencement Music To Be Expanded This Year

Music for the 1979 MIT commencement exercises will be expanded in size and shape to accommodate the Massachusetts Avenue procession and the proceedings in Killian Court.

Usually limited to brass literature, this year's program will also feature the 45-member John Oliver Chorale, John Oliver conductor and music director. Mr. Oliver is also lecturer in the MIT Music Section and director of the famed Tanglewood Festival Chorus.

The Chorale will give Preludes in Killian Court with a program that includes *Ascendo ad patrem meum* and *Angelus ad pastores ait* by Samuel Scheidt; three settings of poems by James Stephens: *Mary Hynes*, *Anthony O Daly* and *The Coolin* by Samuel Barber; and three folk songs of the British Isles: *Ca' the yowes* and *Just as the tide was flowing* by Ralph Vaughn Williams and *Ay wauklin' O* by Hugh Robertson.

As the Processional begins, the Brass Choir, Herbert J. Philpott conductor, will perform on the steps of the main entrance. First trombonist with the Boston Brass Ensemble, Mr. Philpott is the former dean of the Boston Conservatory of Music and was recently conductor of the Massachusetts All-State Band in Lowell.

The program for the Brass Choir will feature music by Johann Pezel, Dietrich Buxtehude, Gottfried Reiche, Giuseppe Guami and Giovanni Gabrieli.

The 15 musicians in the Brass Choir as well as some 20 players in the Brass Ensemble, which will perform in Killian Court, are mem-

bers of the Boston Brass Ensemble, a professional group that regularly performs in the Boston area and at commencements. The conductor since the early 1950's has been John Corley, who has conducted the MIT Concert Band since 1948 and is in charge of music for the MIT Commencement.

Music for the Processional in Killian Court will include 17th century brass works by William Walton, Fernand Desprez, Andrea Gabrieli, Giovanni Gabrieli, Girolamo Frescobaldi, Benedictus Grep and Henry Purcell.

Lead by Mr. Corley, the Brass Ensemble will be joined by four members of the graduating class—Michael Good of Royal Oak, Mi., trumpet, Jerry Flanagan of Luray, Va., trumpet, Michael Strauss of Harrison, N.Y., trombone and Gregory Bosch of Blue Springs, Mo., baritone.

The Brass Ensemble will also perform a double choir with the Chorale for a Musical Interlude in Johann Pachelbel's *Der Herr ist König* (*The Lord God Reigneth*). A festive piece, this music was selected for its ceremonious qualities and its appropriateness in the large outdoor space of Killian Court.

Commencement exercises will close with a Recessional program of music for brass by Benedetto Marcello, Adriano Banchieri, Giovanni Gabrieli, Girolamo Frescobaldi and Daniel Speer.

In the event of rain, the Brass Ensemble and the Chorale will perform in the Rockwell Cage and the Brass Choir will perform on the upper steps at the entrance of the Student Center.

MIT Press Is Being Sued For Publishing Moon Book

Last week MIT answered a summons in an action by the International Cultural Foundation, which is affiliated with Sun Myung Moon's Unification Church, alleging that MIT Press's publication of *Science, Sin, and Scholarship: The Politics of Reverend Moon and the Unification Church* (1978) constitutes copyright violation.

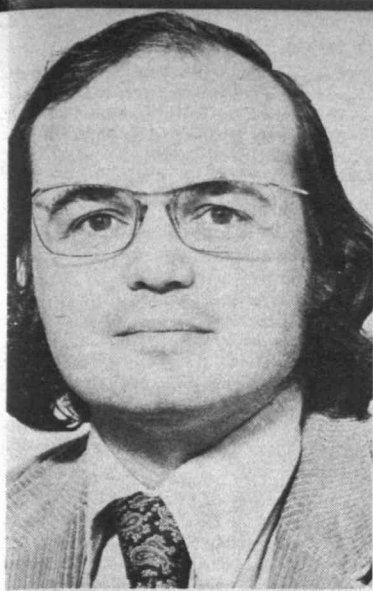
The International Cultural Foundation demands that MIT Press cease publication of the book, turn over its inventory to the Foundation, and destroy the plates. In addition, the Foundation seeks damages of not less than \$5000.

Science, Sin, and Scholarship, edited by Irving Louis Horowitz, Hannah Arendt Professor of Sociology and Political Science at Rutgers University, has been praised by *The Chronicle of Higher Education* as "The first full-length and balanced treatment of the political, religious, and social implications of the American career of the Reverend Sun Myung Moon documents by Moon, objective presentations of Unification Church theology and extracts of

testimony given before the House Subcommittee on the Korean lobby.

The inclusion of Reverend Moon's Founder's Address to the Fifth International Conference of the Unification of the Sciences is the grounds for the suit. The International Cultural Foundation claims that this speech is copyrighted and that it is the owner of the copyright, and as much is entitled to satisfaction of its demands.

