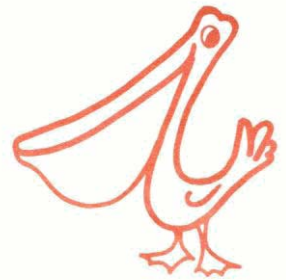


The Pelican

a newsletter for the F.I.T. family



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William Potter joins Board of Trustees

William C. Potter, a South Brevard attorney and civic leader who is also well known for his guidance of economic development activities, has been elected to the F.I.T. Board of Trustees.

President Jerome P. Keuper announced the addition to the University's board.

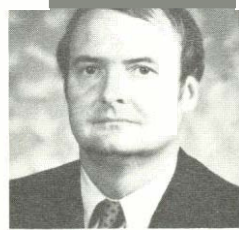
"Mr. Potter will contribute significantly to the leadership of our institution," said Dr. Keuper. "It is especially gratifying to gain the talents of a community leader from our own backyard with Mr. Potter's abilities, and his demonstrated interest in the future of our young people."

Potter's community service has ranged from directorships for the Melbourne Area YMCA and Junior Achievement of Melbourne to leadership roles in the Melbourne Area Chamber of Commerce and the Brevard Economic Development Council.

The new trustee is a partner in the law firm of Nabors, Potter, McClelland, Grif-

fith, & Jones, P.A. The firm has offices in Melbourne and Titusville.

William Potter



After attending public schools in his native state of Michigan, Potter earned an undergraduate degree in political science from Brown University in 1962. He received his J.D. (doctor of law) degree from the University of Michigan in 1964.

In Brevard, Potter has served as attorney for Melbourne Village, Indialantic, the Brevard Transportation Authority, the Melbourne Airport Authority, and as a municipal judge for Melbourne Village.

He is an attorney for Atlantic National Bank, and a director of the bank. Potter is also general counsel, a director and member of the executive committee of DBA Systems, Inc.

A lieutenant colonel in the Air Force Reserve, Potter has also served as a member of the Grievance Committee of the 18th Judicial Circuit.

Potter has been active in leadership roles for the American Cancer Society, Kiwanis, United Way, the Brevard Community College Foundation, and the Melbourne Chamber Foundation.

Awards have included honors from the Brevard Bar Association, the Melbourne Kiwanis Club, the Melbourne Chamber, the Florida Industrial Development Council, and the Southern Industrial Development Council.

Potter and his wife, Wendy, have three children.

Labs new in Electrical-Computer Engineering

By Michael Moore

A well-equipped Microwave Laboratory has just been put into use as part of a broader expansion of lab facilities to accommodate the students of Electrical and Computer Engineering — one of the university's busiest departments.

Some 600 students have begun the new academic year as majors in the two disciplines, said Dr. John Hadjiligiou, department head and professor.

The new laboratory space and equipment will be serving about 500 undergraduates and some 100 graduate students, he noted. Of the graduate-level students, Hadjiligiou explained, about 80 are part-time degree seekers from local industry.

Electrical engineering and computer engineering are built upon the same academic foundations. A student in either engineering field who seeks a bachelor's degree will be required to take many of the same courses. In fact, only eight courses will differ.

An F.I.T. student can also choose a degree program in Computer Science. A simple way to explain the difference be-



tween "science" and "engineering" of computer studies, Hadjiligiou noted, is that "we open the box and tell them what is inside."

For Dr. Walter Nunn, professor of electrical engineering, the completion of the Microwave Laboratory marks the latest successful step in a 13-year effort to develop study and research facilities for the F.I.T. department.

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Computer research to aid the disabled

By Mary Deese

Researchers at F.I.T. are currently developing an innovative service to provide disabled persons with voice communication via computer.

"What we are doing is developing one of the few services in the country which will allow a handicapped person to operate a computer with minimal body movement. We are using technology already in existence with a new technique to control that technology for the handicapped," said Dr. John Hadjiligiou, head of Computer and

Electrical Engineering.

The new technique involves a specialized computer controller device and computer programs developed by Dr. Michael E. Valdez, professor of electrical and computer engineering.

Dr. Valdez will teach handicapped persons, unable to communicate verbally, how to operate his computer system.

