CAMPUS NOTES

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Dr. William S. Alevizon, associate professor in Biological Sciences, recently presented a paper entitled "Use of Artificial Reefs to Concentrate Bahamian Food Fishes," at the annual meeting of the American Society of Ichthyologists and Herpetologists in Tallahassee. Alevizon presented the paper in conjunction with graduate students Jonathan Corham, Sheryl McCarthy and Rebecca Richardson.

Dr. Jane LeMoine, head of Humanities, has announced that Dr. E. Rufus Cook and Dr. Rudolph W. Stoeckel, will join the faculty in September.

Cook, who holds a doctoral degree from the University of Chicago, has served as assistant professor of philosophy and communications at Salem College in Salem, WV. Dr. Stoeckel, who holds a doctoral degree from Loyola University of Chicago, has sewed as associate professor and chairman of the English and humanities department at Tri-State University, in Angola, IN.

Holmes C. Beausang, director of Student Life, has announced that Elly Jones recently joined the Student Life/Housing Office staff. The Florida native replaced Todd Schackne as a computer terminal operator. Schackne will remain at F.I.T. as a student.

Robert S. Heidinger, director of Admissions, has announced that Shannon LoVette was recently appointed assistant director of Admissions. LoVette, a recent F.I.T. graduate, has replaced Jackie Thiell. Thiell is pursuing her master's degree in environmental science and public affairs at Indiana University.

Bob Rowe was recently reappointed associate director of Admissions after several months of service as an account executive for National Printing Inc. in Melbourne.

Dr. Randall L. Alford, assistant professor and Director of the Language Institute, recently presented a paper at the annual summer conference on Adult Second Language Learning and Teaching in Tallahassee.

Ronald E. Keene of Springfield, VA, has found that his interest in earning a master of business administration degree has support at home. In fact, the Army system accountant's daughter, Pamala Sue Keene, followed on his heels in signing up for the same degree program at the F.I.T. Off-Campus Program site at Alexandria. She finished undergraduate work earlier this year. Both family members have started F.I.T. work during the summer quarter, and both are concentrating in contract management.

State funding approved for research and tuition

F.I.T. was awarded some $552,000 in state funding by lawmakers during the recently completed session of the Florida legislature, it has been announced by Tom Adams, Vice President for Public Affairs.

The money is to be used for research in solar energy and in "biomass" techniques, and to supplement tuition costs for students in science and math education, and in some engineering disciplines.

The research funding will travel to F.I.T. through the Florida Solar Energy Center (FSEC), according to Patrick Healy, assistant to the vicepresident. F.I.T. has worked in cooperation with the FSEC since 1974. The Cape Canaveral-based center is part of the State University System and is one of the nation's most active solar energy research facilities.

Healy explained that about $120,000 will allow continued support for a joint FSEC-F.I.T. project on biomass research.

Researchers at F.I.T. recently completed construction of a pilot plant designed to produce and evaluate various gasoline "extenders." The biomass conversion process uses waste products such as shredded newspapers, and plant materials to produce gasoline extenders — chemical additives which can be mixed with gasoline.

Principal investigators are Dr. John Thomas, head of the Chemistry Division of the Medical Research Institute, and Dr. Ron Barile, professor of chemical engineering.

Healy said that an additional $80,000 of the grant money will be used to fund advanced solar energy research at F.I.T.

That research is aimed at exploring new methods of solar energy utilization. One project is studying the prospects of using sun energy to drive a facility that can convert saltwater to freshwater. Other studies focus on the prospects of providing solar lighting and heating for homes and businesses.

"One thing we are anxious to look at is large scale solar water heating," said Dr. Thomas Bowman, head of Mechanical Engineering. He explained that such a project would depend on donation of a large number of solar energy collectors, and a 2,500-gallon water storage tank being sought from Florida Power and Lit Company.

"The idea is to collect as much data as we can on large scale water heating, in light of recent legislation which reauires all new Florida schools to have solar water heaters," said Bowman.

