

Need help?

If you need afternoon help in your office or lab, consider hiring a Cambridge TeenWork student on an after-school basis.

Cambridge TeenWork is a youth employment program through which local schools and businesses employ high school students. Participation in the program can provide a student with a productive work/learning experience and—at the same time—help meet your work needs.

Further information on the program is available from MIT's TeenWork coordinator, Elizabeth Mulcahey, x3-1674.

Speaking of food

Nationally known sports nutritionist Nancy Clark will speak at MIT at 4pm Tuesday, Nov. 19 in Rm 6-120. The talk is sponsored by the Department of Athletics and is open to the community.

Ms. Clark is an expert on nutrition and the athlete—from recreational to world class. Her book, *The Athlete's Kitchen*, was one of the first in sports nutrition. She is a staff member for Sports Medicine of Brookline and a contributing editor to *The Runner* magazine.

Meet the artist

An introductory evening will be held Tuesday, Nov. 19, at 8pm for the year's second artist in residence at The Reference Gallery of the List Visual Arts Center in the Wiesner Building. He is Austrian artist Richard Kriesche who is known for his film, video and installation work. His work here will focus on the relationship of new technologies to the social conditions which they both convey and create. Students and all other members of the community are invited to this first event of the Kriesche residency, organized by the Committee on the Visual Arts.

Old wreck

A marine archaeologist who dived last summer to explore the world's oldest shipwreck, dating to 1400 BC, will present a lecture with slides tonight (Nov. 13) at 7pm in the MIT Museum's Ditty Bag Series. Dr. Paul Johnston of the Peabody Museum in Salem said the exploration, in the Mediterranean off the town of Kas on the southern coast of Turkey, revealed the "richest site I've ever seen." The wreck, first discovered in 1983, has been identified as that of a cargo vessel probably being used to haul metal ingots. All members of the community are invited to this lecture at the MIT Museum, 265 Massachusetts Avenue.

East & west

Professor D. Eleanor Westney of the Sloan School will present results of studies comparing Japanese and American computer design engineers in the next Perspectives talk Wednesday, Nov. 20, at noon in Rm E25-111. She will explore similarities and differences in human resource development, work ethics and organizational structures in Japan and the US. The talk is open to all.

No Tech Talk

Tech Talk will not be published Wednesday, Nov. 27, because of Thanksgiving vacation. The Institute Calendar in the next week's issue will cover the period from November 20 through December 3. Listings for inclusion in Institute Notices, the Institute Calendar and Classified Ads in *that issue* must be submitted by noon Friday, Nov. 15.

Astronomer explains what to expect from comet

Three years ago astronomer David C. Jewitt was the first person to see Halley's comet since it disappeared in 1911. He's hardly taken his eyes off it since.

Dr. Jewitt, assistant professor of planetary science in the Department of Earth, Atmospheric and Planetary Sciences, continues to monitor Halley using the telescopes at Kitt Peak National Observatory, at MIT's McGraw-Hill Observatory, both near Tucson, Ariz., and at the National Aeronautics and Space Administration's infrared telescope facility on Mauna Kea, Hawaii. Working with him is MIT graduate student Karen J. Meech of Littleton, Colo.

It was on October 16, 1982, that Professor Jewitt became the first person in 75 years to see Halley's Comet, using the 200-inch diameter telescope at Palomar Observatory at California Institute of Technology. The comet should soon be bright enough to be visible to the unaided eye, he said.

But now Halley's—about 180 million miles from the sun and 100 million miles from the earth—is at least 50 times too faint to be seen without a telescope.

"The predicted date of its closest passage by the sun is February 6, 1986. It will then be 55 million miles from the sun and too close to

that brilliant body to be visible from earth," he said.

"The best times for visual observation will probably occur in January and again in March of next year. The comet should appear in these months as a fuzzy blob among the stars. The exact appearance of the comet, and of comets in general, cannot be reliably predicted in advance. However, it is likely that the comet will be so extended that the best views will be had either with the naked eye, or with a pair of low magnification binoculars. A telescope will not be needed," Professor Jewitt said.

People living in the country will probably

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Students gather in apartment of Bexley Hall housemaster Judah L. Schwartz, lower right, professor of engineering science and education, for apartheid discussion. —Photo by Calvin Campbell

First Institute Colloquium draws hundreds

By CHARLES H. BALL
Staff Writer

Colloquium: an academic meeting at which one or more specialists deliver addresses on a topic or on related topics and then answer questions relating thereto.