He will also direct John Ertem, a doctoral student in electrical engineering, and other graduate students in customizing computer

Continued on back page

Campus notes

Dr. Charles D. **Polson**, assistant professor of Biological **Sciences**, presented a paper entitled, "Loss of **Mitochondrial** DNA in Mouse Tissues with Age," at the annual meeting of the American Aging Association in San Francisco.

Dr. Jay Bums, head of Physics and Space Sciences, recently spoke to the Brward Astronomical Society on "Image Tubes in Modern Astronomy." Dr. Bums was also reappointed trustee for the Southeast Universities Research Association — a consortium of 22 universities in the Southeast U.S.

Dr. Albert G. Guy, visiting professor for Physics and Space Sciences, has been awarded a Fulbright exchange program grant to conduct research on thermodynamics of electrons in solids in Budapest, Hungary. Dr. Guy will be working at the Central Research Institute in Budapest until February.

Dr. **Bill** S. Thrasher, associate professor of Mechanical Engineering, recently presented a paper entitled "Ultra Low Cost Micro-computer Based Computer Aided Design (CAD) System" to the second International Computer Engineering Conference in **San Diego**. He also made a panel presentation on "Implementing Computer Aided Engineering Facilities."

Dr. **Palmer** Stiles, assistant professor of Mechanical Engineering, served as delegate to the National Student Sections Committee for the annual meeting of the American Society of Mechanical Engineers.

Dr. Richard **Elmore**, assistant professor of Psychology, recently presented a paper entitled, "The Use of Paraprofessionals as Organizational Development Specialists" to

the American Psychological Association. The paper was presented as part of a symposium on "Innovations in Consultation and Mental Health Education."

Dr. **Elmore** has also published an article in the current issue of Journal of College Student Personnel entitled, "Assessment of Student Stress in the Campus Environment."

Dr. **Bill** Gabrenya of Psychology recently presented a paper entitled "Social Loafii

in the United States and China," to the American Psychological Association. The paper summarized the results of Dr. Gabrenya's research on group productivity in Taiwan.

Jack W. **Schwalbe**, assistant professor of Civil Engineering, was employed during the summer by the U.S. Naval Sea Systems Command in Arlington, VA, as a consultant in the Submarine **Structural** Integrity Division. His responsibilities included developing a design procedure for **strut**-supported double hulls.

Dr. Frederick B. Buoni, associate professor of **Mathematical** Sciences, and chairman of the Operations Research Program, spoke on "Office Automation" at the Canaveral Chapter of the American Institute of **Industrial** Engineers. He also presented a paper coauthored by Richard **Enstice** and Dr. **Harry** P. Weber, entitled "The Use of Computers in Academic Programs at F.I.T.," at the annual Conference on Modeling and Simulation at Pittsburgh.

Dr. **Pieter** S. **Dubbelday**, adjunct professor of physics and oceanography, and Mark S. Ptak, graduate student in the department of Physics and Space Sciences, recently presented a paper at the annual meeting of the Society of Engineering Science at the University of **Missouri-Rolla**. The paper entitled "Hydroacoustic **Ferro**-fluid Projector in Toroidal Configuration," describes work performed at F.I.T. during the past two years under a Naval Research Laboratory contract.

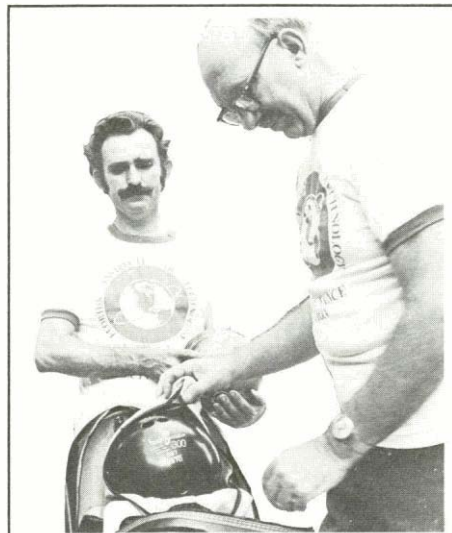
Dr. Salem Devi, chief pathologist for Tripura State, India, recently visited Dr. Arvind Dhople, head of the Infectious Diseases Division of the Medical Research Institute. Dr. Devi's visit was sponsored by the World Health Organization. During the visit, Dr. Devi had several discussions with Dr. Dhople on various leprosy programs at **MRI**, and became familiar with the techniques currently in use there.