Principal investigators on the energy studies include Dr. Maurice Kurtz, associate professor of civil engineering; Dr. Bob Scaringe, assistant professor of mechanical engineering, and Dr. Frank L. Stasa, associate professor of Mechanical Engineering.

To allow a continuation of a state tuition support program, "F.I.T. received $316,950 for renewal of the university's engineering contract with the State of Florida," said Healy.

Healy said the program is designed to counter a statewide shortage of engineers, and will provide supplementary tuition grants so that Florida residents can attend F.I.T. at a cost equivalent to tuition at state universities.

'The new engineering contract will support about 25 percent more students than last year," said Dr. Andrew Revay Jr., Dean of the School of Science and Engineering.

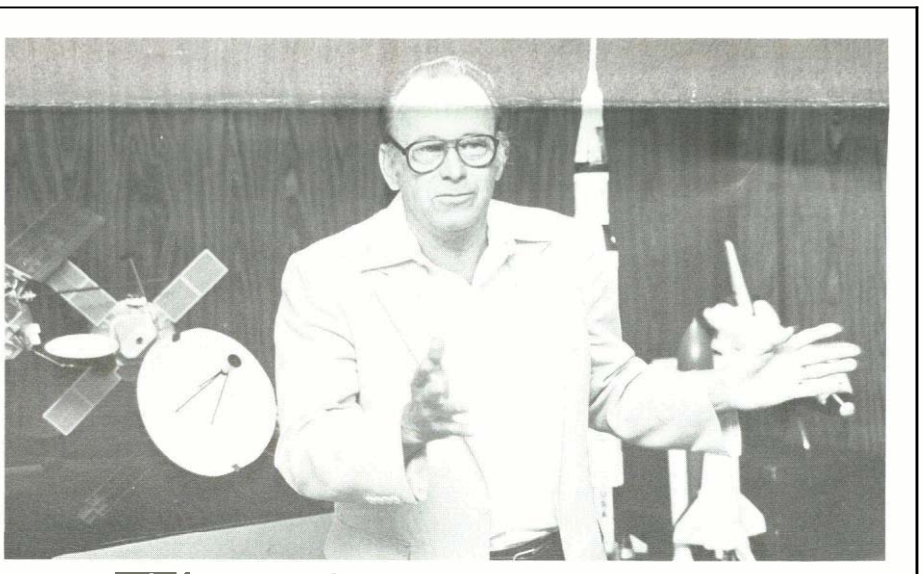
Dr. Revay said that the F.I.T. engineering contract will provide fulltime places for 102 students enrolled in the bachelor's degree programs in computer, electrical, mechanical, or ocean engineering, or in master's degree programs in electrical or mechanical engineering.

'The new engineering contract will support about 25 percent more students.. .'

Dr. Andrew Revay, Jr.

A similar program for aspiring teachers has been made possible by a $35.568 state grant to F.I.T. "For the first time we will also be able to provide tuition reduction grants for 13 Florida residents who want to teach science and math in the state's high schools." said Healy.

The contract money will be used to provide tuition reduction grants to students earning bachelor's degrees in science and math education.



Aero workshop speaker

President Keuper had the opportunity lo talk about F.I.T.'s numerous ties with the aerospace Industry — both past and present — aa ha met with persons attending the Summer Aerospace Workshop held on campus for educators from amund the country. The workshop is held annually under the direction of Dr. Ed Strother.

Students travel to Sweden

Four F.I.T. graduate students will travel to Sweden and learn first-hand about differences in marine environments there and here, during a five-week student exchange program that begins in August.

"The purpose of the exchange program is for students to work in contrasting marine environments in Sweden on research projects that are compatible with work they are currently doing at F.I.T.." said Dr. Walter G. Nelson, assistant professor for Oceanography and Ocean Engineering.

The research site will be the Tjarno Marine Laboratory of the University of Gothenburg, located on the west coast of Sweden.