The word colloquium has a cloistral ring to it, but the opposite proved true at MIT last week when the Institute's first community-wide colloquium explored the issue of institu-

tionalized racism, or apartheid, in South Africa.

The talks, workshops and discussions spread across the campus, moving from Kresge Auditorium to student living groups. The dialogue became intense at times as outside speakers, faculty members, students, administrators and staff members focused their attention on a practice that was universally condemned as evil, on the future of South Africa and on the controversy over divestment

as a way of attacking apartheid.

The forum, which included day and night activities on Wednesday and Thursday, Nov. 6-7, was sponsored by the new Institute Colloquium Committee. The committee was formed recently by the Provost to bring all segments of the community together to consider important issues of our times.

Its chairman, Frank E. Morgan, associate professor of mathematics, said the committee (continued on page 8)

Engineering School to undertake self study

By ROBERT C. DI IORIO
Staff Writer

MIT's undergraduate engineering education program, unique in the nation and perhaps in the world because of its close coupling to research and to graduate education, is about to undergo a comprehensive reappraisal by the School of Engineering.

Dr. Gerald L. Wilson, Dean of the School of Engineering and Vannevar Bush Professor, has announced the formation of a Commission on Engineering Undergraduate Education (CEUE) and charged it with overall direction of the reappraisal, which will include an examination of how the Institute's general academic requirements and the Institute's

environment influence engineering education.

The CEUE is charged with enunciating a concise statement of the goals of engineering education by January and with the preparation of a preliminary report by May.

Dr. Jack L. Kerrebrock, Associate Dean of the School of Engineering and the R.C. Maclaurin Professor, is chairman of the commission.

Appointed members of the CEUE were Dr. Herman A. Haus, Elihu Thompson Professor in the Department of Electrical Engineering and Computer Science; Dr. Lawrence M. Lidsky of the Department of Nuclear Engineering, and Dr. Borivoje B. Mikic of the Department of Mechanical Engineering.

Professors Haus, Lidsky and Mikic will chair working groups which will address the critical issues as defined by the Commission, such as: the interface of the general Institute requirements with the engineering curriculum; the content of the engineering curriculum itself in the various departments; the advisability of creating a core engineering curriculum; the environment in the living units, and the learning environment at MIT.

The CEUE is charged with drawing out the thoughts and suggestions of the faculty of the School of Engineering and with collaborating with the reviews being conducted by the Committee on the Humanities and Social (continued on page 8)

Program announced for 'Star Wars' symposium

MIT will hold a daylong informational symposium on the Strategic Defense Initiative (SDI) Saturday, Nov. 23, in Huntington Hall (Rm 10-250) beginning at 9:30am.

SDI, also known as "Star Wars," is a controversial national program intended to prevent the entry of nuclear missiles. It has become a major issue in both foreign and defense policy.

The symposium has been arranged by a faculty committee to inform the MIT community about the technical and social issues surrounding SDI. Sponsors of the event are the Office of the Provost and the MIT Defense and Arms Control Studies Program.

Professor John Deutch, MIT provost, will chair the morning session at which the topics and speakers will be:

—"Historical Review of ABM Issues," Alexander Flax of the Institute for Defense Analyses.

—"SDI Systems Concepts," Ashton Carter of Harvard University.

—"Critical Technologies," Richard Garwin of IBM, Hans Mark of the University of Texas and Gerold Yonas of the SDI Office.

Professor Louis Smullin, who chaired the organizing committee, will chair the afternoon session with the following program:

—"Strategy and Policies Issues," Fred Hoffman of R&D Associates/Panheuristics and Professor Jack Ruina, head of the MIT Defense and Arms Control Studies Program.

—"Personal Perspectives on SDI," W.K.H. Panofsky of the Stanford Linear Accelerator

Center, Brent Scowcroft (Lt. Gen, ret., USAF), former National Security Advisor to the President, and Institute Professor Jerome B. Wiesner, former MIT president and White House Science Advisor.