The new F.I.T. executive committee for Sigma XI, Scientific Research Society, for 1982-1983 include, Dr. Arvind Dhople, president; Dr. Anne Rowe, Past President; Dr. Frank **Webbe**, President-Elect; Dr. Alan Rice, Secretary; and Dr. Charles **Poison**, Treasurer.

Military Science instructor Michael S. **Pohler** was recently promoted to the rank of Army major and Major Paul W. **Fuller** recently joined F.I.T.'s Military Science Department.

Dr. **James** Sharber, associate professor of Physics and Space Sciences, spent the summer in **San** Antonio at the **Southwest** Research Institute. He was a participant in the **National** Science Foundation - Industry Faculty Participation Program. Dr. Sharber

(See next page)



"We've **been** bowling for the past two years. We decided to **form** a university bowling team since we all work together at F.I.T." That's the word from **Dick** Truman, (pictured at right) head of F.I.T.'s Cabinet Shop. Other F.I.T. bowlers include **Dan** Norris (captain), **Fred** Clark, **Dave** Donaldson (pictured at left) and **Wilfred** Stewart. The team practices in the **Port** Malabar Bowling Center and hopes to form a mixed doubles team.

Librarian registers her 15th

Vetra **Knight**, head of the Library circulation staff, recently completed 15 years of service at F.I.T.

The Kentucky native came to the university on September 11, 1967. She worked **only** two days as a part-time staff member before Eileen Hall, the Library's first director, offered her a full-time position.



Vetra Knight

"It doesn't **seem** like it's been that long," **Knight** said of the 15 years. She decided to go to work after her youngest daughter graduated from high school. "I just wanted to get out of the **house**," **Knight** recalled. "I

thought it would be fun to work at a college."

Being surrounded by college life daily has been a pleasant experience for Knight. "I enjoy working with college students," she said.

When she first began her job the university was known as Brevard Engineering College, and there were only two other librarians.

Dr. James G. Potter, advisor to the Society of Physics Students organization at F.I.T., has received on behalf of the local Sigma Pi Sigma honors chapter the congratulations of national President Richard Waring. The occasion is the **100th** student membership in the F.I.T. Sigma Pi Sigma.

"This significant accomplishment speaks well for the quality of instruction by your **Physics** (and Space Sciences) Department, and **enthusiastic** leadership and higher scholarship goals by the members of your chapter," Waring wrote.

Dr. Mason becomes Fellow in 'AIChE'

By **Mary Deese**

Dr. Donald R. Mason, head of F.I.T.'s departments of Environmental Science and Engineering, and Chemistry and Chemical Engineering, was recently elevated to the rank of Fellow by the National Council of the American Institute of Chemical Engineers (AIChE).

"The status of Fellow is one of the highest honors the organization awards to chemical engineers who have practiced in the profession for 25 years and who have been a member of the AIChE for at least ten years," said Dr. Ronald G. Barile, chairman of the Chemical Engineering Program. He nominated Dr. Mason for the award.

Dr. Barile explained that Dr. Mason was awarded the status of Fellow by the AIChE for recognition of both "professional attainment" and "significant accomplishments in engineering."

"Dr. Mason has authored some 30 technical publications and holds some eight patents — all of which are assigned to Harris Corporation," said Dr. Barile.

Dr. Mason holds the bachelor's degree in chemical engineering from the University of Illinois, and his doctoral degree in chemical engineering from the University of Minnesota.



Dr. Donald Mason

He initiated the chemical engineering program and the graduate-level degree program in chemistry at F.I.T. in 1977, when he assumed the position of head of both departments. From 1966 to 1977, Dr. Mason served as an adjunct professor for

Campus notes

(Continued from Page Two)

analyzed data from the Dynamics Explorer Satellites, launched in August of 1981.

The continuing study involves comparing particle data from the satellites and optical data from a ground-based "all-sky imager" at Thule, Greenland. The objective was the determination of the cause of auroral red emissions in the Earth's polar cap regions.

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F.I.T.'s electrical engineering department.

A native of Illinois, Dr. Mason for 12 years worked with the Semiconductor Division of Harris Corporation, as both department director and senior scientist involved in the manufacture and design of silicon integrated circuits.