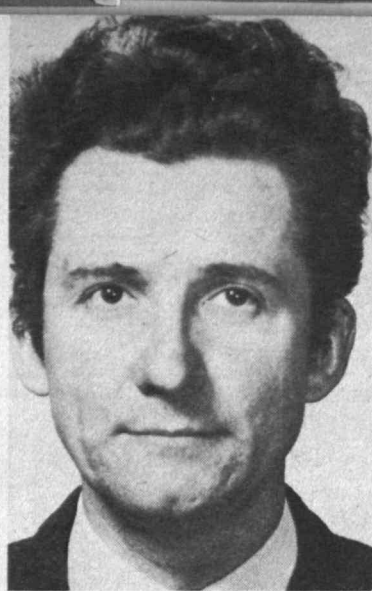
MIT has refused to cease publication of *Science, Sin, and Scholarship*, denying any liability for copyright violation. MIT believes the alleged copyright to be invalid and believes that even were the copyright valid, publication of the speech is consistent with the MIT Press's First Amendment rights, and those of Professor Horowitz, to comment on the doctrines and activities of the Unification Church. MIT views the action as an attempt to stifle debate and criticism of Reverend Moon and the Unification Church.



Professor Boolos



Professor Bresnan



Professor Busza



Professor Feld



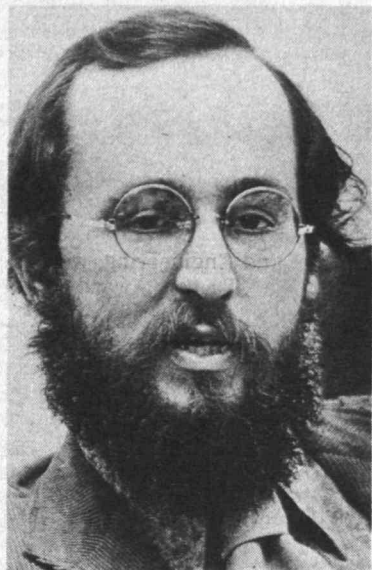
Professor Garrett



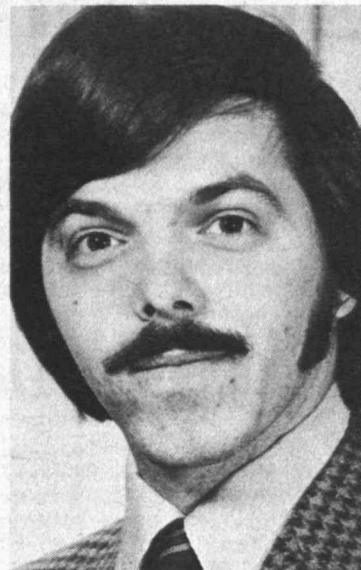
Professor Hausman



Professor King



Professor Larson



Professor Magnanti



Professor Melrose

20 Are Named To Rank Of Full Professor

Twenty members of the MIT faculty have been promoted to the rank of professor effective July 1. They are:

George S. Boolos, linguistics and philosophy, of Brookline. A philosopher whose fields of specialization are logic and the philosophy of mathematics, Dr. Boolos has attained an international reputation. He was one of the principal initiators of a new area of logical investigations and is the author of a widely acclaimed book and a number of papers.

He holds the BA in mathematics from Princeton University (1961), the BPhil in philosophy from the University of Oxford (1963), and the PhD in philosophy from MIT (1966). Professor Boolos joined the MIT faculty in 1969 after teaching philosophy at Columbia University from 1966-69.

Joan W. Bresnan, linguistics and philosophy, of Boston. Considered the leader of her generation in the field of syntactic studies, Professor Bresnan is known as an innovator in an area in which MIT has established a position of world leadership. Her current research represents a major new thrust in establishing links between linguistic theory and the study of cognitive processes.

She joined the MIT faculty in 1975 after teaching linguistics at Stanford University (1972-73) and at the University of Massachusetts, Amherst (1973-75). Professor Bresnan's degrees are the BA in philosophy from Reed College (1966) and the PhD in linguistics from MIT (1972).

Wit Busza, physics, of Weston. Professor Busza, an experimental particle physicist, has pioneered the study of interaction of very energetic hadrons and is widely recognized as the leading authority in this field. In particular, by studying interaction of energetic pions with atomic nuclei, he has been able to probe space-time properties of reactions at high energies. He joined the MIT faculty in 1969 after several years as a research associate at University College, London, and at the Stanford Linear Accelerator Center.

Professor Busza holds the BSc in physics (1960) and the PhD in nuclear physics (1964), both from University College, London.

Michael S. Feld, physics, of Cambridge. Professor Feld's work is generally regarded as the starting point of experimental research in the area of super-radiance. He has also worked extensively in high-precision laser spectroscopy, explaining the mechanisms involved in energy transfers between excited atoms and molecules. Well known as a leading investigator in the field of modern optics, Professor Feld is presently working on a novel application—the use of laser optical pumping to align short-lived atomic nuclei to determine their electromagnetic properties.

All of Professor Feld's degrees—the SB in the history and philosophy of science, the SM in physics (both 1963) and the PhD in physics (1967)—are from MIT. He joined the faculty in 1968.

Merrill F. Garrett, psychology, of Marshfield. Professor Garrett has won worldwide recognition for his experimental study of the mental processes underlying human language use. A psycholinguist, he is highly regarded as a research mentor and as a teacher of graduate students in the cognitive sciences.