Four Swedish students will also travel to F.I.T. to pursue research projects. "The Swedish students have not yet been selected, so we do not know the topics of their specific research projects," said Nelson. He said that the Swedes will conduct their research at local sites including the Sebastian Inlet and Indian River.

The student exchange program was made possible by a $28,000 grant from the Hasselblad Foundation of Gothenburg. The Foundation supports scientific studies and research in the fields of natural science and photography. The Hasselblad company is a manufacturer of cameras and precision instruments.

Nelson, who completed advanced doctoral research on the impact of oil pollution along the coast of Norway, believes that student exchange programs help increase student interest in studies of differing marine ecosystems.

Participating in the program are biological oceanography graduate students Martin Main of Bloomsfield, MI, and Suzanne Ban of Glenshaw, PA, along with marine biology graduate students Dwayne De Freese of Linbrook, NY, and Ted Nuttal of Brookhaven, PA.

Student projects range from a comparison of habitats to a comparison of marine life found in the U.S. and Sweden.

For example, Ban is currently determining how effective sea grass beds are in providing a refuge for aquatic life in the Sebastian inlet. In Sweden, she will investigate whether or not oyster beds provide a safe refuge for aquatic life.

"It will be a really good experience for me. I have never been to Europe and I look forward to learning from comparing and contrasting the research I am doing here," said Ban.

Main is currently investigating whether dredging at Sebastian Inlet will adversely impact a reef building worm called a "sabellariid." In Sweden, he will study the susceptibility of a similar worm to changes in its environment.

Story by Mary Deese

Colombia journey completed

A delegation of 40 members headed by Dr. and Mrs. Jerome P. Keuper visited Colombia June 12-19 to participate in the XVIII Florida-Colombia Partnership Conference.

F.I.T. was well-represented. In addition to the Keupers, other representatives were Dr. and Mrs. John E. Miller, Dr. and Mrs. Charles Gorman: Mr: and Mrs: Carlos Barba and Dr. Arthur A. Kimball and daughter Laurie.

Following the conference the group enjoyed an overnight visit to Villa de Layva, a town over 400 years old, and viewed historic landmarks from and to Bogota. The group exited through the beautiful and historic city of Cartagena on the Caribbean Sea.

The next opportunity tor foreign travel with Partners will come next Nov. 17-21, to attend Partners of the Americas XII International Convention in Merida, Yucatan Peninsula, Mexico.

Because of the sorry state of the Mexican peso, a real bargain is available for this trip. For under $300, the package includes round trip air fare from Miami to Merida, four nights (double occupancy) in the Holiday Inn, and a conference registration fee which covers five meals.

Anyone interested in signing up or learning more about this opportunity should write or call Dr. Arthur Kimball at F.I.T. (P.O. Box 1150, Melbourne FL 32901, telephone (305) 723-3701 ext. 261). It is advisable to make reservations before August 17 to assure availability of facilities.

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Clam testing provides shellfish industry quick approval rate

F.I.T. recently opened the only state-authorized private microbiology laboratory for the testing of hardshelled dams to determine whether they are safe for human consumption.

'We will provide anyone harvesting dams faster results (than are currently available) on tests for bacterial contamination of their clams," said Dr. Kenneth L. Kasweck, director of F.I.T.'s Microbiology Laboratory.

Florida law requires that anyone harvesting clams for sale and human consumption have the clam meat tested for bacterial contamination.

Kasweck said that the Department of Natural Resources' laboratory in Apalachicola is the only laboratory in Florida certified to test shellfish for bacterial contamination.

'The state uses an acid and gas production method to test for shellfish contamination. This test takes about 72 hours to get results," said Kasweck.

The researcher explained that F.I.T.'s test, recently approved by the U.S. Food and Drug Administration, takes only about 18 hours to complete and uses a "direct counting method to determine the number of bacterial contaminants per gram of clam meat.

According to the National Marine Fisheries, 80 to 85 percent of the clams harvested in the state of Florida come from Brevard County.