In addition to Professors Deutch, Smullin, Ruina and Wiesner, members of the organizing committee are Professors Jack L. Kerrebrock, associate dean of the School of Engineering; Philip Morrison, Institute Professor and professor of physics; Walter E. Morrow, professor of electrical engineering and computer science and director of Lincoln Laboratory, and Dr. Kosta Tsipis, principal research scientist in the Program in Science, Technology and Society.

'Policies and Procedures' is revised, now being distributed

The Institute's revised *Policies and Procedures* has been issued, incorporating changes in policies covering such matters as the annual salary plan for faculty, the research staff, vacation and other benefits, harassment, privacy, retirement and open research.

The new edition, revised through August 1985, replaces the 1979 volume. It is being distributed individually to members of the faculty and staff and additional copies can be obtained from the Communications Office (x3-1702).

Deleted from the revised edition is the section dealing with Institute Facilities and Services. This information may be published in the Institute Directory in order to keep it more current.

In addition, an improved index includes a greater number of entries that are also more detailed.

Vice President Constantine B. Simonides, in a memorandum accompanying distribution of the new volume to the Academic Council, academic and administrative department heads and laboratory and center directors, acknowledged the efforts John Wynne, Vice President Emeritus, and Janet Snover, Manager of the Communications Office, in accomplishing the revision.

He also noted that the administrative officer in the Office of the President will be responsible for collecting changes in policy on an ongoing basis and will respond to requests for interpretation of policy or for the latest status of a policy.

Mr. Simonides also identified the principal changes from the 1979 volume in some 20 areas.

He noted, for example, that the sections covering outside professional activities and conflict of interest provide additional guidance as to situations in which conflict of interest is likely to arise, including association of MIT's name or image with commercial interests and the exercise of improper influence because of sexual relationships.

Policies covering retirement of faculty and staff members have been revised to reflect changes in the Massachusetts law which prohibit private employers from requiring a person's retirement because of age. Tenured faculty members, under a special provision of the law, are still required by MIT to retire at age 70. The President has announced his

intention to appoint a small group of faculty members to study long-range policy issues relating to faculty employment and tenure, and to make appropriate recommendations for discussion in the community prior to proposing any major policy change.

The new edition also incorporates a change in vacation accrual, effective December 1, for academic administrative, library and administrative staff appointments. The new policy provides three weeks of vacation for up to five years of service and four weeks thereafter, rather than four weeks at time of appointment. Staff members eligible for four weeks of vacation prior to the change will continue to receive the four weeks. The revision also reaffirms the policy that, with limited exceptions, salaries of full-time staff members may not be augmented from funds administered by MIT.

The new document also includes the change in vacation accrual for research staff on campus and at Lincoln to three weeks for up to five years of service and four weeks thereafter. This change became effective in July, 1985.

The Institute policy on harassment is included in *Policies and Procedures* for the first time, defining harassment, declaring that harassment of any kind is unacceptable, and encouraging aggrieved individuals to initiate a complaint through established procedures.

Also included is the Institute's first formal statement on privacy of information. It sets forth the Institute's commitment to protect the personal privacy of members of the MIT community, and details the rules and procedures to fulfill the commitment.

Noteworthy also is a new statement headed "Open Research and Free Exchange of Information." This section affirms that the encouragement of research and inquiry into intellectual areas of great promise is one of the most basic obligations of the Institute to its faculty, to its students, and to society at large. It also revises the material on classified research to incorporate the recommendations of the Committee on the Changing Nature of Information, especially to provide policy and procedures related to research on critically important but sensitive areas of technology and, as well, to emphasize that a policy of openness in research requires access by international faculty, students, and visiting scholars.

SDI economics to be discussed

Will the Strategic Defense Initiative benefit the economy by supporting the high-tech industry and by producing important spinoffs? Or will the Star Wars effort draw important resources away from civilian economic projects and social programs and dangerously increase the national debt?

The second in a series of SDI discussions, sponsored by MIT's Technology and Culture Seminar, the MIT Disarmament Study Groups and the Boston chapter of Computer Professionals for Social Responsibility, will explore those questions at a seminar on "SDI: Boon to the Economy?"

The seminar will be held at 4:15pm Tuesday, Nov. 19, in Rm 9-150.

In the audience will be three visitors from the Soviet Union—two students and an executive from the USSR Student Council.