He came to MIT in 1964 as a member of the staff at the Research Laboratory of Electronics and joined the faculty as an assistant professor of psychology in 1968. He holds the BS in chemistry from Montana State University (1959), the MA in speech from the University of Montana (1960), and the PhD in communication sciences from the University

of Illinois, Urbana, (1965).

Jerry A. Hausman, economics, of Milton. Econometrics, a field of central importance in economics, is Professor Hausman's specialty. His early research shed new light on problems in simultaneous equation estimation—the central focus of the profession for the last 25 years. His current work applies sophisticated techniques to experimentally generated data.

Professor Hausman is associate editor of *Econometrica*, the *Bell Journal of Economics*, and reviewer for *Mathematical Review*. He holds degrees from Brown University (BA economic history, 1968) and Oxford University (B Phil, economics, 1972, and D Phil, economics, 1973). He joined the

MIT faculty in 1976.

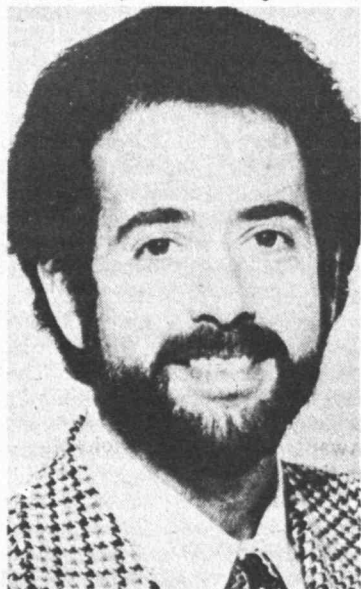
Charles E. Holt III, biology, of Concord. His research involves the physiology, biochemistry and genetics of the slime mold, *Physarum polycephalum*. The work is important because this organism is ideally suited as a model to study the fundamental aspects of differentiation and development. As a teacher, Professor Holt was instrumental in developing research-oriented project laboratories for undergraduates in the Department of Biology.

Professor Holt holds the BA from Wesleyan University (1957) and the PhD from MIT (1962). He

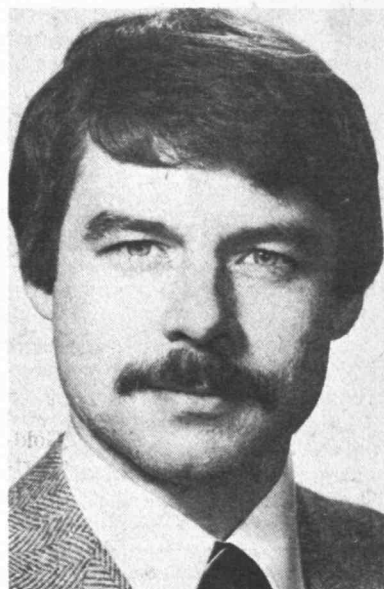
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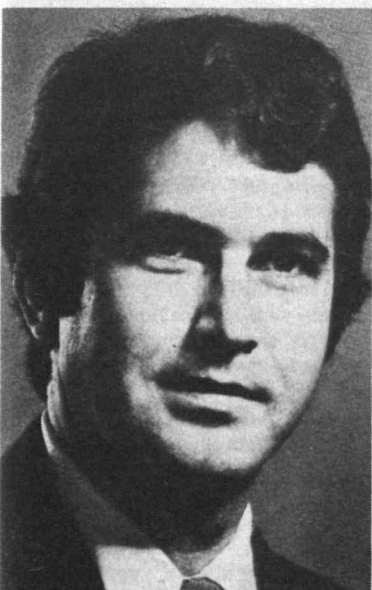
Professor Negele



Professor Pindyck



Professor Schmalensee



Professor Senturia



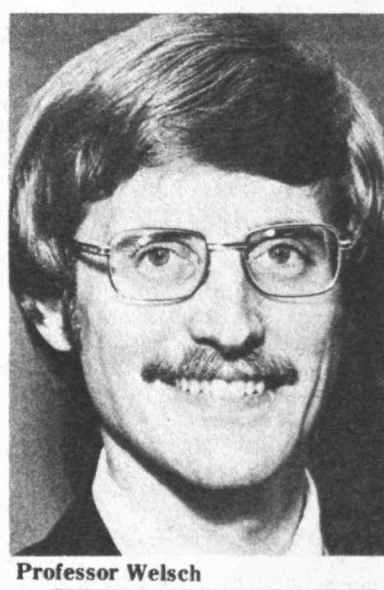
Professor Sharp



Professor Torriani-Gorini



Professor Vanmarcke



Professor Welsch

THE INSTITUTE CALENDAR X3-3270

May 30
through
June 10

Seminars & Lectures

Wednesday, May 30

Update on Enteral Hyperalimentation* — Dr. William Steffee, director, Clinical Nutrition, University Hospital. Seminar at 9am, Rm E18-408.

Thursday, May 31

A New Approach to Preventive Medicine* — Dr. Alan Blum, founder, Doctors Oughta Care, Miami, Florida, a review of campaigns to prevent smoking through humor. Sponsored by the Group Against Smoking Pollution, 7:30pm, Rm 407, Student Center.