Dr. Mason also was for nine years on the faculty of the University of Michigan. He was a full professor of chemical engineering

at Michigan.

Dr. Mason is an active member of the AIChE. He organized a symposium for the Detroit meeting in August on the "Manufacture of Computer Components," and recently served as general arrangements chairman for the AIChE's national meeting in Orlando.

Dr. Mason currently resides in Indianatic with his wife Nell and a daughter.

Accounting: is new program

F.I.T. is offering a new master of business degree with a concentration in accounting. The new degree program will benefit prospective certified public accountants, according to Dr. Maurice P. Pujol, associate professor for the Management Department.

Dr. Pujol said that the new degree program will benefit students who have passed the certified public accountant (CPA) exam, as well as students preparing to take the exam.

"Currently, Florida law requires that once a person has passed the CPA exam, he

or she must also have an additional one year of graduate-level accounting courses or one year employment under a CPA," said Dr. Pujol.

Dr. Pujol also noted that after August 1, 1983, Florida law will require persons to complete graduate-level courses in order to even participate in the CPA exam.

"F.I.T. is allowing prospective accountants the opportunity to gain certification through an alternate route not previously available to them in the local community," added Dr. Pujol.

Student count shows increase

A tally of all students registered as of October 16 shows a record enrollment, announced Jerry Montag, registrar. "Overall enrollment is up. There are increases in nearly all of the schools and majors," Montag reported. "The totals show that we're up 6.3 percent from last fall."

The count for all students in all programs — both full- and part-time — was recorded at 7,061. That compares to 6,642 for the preceding academic year.

The number of full-time undergraduates was listed at 3,320, up one percent from the fall of 1981. The number of part-time undergraduates took a 10.4 percent jump to 436, with their class time equal to that of 231 full-time students.

A large increase was reported for graduate students. The number of full-time grads leaped 26.1 percent to 449, while the count for part-timers increased by 22.8 percent to 1,138. That enrollment of part-time grads is equal to 585 full-time students.

At the Jensen Beach campus, the student population increased about 6 percent to a total count of 801. The School of Aeronautics showed an enrollment decline of 9.4 percent, with students numbering 753.

In the schools of Science and Engineering, Management and Humanities, and Psychology, the number of undergraduates increased to 2,110 from last year's 2,086 — a gain of 1.2 percent. The 1,826 full-time students means an increase in that category of nearly 7 percent, while the 284 part-timers represents an enrollment decrease in that category of nearly 25 percent.

Within those schools, Science and Engineering reported an undergraduate student population of 1,814, while Management and Humanities listed 232, and Psychology listed a total of 64.

The Off-Campus Program reported at its various sites an enrollment of 1,437. That is 4 percent above the previous year's enrollment, and represents the equivalent of 701 full-time students in the graduate-level programs offered in Florida and seven other states.

The official enrollment report compiled by Montag also listed 85 Language Institute students, representing a 37 percent increase in enrollment. Another 118 graduate and undergraduate students who are enrolled in academic programs also utilize the Language Institute.

The official figures also include 1% students in a miscellaneous category.

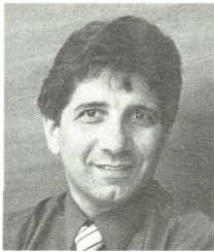
Laboratories are expanded

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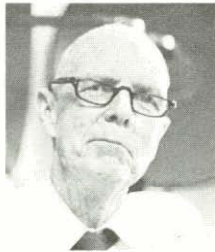
Located in Room 617 of Crawford Science Building, the Microwave Laboratory is one product of an evolution toward an international reputation for excellence of graduate programs in the field of electromagnetic theory, and some of its applications.

Just as students recognize the value of computer knowledge, Nunn explained, the aerospace industry searches for wisdom related to electromagnetic theory.

The field is "the jugular vein of the aerospace industry," the professor explained, since it relates to the transmission of information to and from objects in space.



Dr. Hadjilogiou



Dr. Nunn

But developing an academic reputation, he noted, is hard work. F.I.T. in 1971 was approved to offer the Ph.D. degree in electrical engineering. *But* the earning of accreditations must be followed by years of program and laboratory development. Not until the summer of 1981 was an initial doctoral degree in electrical engineering awarded, Nunn said.