They are expected to arrive in Cambridge Tuesday afternoon for a program later that evening arranged by the MIT Disarmament Study Group. Professor Aron M. Bernstein of the Department of Physics said the visit was arranged by UCAM—United Campuses to Prevent Nuclear War—and is a followup to the 1984 visit of two professors and two students from this country to the USSR.

Ocean rig expert to speak here

Dr. John Mercier, supervisor of marine engineering for Conoco Inc., a DuPont company, will deliver the fifth Robert Bruce Wallace Lecture Monday, Nov 18, at 3pm in Rm 10-250.

He will discuss the world's first commercial tension-leg platform (TLP) installation at Hutton Field in the North Sea, about 90 miles northeast of the Shetland Islands, in July 1984.

Dr. Mercier was instrumental in the development of the TLP concept used when drilling oil in deep ocean waters. He coordinated the early project feasibility development and established the design and project premises essential to the execution of the Hutton Field TLP project.

He also guided a number of scientific investigations into hydrodynamics problems that were encountered during the design. He was involved in essentially all aspects of the development of the Hutton system, including structure, mooring systems, well systems, etc., as well as the configuration-control activities of the project.

Before he joined Conoco in 1974, Dr. Mercier was employed by the Davidson Laboratory of Stevens Institute of Technology, engaging in research and advanced engineering on a number of aspects of ship theory and offshore

engineering. He has also been an engineer at Bethlehem Steel Corporation's Staten Island foundry and propeller plant, and a research scientist at Hydronautics, Inc.

He received a bachelor's degree from Webb Institute of Naval Architecture in 1960, a master's degree in naval architecture from MIT in 1961, and a PhD from Stevens Institute of Technology in 1973.

He has published and lectured extensively on a variety of problems, and has authored papers on tension-leg platforms for the World Petroleum Congress, the Royal Society of London, the Third International Conference on Behaviour of Offshore Structures, the Offshore Technology Conferences, the Offshore Southeast Asia Conference, and the Royal Institution of Naval Architects, among others.

The Robert Bruce Wallace Lecture Program is made possible by a gift from Mr. and Mrs. A. H. Chatfield. Mrs. Chatfield is the daughter of Robert Bruce Wallace '98, former president of the American Shipbuilding Company who made major contributions to the development of inland waterways shipping.

The Wallace lectures provide an opportunity for MIT faculty and students to meet with an eminent figure in the marine world to discuss technology development for ocean uses.



Professor David C. Jewitt of the MIT Department of Earth, Atmospheric and Planetary Sciences sits amid images of Halley's Comet which he has been observing since 1982.

—Photo by Calvin Campbell

Astronomer explains comet

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be able to see more of Halley than observers in large cities, he said, because the comet will be too dim to be easily seen against bright city skies. Those living in the Southern Hemisphere or near the Equator will have a better view of the comet than those in the Northern Hemisphere, he said.

"Although the comet will be moving with respect to the earth at about 30 miles per second, it will seem to move across the sky only very slowly for the same reason that a high flying jet aircraft appears to move more slowly than a low flying one. In fact, most people will not notice any motion in a single night, although the movement during one week should be readily seen," he said.

Scientists believe that about a trillion comets are orbiting the sun. So what's so special about Halley's Comet that brings it so much attention? Very little, says Professor Jewitt.

"Although comet Halley is an object of great popular interest, it is not a 'special' comet in any sense other than in its regularity of appearance," he said. "Scientific interest in the comet centers on the physical and chemical properties of the nucleus, the smallest and most enigmatic component of the comet. The nucleus is thought to contain the raw materials from which the planets condensed 4.5 billion years ago, preserved since then in the deep freeze of space. Scientists hope to learn about the formation of planets from studies of Halley's and other comets."

Each comet consists of a compact, solid nucleus probably made mostly of water, ice and dust. Halley's nucleus is an irregular object only a few miles in diameter, Professor Jewitt said.

When the comet nears the sun, the nucleus surface is warmed and begins to evaporate. The evaporated water molecules produce a glowing cloud of atoms and reactive molecules called the coma. The evaporated water also drags small dust particles from the nucleus into the coma, which can grow to become several tens of thousands of miles across, Professor Jewitt said.

"Dust particles and gas atoms and molecules are deflected from the coma by the pressure of solar radiation, and by the solar wind, into long streamers or 'tails,' pointing roughly away from the sun. The tails may reach a length of 10 million miles, perhaps even more. Observers with dark skies should be able to see both the coma and the tails of

Comet Halley. The nucleus, situated at the center of the coma, will be too faint to be seen even through a large telescope," Professor Jewitt said.