Friday, June 1

Animal Spirits and the Neuron Doctrine — Two Centuries of Changing Ideas* — Prof Sanford L. Palay, neuroanatomy, Harvard University Medical School. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Community Meetings

Wives' Group* — Wednesday, May 30, Litsa Mikhalevsky, member of the Wives' Group, will give a slide presentation on "Greece", 3-5pm in the Mezzanine Lounge, Student Center. Babysitting provided.

Seniors!** — Sat, June 2, 3-6pm, Kresge Oval, "Clam Bake", lobster, steamed clams, Bar-B-Q chicken, corn-on-the-cob, watermelon, rolls, beer, coke. Ticket: \$9/person. Sun, June 3, 8pm-Midnight, "The Last Tango", semi-formal, two live bands, one playing swing and the other rock, hors d'oeuvres and cash bar. Tickets: \$4/person. All tickets on sale now, Lobby 10 or call Gregg x5-9481 or Marcia x5-8307 Dorm.

Professor

(Continued from page 3)

joined MIT in 1962.

Jonathan King, biology, of Boston. Professor King's research has been primarily in the field of the mechanisms involved in the assembly of the structural components of bacterial viruses to form intact and infective viruses. His work has been important to the entire field of morphogenesis, which deals with the formation and differentiation of tissues and organs. Professor King is considered one of the leading investigators in this field.

In addition to his research and teaching, Professor King directs the biology department's Electron Microscopy Facility. He holds the BS degree from Yale University (1962) and the PhD from California Institute of Technology (1967). Professor King joined MIT as an assistant professor in 1971.

Richard C. Larson, electrical engineering and computer science, and urban studies and planning, of Winthrop. Co-director of the Operations Research Center at MIT, Professor Larson is known internationally for his analysis of public safety systems, especially police patrol deployment and ambulance allocation systems. He holds joint appointments in the Department of Urban Studies and Planning and the Department of Electrical Engineering and Computer Science.

Professor Larson's degrees are all from MIT and all in electrical engineering. He received the PhD in 1969, the same year he joined the faculty. Professor Larson has been co-director of the Operations Research Center since 1977.

Thomas L. Magnanti, management, of Holliston. Professor Magnanti has an international reputation for his theoretical and applied research work in the areas of operations research and operations management. He has worked closely with scholars in civil engineering, mathematics and electrical engineering to solve many important management problems.

He holds the BS in chemical en-

gineering from Syracuse University (1967), two masters degrees—statistics and mathematics—from Stanford University (1969 and 1972, respectively) and the PhD in operations research, also from Stanford (1972). Professor Magnanti joined the faculty at the Sloan School of Management in 1971.

Richard B. Melrose, mathematics, of Belmont, is a widely respected mathematical analyst who works in the field of partial differential equations.

Professor Melrose joined the MIT faculty in 1976 after two years as a research fellow at St. John's College, Cambridge. He has a BS in mathematics and physics from the University of Tasmania (1968), a second BS in theoretical physics from Australian National University (1969), and the PhD from Cambridge University (1974).

John W. Negele, physics, of Belmont. Professor Negele is a theoretical nuclear physicist who is regarded by the nuclear community as one of the leaders of the field. He has contributed to a broad range in nuclear physics, including the structure of nuclei, the time-dependence of heavy ion reactions, and the extraction of electromagnetic properties of nuclei.

Professor Negele holds the BS in engineering sciences from Purdue University (1965) and the PhD in theoretical physics from Cornell University (1969). He came to MIT as a visiting assistant professor in 1970 and was appointed assistant professor in 1971.

Robert S. Pindyck, management, of Newton. A world-renowned authority on the economics of energy demand and production, Professor Pindyck is beginning exploratory research in an entirely new area—the economics of epidemic control. He is developing theoretical models of optimal government policy for subsidization of vaccination programs.

Professor Pindyck has been a member of the faculty at the Sloan School of Management since 1971. All his degrees are from MIT—the SB in electrical engineering and physics (1966), the SM in electrical engineering (1967), and the PhD in economics in 1971.

Richard Schmalensee, management, of Brookline. An applied microeconomic theorist, Professor Schmalensee works on the pro-

blems of industrial organization and the issues entailed in the government regulation of industry. Considered to be at the forefront of his field, he is often called upon to provide expert testimony on these matters.

Professor Schmalensee came to the Sloan School of Management as an instructor in 1967. From 1970-77 he taught at the University of California, San Diego. He returned to the Sloan School in 1977. He holds the SB in economics, politics and science (1965) and the PhD in economics (1970), both from MIT.

Stephen D. Senturia, electrical engineering and computer science, of Boston. Professor Senturia has played a major role in maintaining the reputation for excellence in education enjoyed by the Department of Electrical Engineering and Computer Science, of which he has been a member since 1967. He has developed key undergraduate subjects that have established the tone of the department for many new students. In addition, he has maintained a research effort in the field of semiconductor materials, devices and instrumentation applications.

Professor Senturia, whose BA is from Harvard College (1961) and whose PhD is from MIT (1966), joined the faculty in 1967.