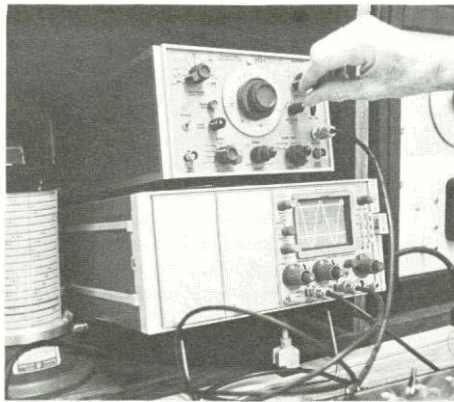
Nunn has also been instrumental in development of the High-Power Plasma Research Laboratory, another valuable university facility. It is located in F.I.T.'s Frueauff Energy Research Building, and is

used for graduate student research activities.

Other research underway within the department ranges from computer applications to electro-optics and fiber optics, digital control systems, and electromagnetic theory applications.

F.I.T. is working to establish its reputation in both digital systems and electromagnetic theory at the graduate level, Nunn explained. Hadjilogiou noted that the current academic year marked the first time more prospective graduate students sought assistantships than could be accommodated.

Hadjilogiou explained that F.I.T., like universities across the country, must compete with industry for graduates from lower-level programs. Very often, the incentive of immediate employment at relatively high wages outweighs the perceived benefits of continued education.



The department head envisions this year's enrollment as being a good figure at which to stabilize for several years. The total includes about 175 freshmen.

Computer links to handicapped are designed

Continued from Page One

equipment to meet an individual's needs. The students will construct various attachments to the computer, ranging from a voice synthesizer to robotic arms.

"The only thing that it (the service) requires is that the handicapped person have minimal control of his hands (controlled movement of at least one finger) and a functional intellect," said Dr. Valdez.

Dr. Valdez noted that the university is not providing any medical service. "We are only interested in providing persons unable to verbally communicate with the opportunity to learn to use the whole power of the computer to overcome some of their handicaps," said Dr. Valdez.

The handicapped person operates the computer by using slight but varying motions of a finger to touch a single button on the computer controller device.

One computer program Dr. Valdez has developed allows the handicapped person



Dr. Valdez

to construct his own sentences, or choose from commonly used words or phrases. The computer program also activates a voice synthesizer attached to the computer which verbalizes the word, sentence or command.

"The computer will keep statistics on the words or phrases most commonly used by the handicapped person. I plan to develop a program to store those words and phrases in the computer so the person can recall them at will from the computer or expand

Alumni elect

Alumni Director Art Kimball has announced the seven newly elected members of the F.I.T. Alumni Association.

The initial directors were the top vote-getters from a long list of prospective board members nominated by Association members.

The directors are:

- Jeffrey N. Bass '74, Melbourne.
- Deborah A. Davis '80, Glen Riddle, PA.
- Joseph Eckelman '74, Poughkeepsie, NY.
- Cesar D. Fermin '77, '81, Houston.
- Robert S. Heidinger '77, '81, Melbourne.
- James N. Irwin '62, '70, '73, Melbourne.
- J. Allyn Smith '75, '79, Cocoa.

Nurses served

Dean Ernest E. Tealey has announced the start of a new program for nurses to be offered at the Jensen Beach campus.

The program is designed to enable registered nurses who are graduates of associate degree programs to earn a bachelor's degree in Nursing Science on a part-time basis. The program was made possible in part by the generous support of the area health care institutions.

Classes will be offered in the late afternoons or early evenings to allow nurses on different shifts to attend.

The nursing program is projected to begin in January. In the meantime, prerequisite and required general education courses will be offered.

his vocabulary," said Dr. Valdez.

"Once the handicapped person has control over the whole computer, then the door is wide open for everything. All that is necessary is to expand the capabilities of the computer," said Dr. Valdez.

"Instead of words just being pronounced, they can be typed by connecting a printer and specialized computer programs I have developed. The person is now able to write letters, articles or even books.

"It (the computer) can be connected to the telephone so the person can have a telephone conversation or he can control a wheelchair, television, or robotic arm to perform necessary tasks which may help him become financially productive," said Dr. Valdez.

Dr. Valdez explained that the cost of the service will depend on the severity of the person's handicap, his familiarity with computers, and his ability and willingness to learn to operate a computer.