Professor Jewitt holds the BSc in astronomy (1979) from the University of London and the MS in planetary science (1980) and the PhD in planetary science and astronomy (1983), both from California Institute of Technology.

Nairobi conference is seminar topic

The Joint Harvard MIT Women in International Development will present the second in a seminar series, "To Nairobi and Back," Wednesday, Nov. 20, 4:30-6pm in the Student Center Mezzanine Lounge. The series covers local, national and international participation in the World Conference to review the achievements of the UN Decade for Women.

Speakers at the seminar will be four members of the official US Delegation to the conference: —Margaret Galey, staff consultant to the Committee on Foreign Affairs of the House of Representatives, who will discuss "Preparation and Participation of the US Delegation."

—Lois Harrington, assistant attorney general in the Justice Department, whose topic will be "International Dialogue: Enacting an Unprecedented Resolution on Family Violence."

—Donna Alvarado, director of ACTION, who will talk on "The Unique Concerns of Refugee Women: Feedback from the Conversation Group on Refugees."

—Sarah Tinsley, acting assistant administrator of the Bureau of External Affairs of the Agency for International Development, who will describe "The Women and International Development Component of the Nairobi Conference."

The WID Group is an international network of researchers, educators, students, development practitioners and others who share a common interest in the role of women in the development process. The group seeks to increase public awareness of development issues and to narrow the gap between academic research on development and the implementation of development projects.

Engineering School study

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Sciences, chaired by Professor Pauline R. Maier, head of the history faculty, and by the School of Science Education Committee, chaired by Professor Robert J. Silbey of the Department of Chemistry.

In a letter to the faculty of the School of Engineering, Dean Wilson and Dean Kerrebrock said a review is appropriate at this time for a number of reasons.

"First is the overriding importance of our undergraduate engineering program to the School and to the Institute. It is the foundation upon which the School's research and graduate teaching programs are built, while at the same time it is the beneficiary of these programs. Together with the exceptionally high qualifications of our undergraduate students, this close coupling to research and graduate education makes our undergraduate engineering program unique in the nation, perhaps in the world. It is the example by which other institutions guide their programs.

"To maintain this preeminence of our undergraduate program, we think it is essential that the faculty of the School have a shared understanding of its goals and expectations, a reasonably consensual view of the set of competencies and understandings which our graduates should have in common," they said.

"... It is our sense that without periodic reappraisals leading to modification or reaffirmation of our overall goals, our departmental programs may lose their common sense of purpose. This may be more likely now than in the past, due to the rapid evolution of the practice of engineering and the demand

for immediate functional usefulness in our graduates.

"It is not our intent to pursue change for its own sake," Deans Wilson and Kerrebrock said in their letter to the faculty. "Even if after a thorough review the result is to make few changes, the reaffirmation of the goals and content of our program will strengthen the environment for learning at MIT for the years ahead."

Discussions in the Engineering Council over the past year have raised a number of questions about the substance and structure of the undergraduate engineering curriculum, they said. Among these are the impact of numerical computation, the potential of life sciences for new technologies, the increasing need for engineers to work in large teams, and the need to incorporate environmental and social aspects into engineering judgments.

There is also the question, the deans said, of "whether our educational methodology serves effectively the bulk of the very talented student body we are fortunate to attract. Can we devise educational strategies which capture the interest of and motivate that fraction of the student body which now regards Tech as an ordeal, to be endured as the price for an MIT degree? Can we do this without compromising the standards for which the Institute is noted?"

"... The issues we face are many, complex and subtle. The wisdom and experience of the entire faculty of the School will be needed to achieve our objective of assuring MIT's preeminence in engineering education for the indefinite future. We urge that you each participate in your own way as fully as possible," the letter to the engineering faculty concluded.

Colloquium on apartheid

(continued from page 1)

was "pleased by the number of people who took an interest" in the event and had "learned a great deal from it." The discussions in the living groups were particularly valuable, he said, in that students had a chance to hear differing views from a variety of people.