Phillip A. Sharp, biology, of Newton. Professor Sharp's work on RNA splicing, which involves the transcription of genetic information, has had a revolutionary impact on the field and has marked him as one of the leaders of this field of biology. His earlier work on the molecular biology of adenovirus infection of mammalian cells is also widely recognized.

Professor Sharp received his undergraduate degree in 1966 from Union College in Barbourville, Ky. He received his PhD in 1969 from the University of Illinois. He was a postdoctoral fellow at California Institute of Technology from 1969-71 and came to MIT as an associate professor in 1974 after three years at Cold Spring Harbor Laboratory.

Richard P. Stanley, mathematics, of Newton. A combinatorialist (one who works on finite or discrete mathematical problems), Professor Stanley's research is characterized by remarkable ingenuity. His work bridges the gaps between pure and

applied mathematics and between combinatorics and computer science.

He holds the BS in mathematics from California Institute of Technology (1966) and the PhD in mathematics from Harvard University (1971). Professor Stanley joined the MIT faculty in 1973. Before that he was C.L.E. Moore Instructor at MIT from 1970-71 and Miller Research Fellow at the University of California, Berkeley, from 1971-73.

Annamaria Torriani-Gorini, biology, of Brookline. Professor Torriani-Gorini's general research interests are in the fields of bacterial physiology and the molecular biology of bacteria. Her contributions in the area of regulation of the synthesis of bacterial alkaline phosphatase is often cited as the model for studies in regulation of enzyme synthesis.

Since 1972 she has had major responsibility for the organization and teaching of the introductory laboratory subject that all undergraduate biology majors must take. Dr. Torriani-Gorini holds the PhD in biology-botany from the University of Milan, Italy, (1942). She joined MIT in 1960 as a research associate and became a member of the faculty in 1971.

Erik H. Vanmarcke, civil engineering, of Wayland. Professor Vanmarcke's technical specialization is in the application of probability and decision analysis to problems in geotechnical and structural engineering. He is ranked among the leaders of the movement to apply formal probabilistic methods to civil engineering practice. Professor Vanmarcke is also making important contributions to dam safety and is head of the Department of Civil Engineering's Systems Methodology Group.

He holds the engineer degree from Catholic University of Louvain, Belgium (1965), the MS from the University of Delaware (1967), and the PhD from MIT (1970). He joined the faculty in 1969 and from 1974-77 he was the Gilbert W. Winslow Career Development Associate Professor.

Roy E. Welsch, management, of Reading. Professor Welsch's work is in the center of activity of modern statistical research and deals with such varied topics as robust regression, statistical com-

puting, nonlinear estimation and econometrics. His research interests and statistical outlook are focused on applications. He has played an important role in the development and growth of the Operations Research Center and the Center for Computational Research and Economics in Management Science.

Professor Welsch holds the AB in mathematics from Princeton University (1965) and the MS (1966) and the PhD (1969), both in mathematics and both from Stanford University. He joined the faculty at the Sloan School of Management in 1969.

Group To Study Monsoon Season

Several MIT scientists and students are participating in an international scientific study of the atmosphere's single most massive weather phenomenon, the monsoon.

Dr. Kshudiram R. Saha, Dr. Frederick Sanders and Dr. Jagadish Shukla, all of the Department of Meteorology, are involved in the four-month-long summer Monsoon Experiment (MONEX), which began earlier this month. Nearly 200 American scientists are participating in the 36-nation study designed to learn more about monsoons. Dr. Saha is a visiting scientist from India and is director of the Indian Institute of Tropical Meteorology.

The best-known monsoon is the summer monsoon which delivers nearly all of India's rain during June, July, and August. The monsoon can change the Indian landscape virtually overnight from brown and yellow to verdant green. However, when the monsoon is weak much of the nation is unable to grow enough food and the economy suffers drastically.

Less well-known but also important, is the winter monsoon that delivers three-quarters of the total rainfall to the Philippines, the Malay peninsula, Indonesia and parts of Australia.

The MIT scientists will participate in the study of the summer monsoon. Professors, Sanders, Shukla, Dr. Saha and student Philip Sabella will spend part of this summer in India on this National Science Foundation sponsored research.

Wives' Group* — Wednesday, June 6, the Wives' Group will have a picnic in the Great Court, 12 noon-2:00pm. Bring your own lunch. Children are welcome.

Register for Summer Art Classes in Drawing, Pottery, Photography, Calligraphy** — Classes start June 18 for 10 weeks. Sponsored by the Student Art Association. Register through June 15, 1-5pm, Student Center, Rm 429. Information call x3-7019.

Social Events

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

Movies

African Queen** — Special LSC Senior movie. Wed. May 30, 8pm, Rm 26-100. Free to seniors (bring ID or Brass Rat) 50¢ for others with MIT or Wellesley ID.

Double Feature** — LSC Summer Movie. Fri, June 1: The Illustrated Man, 7pm. The Stepford Wives, 9pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

The Three Musketeers** — LSC Summer Movie. Sat, June 2, 8pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Double Feature** — LSC Summer Movie. Fri, June 8: Meet Me in St. Louis, 7pm. An American in Paris, 9:15pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Marathon Man** — LSC Summer Movie. Sat, June 9, 8pm, Rm 26-100. Admission: 75¢ w/MIT or Wellesley ID.

Exhibits

Processes in Architecture: A documentation of six examples* — Works presented by architects: Marvin Goody/Simmons College renovation; Louis Kahn/The Yale Center for British Art and British Studies; Gerhard Kallman and Noel McKinnell/The Boston Five Cents Savings Bank; Donlyn Lyndon/Pembroke Dormitories at Brown University; Jack Myer/Dormitories at Hampshire College and Worcester State College and Richard Tremaglio/private residence in Marblehead, Mass. On view daily 10am-4pm; Wed evenings; 6-9pm, Hayden Gallery, through June 24, 160 Memorial Dr., Cambridge, Mass. Sponsored by the Committee on the Visual Arts. Information: 253-4400.

Alan Saret: Stair, Water and Canopy Arrangements* — Exhibition of drawings for architectural projects. The artist's intentions, procedures and concerns with regard to architectural structures will be explored. On view daily, through June 24, Hayden Corridor Gallery. Sponsored by the Committee on the Visual Arts. Information: call 253-4400.

The Computer — From Counting to Cognition* — Computers then and now . . . and how they got that way, photographs, computers and representative documents that trace the historic and scientific development of computers, also indication of the ever-expanding use of computers and will include many of MIT activities that contributed to this development. On view through Aug 15, Mon-Fri, 10am-5pm; weekends, 1-4pm, Margaret Hutchinson Compton Gallery, rm 10-150, Camb, Mass.

MIT Historical Collections* — In-house exhibits include antique globes, the Ellsworth A. Wentz Collection of motors and meters; rare instruments including compasses, sundials and other measuring devices from the 17th and 18th centuries; Early Alumni and several exhibits of memorabilia and photographs honoring prominent graduates of the Institute; The Complete Years, a photographic essay of the lives of Dr. & Mrs. Karl Taylor Compton. Recently installed exhibits: "Hello Central", traces the development of the telephone as well as the relationship between Alexander Graham Bell and MIT; "X-Ray Astronomy Sounding Rocket", "L'ere de Despradelle" architectural rendering from the Beaux Art period of 1893-1912 as influenced by Prof Constant Desire Despradelle. On view daily, 9am-5pm. 265 Massachusetts Ave. 2nd floor Camb, Mass.

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

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

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

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

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

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

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 departmental field.

*Open to the public
**Open to the MIT community only
***Open to members only

Send notices for June 6 through June 17 to Calendar Editor, Rm 5-103, X3-3270, before Noon, Friday, June 1.



34 Promoted To Associate Professor

Thirty-four MIT faculty members have been promoted to the rank of associate professor effective July 1. They are:

Harold Abelson, Division for Study and Research in Education and Electrical Engineering and Computer Science (joint), of West Newton. Professor Abelson, who has combined theoretical work in computer science with uses of computer technology to enhance education, received the AB in mathematics from Princeton University (1969) and PhD in mathematics from MIT (1973). He was appointed an assistant professor in 1977.

Robert C. Armstrong, Chemical Engineering, of Lexington. Professor Armstrong, an expert in the flow of polymer liquids and in the processing of polymers, holds the B ChE from the Georgia Institute of Technology (1970) and the PhD in chemical engineering from the University of Wisconsin at Madison (1973). He was appointed assistant professor in 1973 and was the duPont Assistant Professor of Chemical Engineering in 1974-76.

Tanya M. Atwater, Earth and Planetary Sciences, of Boston. Professor Atwater, a geologist working primarily in marine problems, received the BA in geophysics from the University of California at Berkeley (1965) and the PhD in earth sciences from the Scripps Institution of Oceanography (1972). She was an assistant professor at the Scripps Institution of Oceanography in 1972-73 and came to MIT as an assistant professor in 1974.

Raymond M. Baker, Biology, of Stoneham. Professor Baker's research interest is in the area of the genetics of cells of animal origin—including human—maintained as tissue and cell cultures. He received the BS in biophysics from Yale University (1962) and the PhD in biophysics from the University of California at Berkeley (1969). He was a staff scientist at the Division of Biological Research, Ontario Cancer Institute, Toronto, 1971-74; assistant professor at the Department of Medical Biophysics, University of Toronto, 1973-74; staff scientist at the Research Institute, the Hospital for Sick Children, Toronto, 1973-74; and became an assistant professor at the MIT Center for Cancer Research and Department of Biology in 1974.

Thomas A. Barocci, Sloan School of Management, of Boston. Professor Barocci's research has concentrated on the evaluation of government-sponsored employment and training programs, evaluation of public works and economic development projects, and the impact of the structure of collective bargaining laws on the outcome of contract negotiations. He holds the BA in economics (1968), the MA in industrial relations (1969) and the PhD in industrial relations (1972), all from the University of Wisconsin. He was an assistant professor at Cornell University in 1973-74; chief economist for Massachusetts' Executive Office of Manpower Affairs in 1974-75; special assistant to the director of the Regional Manpower Institute in 1975-76; and became assistant professor at the Sloan School in 1976.