As an example, he said, William Jacobsen of the State Department, a panelist not originally scheduled to meet with students, "sportingly agreed to go to dinner at Baker House." The students there "grilled him" Wednesday night and again the following morning at Next House, where he had breakfast. At Ashdown House on Thursday night, Professor Morgan said, two white South African graduate students joined in a discussion with 25 or 30 people and gave their special insights into the situation in their country.

At Bexley House, one of the discussion leaders for a group of about 25 students was Charles Weiner, professor of the history of science and technology. During three hours of intense, yet relaxed talk, he said, the group raised a number of issues and particularly their relevance for the students and for MIT as an institution.

Professor Weiner, who attended both afternoon sessions at Kresge, where about 500 people gathered each day, said he was "enormously heartened" to see the attention of the Institute focused on an issue so central to society and to MIT, and that he thought the balance of the participants was good.

He said the interest of the students was made clear by the people who lined up to ask questions of the speakers, but he said he was somewhat disappointed that more faculty members and administrators were not present.

Overall, he said, he would consider the colloquium a success, but only if it is accompanied by "a real commitment of the faculty, administration and students to follow through on the implications of the issues raised—not in the long term, but in the short term." Otherwise, he said, the event could be justifiably criticized as being "all show and window-dressing" and giving only "lip-service" to the issues.

In his brief remarks opening the colloquium Wednesday afternoon, Professor Samuel Jay Keyser, associate provost for educational programs and policy, said it was the hope of his office that this and subsequent colloquia will provide an opportunity for the larger MIT community to engage in a common dialogue on major issues of our time, "a dialogue which will not only deepen our understanding of those issues and thereby prepare the way for enlightened action, but a dialogue which will also serve to bring the community closer together as a community."

If the colloquium had a central figure, he was Nthato Motlana, a South African physician who has been a leader in the struggle against apartheid for 30 years.

In his keynote address Wednesday afternoon, he said a South African revolution "has begun in earnest" and that a "low intensity civil war," fueled by young activists, was now under way. He said that further bloodshed was inevitable so long as South African blacks are denied their fundamental rights under the apartheid system.

Dr. Motlana did not talk directly to the question of divestment—whether US corporations should stop investing in South Africa and whether universities, such as MIT, should sell their stock in companies doing business in that country—because to do so could cause him legal problems back home. But, he said,

"the healthier the economy (in South Africa), the stronger the regime."

Asked whether he agreed with the reasons MIT has set forth for not divesting, he answered, "no."

Later that afternoon, an anti-apartheid demonstration on the steps of the Student Center by a group that had carried a banner into Kresge drew only a handful of participants.

That evening, a large knot of students—the majority of them minority students—surrounded Dr. Motlana at a reception in McCormick Hall, engaging in a friendly and lengthy dialogue.

There was dialogue and debate, too, at two workshops Wednesday night. At Ashdown House, Robert Zevin, vice president of the United States Trust Company, argued in favor of divestment and Roy Shotland, professor of law at Georgetown University, opposed absolute divestment. Zevin said he favored universities selling their stock in companies tied to South Africa and thus sending out a "loud message" to the companies to withdraw from that country.

Schotland said a more reasonable approach would be selective divestment of companies that are not working against apartheid.

A second workshop, at Senior House, questioning the United States' dependence on South Africa's minerals, was led by Joel P. Clark, associate professor of materials systems.

Divestment again was the focus of the Thursday afternoon panel in Kresge entitled, "What Can and Should Americans Do About Apartheid?" MIT President Paul E. Gray was among those in the audience who heard several speakers urge divestment in South Africa by corporations and universities.

Among them were Gretchen Ritter, an MIT graduate student in political science; former Congresswoman Shirley Chisholm, now a professor of political science at Mt. Holyoke College, and MIT political science professor Willard Johnson, one of the organizers and leaders of the Free South Africa movement in this country.

Professor Chisholm, who was MIT's commencement speaker in 1984, said the issue of divestment was a "moral imperative."

Arguing for a continued US business presence in South Africa, on the grounds that it provides leverage for change, were Jacobsen, the State Department official, and John Reed, an MIT graduate, chairman of Citicorp and a member of the MIT Corporation.