Michael J. Bevan, Biology, of Somerville. Professor Bevan is a cellular immunologist whose research focuses on the study of factors that result in the formation of special kinds of cells important in the antigen-antibody reaction. He received the BSc (1967) and MSc (1968) from London University and the PhD from the Council for National Academic Awards (1972). He was an assistant professor at the Salk Institute in 1975-77 and came to MIT as an assistant professor in 1977.

Rafael L. Bras, Civil Engineering, of Lexington. Professor Bras' research is in the general area of surface water hydrology, with emphasis on the treatment of rainfall and runoff as random processes in space and time. He holds the SB (1972), SM (1974) and ScD (1975), all in civil engineering and all from MIT. He was a natural resources specialist with the Puerto Rico Department of Natural Resources in 1972-73; an assistant professor at the University of Puerto Rico in 1975-76, and came to MIT as an assistant professor in 1976.

Joel P. Clark, Materials Science and Engineering, of Sherborn. Professor Clark, who has pioneered the establishment of research and teaching programs in materials systems and policy studies, received the BS in engineering science (1966) and MS in materials science (1970) from Florida State University, the ScD in materials science (1972) from MIT and the SM in management (1975) from MIT. He was a project manager in research and development for Texas Instruments, Inc., in 1972-75; and was appointed an assistant professor at MIT in 1975.

Michael J. Cleary, Mechanical Engineering, of Lincoln. Professor Cleary, a researcher in the field of continuum mechanics with current interests in the behavior of geological and/or porous materials, received the BE in civil engineering from the National University of Ireland (1972) and the MS (1974) and PhD (1975) in Mechanics and Structures from Brown University. He became an assistant professor at MIT in 1976 and has been the C.R. Soderberg Assistant Professor in Power Engineering since 1978.

Lloyd S. Etheredge, Political Science, of Cambridge. Professor Etheredge, a specialist in political psychology, political behavior and methods of political analysis, holds the BA in economics from Oberlin College (1968) and the MA in international relations (1970), M Phil in political science (1972) and PhD in political science (1974), all from Yale University. He was an assistant professor at the University of Manitoba in 1974-75 and was appointed an assistant professor at MIT in 1975.

Chris Georgakis, Chemical Engineering, of Newton. Professor Georgakis, an expert in the modeling and optimization of the dynamics of chemical reactors and processes, has the Chemical Engineering Diploma from the National Technical University in Greece (1970), the MS in chemical engineering from the University of Illinois (1972) and PhD in chemical engineering from the University of Minnesota (1975). He was duPont Assistant Professor at MIT in

1975-76, assistant professor in 1976-77 and has been Edgerton Assistant Professor since 1977.

Dorian Goldfeld, Mathematics, Arlington. Professor Goldfeld, who works in analytic number theory, received the BS from Columbia University (1967) and PhD in pure mathematics from Columbia (1969). He was a member of the School of Mathematics, Institute for Advanced Study, Princeton, in 1973-74, visiting professor at the Scuola Normale Superiore in Pisa, Italy, in 1974-76, and was appointed an assistant professor at MIT in 1976.

David C. Gossard, Mechanical Engineering, of Watertown. Professor Gossard, a researcher in the field of computer aided design and computer aided manufacture, received the BS (1968) and MS (1970) in mechanical engineering from Purdue University and the PhD in mechanical engineering from MIT (1975). He was appointed an assistant professor in 1975.

Edward M. Greitzer, Aeronautics and Astronautics, of Wayland. Professor Greitzer, an authority on surge and stall in axial flow compressors, a subject of crucial importance to the aircraft engine industry, received the AB in physics (1962), MS in engineering (1964) and PhD in mechanical engineering (1970), all from Harvard University. He was a research engineer with Pratt & Whitney Aircraft, United Technologies, Inc., in 1969-76, an Industrial Fellow Commoner at Cambridge University in 1975-76, and a senior research engineer at United Technologies Research Center in 1976-77. He was appointed an assistant professor at MIT in 1977.

Linda M. Hall, Biology, Cambridge. Professor Hall's research has been directed toward an understanding of the structure-function relationship of components of the excitable membranes of nervous tissue in *Drosophila melanogaster*. She received the BS in biology and chemistry from Bucknell University (1965) and PhD in biochemistry from the University of Wisconsin at Madison (1970). She became an assistant professor in 1973.

Mujid S. Kazimi, Nuclear Engineering, of Newton. Professor Kazimi, whose research has been in the area of liquid metal fast breeder reactor safety, holds the B Eng in nuclear engineering from the University of Alexandria (1969) and the SM (1971) and PhD (1973) in nuclear engineering from MIT. He was a senior engineer for the Westinghouse Electric Corporation in 1973-74 and an associate nuclear engineer at the Brookhaven National Laboratory in 1974-76. He was appointed an assistant professor at MIT in 1976.

Stephen J. Kobrin, Sloan School of Management, of Arlington. Professor Kobrin, whose research has focused on the relationship between international business and politics, received the B Mgt E from Rensselaer Polytechnic Institute (1960), the MBA from the University of Michigan (1975). He became an assistant professor at the Sloan School in 1975 and Ford International Assistant Professor in 1976. He has been a research associate at the Center for International Studies since 1977.

Steven R. Lerman, Civil Engineering, of Winchester. Professor Lerman's expertise is in transportation systems, with emphasis on location and travel demand modeling. He holds the SB (1972), the SM (1973) and PhD (1975), all in civil engineering and all from MIT. He became an assistant professor in 1975 and was named Gilbert Winslow Career Development Assistant Professor in 1977.

Raymond E. Levitt, Civil Engineering, of Bedford. Professor Levitt, whose research has been in areas of fundamental importance to the construction industry, such as construction safety, received the BSc in civil engineering from the University of Witwatersrand, South Africa (1971) and MS (1973) and PhD (1975) in civil engineering/construction management from Stanford University. He became an assistant professor at MIT in 1975.

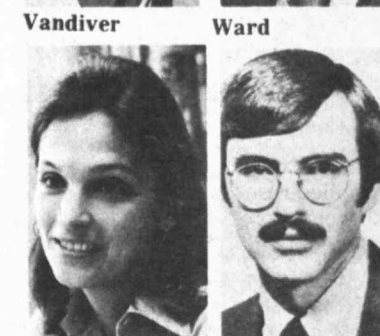
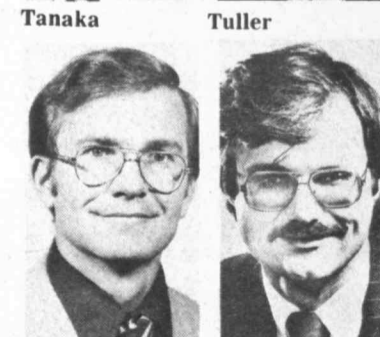
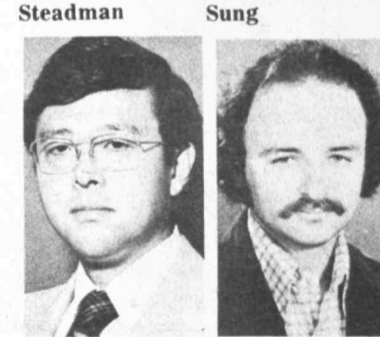
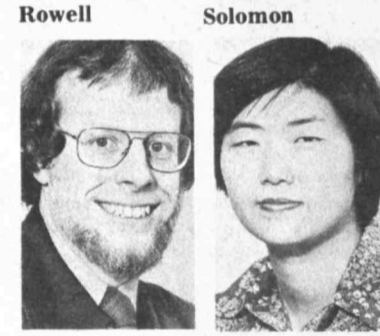
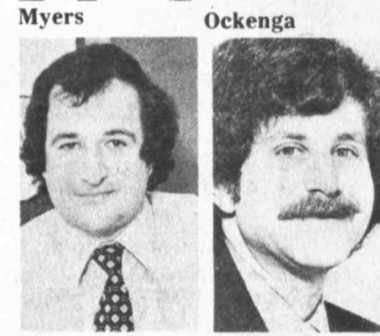
Manuel Martinez-Sanchez, Aeronautics and Astronautics, of Lexington. Professor Martinez-Sanchez's research has been in fields as diverse as MHD power generation and wind energy conversion. He has the Aeronautical Engineer degree from the University of Madrid, Spain (1967) and three degrees from MIT in aeronautics and astronautics, the SM (1968), EAA (1969) and PhD (1973). He was appointed an assistant professor in 1974.

Nathaniel J. Mass, Sloan School of Management, of Acton. Professor Mass' research has focused on the elaboration of computer simulation techniques as applied to the search for solutions to complex socio-economic problems. He is currently director of the System Dynamics National Model Project in the Sloan School. He received the BS in applied mathematics (1972) and PhD in management (1975) from MIT. He became an assistant professor in 1975.

Jeffrey A. Meldman, Sloan School of Management, of Cambridge. Professor Meldman's research has focused on the application of concepts derived from computer science and management information systems to substantive legal problems, particularly those dealing with privacy and computer-aided legal analysis. He has the SB in electrical engineering from MIT (1965), the JD from the Harvard Law School (1968), the SM in electrical engineering from MIT (1970) and the PhD in computer science from MIT (1975). He became an assistant professor at the Sloan School in 1974, and since 1977 has been a member of the adjunct faculties at Boston College Law School and the Franklin Pierce Law Center.

Philip C. Myers, Physics, of Winchester. Professor Myers, a radio-astronomer whose special concern is the physics of dense interstellar clouds from which stars are eventually formed, received the AB from Columbia University (1966) and PhD from MIT (1972). He was an Office of Sponsored Research staff member of the Research Laboratory of Electronics in 1972-75 and was appointed an assistant professor in 1975.

Starr Ockenga, Architecture, of Ipswich. Professor Ockenga, an artist and photographer who has been instrumental in the reorganization of the Creative Photo-



Mass Meldman
Levitt Ockenga
Myers Solomon
Rowell Sung
Steadman Tuller
Tanaka Ward
Vandiver Wilson

(Continued on page 8)