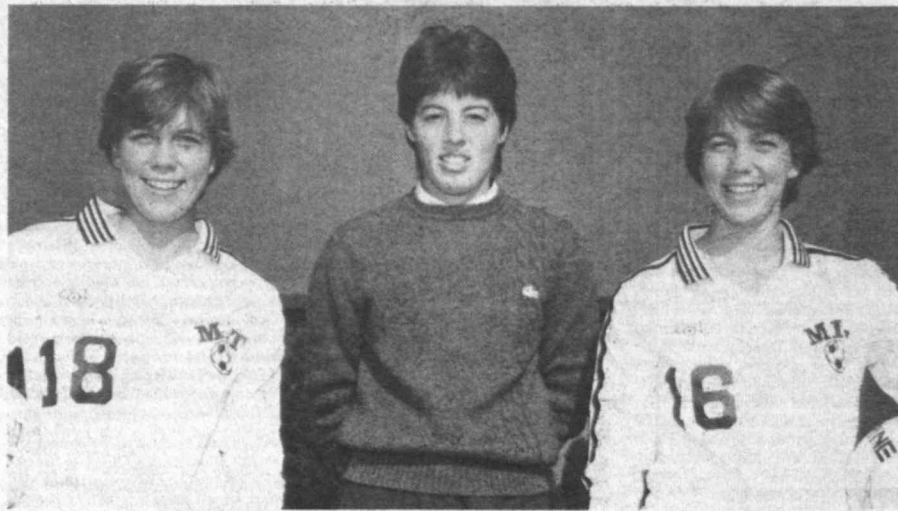
While Reed said his company would not run its business in South Africa in a way that supports apartheid, neither was it prepared to close its branches there and fire the 300 people who work for Citicorp. "We run it (its South African business) in such a way as to develop the people who work for us," he said, adding, "It's not whether you're there or not, but how you behave when you're there."

Jacobsen, who lived several years in South Africa, told the audience that "apartheid must go." But he said the United States wants to be "a builder, not a destroyer" and could only do this by continuing to participate in South African affairs.

The moderator for the discussion was Robert I. Rotberg, professor of history and political science and a specialist on Africa. He also was the chairman of the planning subcommittee for the colloquium.

Professor Morgan, the colloquium committee chairman, said the group would now be considering what to do next and what, perhaps, should be done differently. He said the committee hoped to hear from the community.

←Here & There→



Meet MIT's Biber twins, the last two members of a five-daughter family to attend MIT—and participate on its athletic teams. Freshmen Charlotte E. (left) and Alice I. Biber of Needham, Mass., are shown with soccer coach Shawn Ladda. Sister Madeleine V. Biber, a senior in materials science and engineering, is co-captain of the women's gymnastic team. Barbara P. (Biber) Rizzi of Shrewsbury, a 1979 graduate in chemistry who is now a physician, competed on the women's sailing team, and Catharina R. Biber of Endicott, N.Y., a 1983 graduate in mechanical engineering who works for IBM, was a member of the women's club ice hockey squad.

—Julian Szekely, professor of materials engineering, told a Congressional group, reports the Pittsburgh Post-Gazette, that cutbacks in research and development by US companies are particularly ominous for the steel industry. The reason: its hopes for a return to profitability rest on being able to produce higher quality products which offer higher profit margins.

—Professor Franco Modigliani, MIT's new Nobel Laureate in economics, took over the entire Business Forum section of the Sunday New York Times on November 3. Half of the weekly feature was devoted to a Question & Answer interview, and the other half to a column by Professor Modigliani calling for an all-out assault on the national deficit. On the same subject, Boston Globe columnist William V. Shannon quoted this statement by Professor Modigliani: "What is clear is that there is a lot of selfishness in the Republican-Reagan appeal to the country. People are encouraged to enjoy the moment, so they don't care about the deficits. They have no compassion for the poor or handicapped, and none for future generations either. People don't make the connections between the deficits and the bad things that are going on—farm failures, the trouble younger people have buying houses, loss of jobs."

—A Boston Herald story on injuries suffered by musicians leads off with the recent troubles of an MIT musician—none other than Institute Professor, physics professor and former provost Francis E. Low. Professor Low, an amateur pianist, "can take a lot," the story said, "but the A Flat Ballad of Chopin just about did him in." The reporter spoke to Dr. Low at the musician's clinic at New England Medical Center, where a painful right wrist and elbow—apparently the result of tendonitis—were being examined. The Chopin piece, Dr. Low said, "has especially difficult things you have to do with your right hand," so he would be switching, for the time being, to other works.

—An editorial in the Des Moines (Iowa) Register notes that MIT political science professor George W. Rathjens, in a talk at Drake University, likened the Reagan administration's search for a reliable defense against nuclear attack "to the 16th century dream of a fountain of youth." The editorial concludes: "Rathjens suggests... that diplomacy (or politics) offers more hope for survival than technology can."

—Charles M. Oman, senior research engineer in the Department of Aeronautics and Astronautics, told the International Aeronautical Federation Congress meeting in Sweden, the Associated Press said, that space sickness among US astronauts seems to result from disorientation rather than physiological changes.

—A New York Times article on whether science, as a largely male endeavor, ignores the experiences of women, relies heavily on comments from Dr. Ruth Perry, senior lecturer in literature and women's studies and director of MIT's Women's Studies Program. Noting that a growing number of scholars have begun to examine the possibility that scientific concepts have been shaped by a traditionally male perspective, she asks: "How does the tradition of socialization that men come out of manifest itself in the questions asked, and in the explanations offered, for natural phenomena?" Also quoted was Dr. Evelyn Fox Keller, a mathematician and visiting scholar in the Program in Science, Technology and Society.

—The Arlington Advocate has profiled local resident Edward F. Crawley, associate professor of aeronautics and astronautics at MIT, noting that he was designing paper airplanes when he was four and had constructed a wind tunnel by his senior year in high school. Dr. Crawley, a pilot himself, told the newspaper, "It's fun to come in to work and teach people how to design a spaceship. It makes everybody's day a little more exciting."

(Do you have something to contribute to Here & There? We're on the lookout for short items, preferably of a personal nature. They can be sent to Here & There, News Office, Rm 5-111.)

It isn't every day that an elevator is the cause for celebration, but such was the situation last week at W31, the du Pont Center Gymnasium Building on Massachusetts Ave., where the third-floor tenant, the Center for Real Estate Development, was heralding the installation of an elevator. The "Elevator Launching Party" began at 3:30:30 with a "countdown to elevator liftoff," followed at 3:30:50 with a ribbon-cutting ceremony at the third floor landing. There were also speeches, refreshments and, of course, "Free Rides!"

MIT economics professor Lester Thurow has been sounding gloomy warnings about the state of the nation's economy, but in his latest book, *The Zero Sum Solution*, reviewed in the New York Times and elsewhere, he reveals himself as optimistic—well, emotionally, at least—about the future. "When people ask me whether I'm an optimist or pessimist... I describe myself as an intellectual pessimist but an emotional optimist," he writes. "Intellectually, if I were simply a Las Vegas gambler betting the odds, I would bet on America won't do it. The required changes are too hard. Emotionally, however, I would place a bet on America. When Americans get to the point where each of us is willing to admit that he or she, and not someone else, is at the heart of the problem, America will have reached the point where change can begin."

An MIT football player spotlighted by a Boston newspaper? That may seem unlikely, but The Boston Herald did just that when it published a menacing photo and a story on "MIT's Big Man on Campus," Larry S. Monroe of Alabama, a graduate student in chemical engineering and a 6-7, 240-pound defensive tackle on MIT's club team. Monroe, a tri-captain on the squad, said he always wondered how good he could have been if he had played football in high school and college (Auburn University). "By playing here I found out that I'm a decent football player, but I'm not in that (pro) league. He's in the major leagues academically, however, the Herald said, with a 5.0 grade average."

PRESS CLIPPINGS:

—Institute Professor Emeritus Salvador E. Luria told the 21st Nobel Conference at Gustavus Adolphus College in Minnesota that scientists who "exile themselves from the arena of social struggles" are failing the societies in which they work, reports the Minneapolis Star and Tribune. Scientists also must inform political leaders and the public of the work they are doing and what it means, said Dr. Luria, who won the Nobel Prize in Medicine in 1969. Scientists who shirk their responsibilities to society, he said, stand "somewhere between that of philosophers and poets on the one hand, and that of handgun manufacturers on the other hand."

—A Boston Globe article on efforts by the Central Intelligence Agency to strengthen ties to US campuses quotes Provost John M. Deutch as saying that MIT has no CIA contracts for sponsored research. Any such grant would have to pass through the university administration, he said, but it's likely some individual faculty members act as consultants to the agency.