"Most persons harvesting clams in Brevard County lease several different parts of the Indian River from the state," said Kasweck. The researcher explained these persons use either "offshore relaying" or "onshore relaying" methods to harvest their clams.

Off-shore relaying involves transporting dams from off-shore polluted sites which have been declared "dosed" by the state to other state-approved unpolluted *off-shore* sites. There the dams are allowed to purge themselves naturally of the bacteria inside them.

"Through the natural process of feeding, clams pump water through their gut, cleansing themselves of bacterial contammants," said Kasweck.

On-shore relaying involves moving clams to tanks on the river's banks adjacent to the leased sites. Unpolluted river water is pumped into the tanks on shore.

"Our clients will have not only faster analysis of their clams, but we will test water samples form their leased sites and tanks. The test results will be reported immediately to state officials who will consider opening leased sites, based upon the test we perform," said Kasweck.

The researcher explained that because river conditions can change overnight, all leased sites require periodic monitoring to determme if conditions are safe for clam harvesting.

Kasweck noted that dams are dependent on a moderate salt content in the water in order to feed and cleanse themselves of bacterial contaminants.

"An extreme rainfall could lower the salinity in the water causing the clams to stop feeding and pumping water through their gut. This stops them from cleansing themselves of bacterial contaminants. They could ultimately starve to death," said Kasweck.

Story by Mary Deese

Clam clues

Dr. Kenneth Kasweck (center), assisted 4 students Elise Koster and David Engler prepare tho lab for examination of clams.

China provides art, computer whiz

A Chinese artist who recently graduated from F.I.T. has found that the computer, used as a tool for art work, may provide the perfect means of expressing his talent.

"The computer is a tool similar to a paint brush. The ultimate thing is your talent," said Christopher Ming-Yi Chen. He explained that the computer can allow individual expression in ways never before thought possible, as well as development of more sophisticated forms of art.

Chen said the machines can, for instance. be programmed to allow an artist to use a wide variety of colors in creating designs that will be put on paper or other materials by printing or drawing devices controlled by the computers.

In addition, Chen pointed to the prospect of programming computer-generated graphic designs to simulate the precise pen strokes of Chinese calligraphy.

Chen, who worked at the academic computer center on campus, war recently awarded a master's degree in computer science.

Despite his many admirers as a Chinese brush artist and calligrapher, at the university Chen was best known for his talents as a computer programmer.

"We will really miss him. He is an extremely bright and highly motivated young man," said Dee Dee Pannell, director of the Interactive Computing Center.

Chen, who began work as a student assistant at the center in 1981, was quickly promoted to programmer/consultant as his abilities became evident.

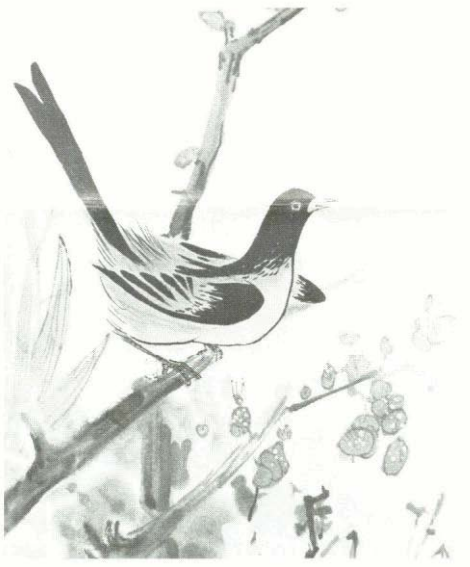
"He helped us write software (computer programs) and develop hardware that enabled three different types of graphics computers to talk to each other," said Pannell. She said that as a result of Chen's work, the computer center can now provide greater graphics capabilities to its users. Graphics are computer drawings.

Chen's abilities also became evident to Dr. David R. Clutterham, head of Mathematical and Computer Sciences. "I was reluctant to admit him to the program at first," said Dr. Clutterham, since Chen was entering an entirely new academic field. His bachelor's degree is in visual arts.

Clutterham said Chen learned quickly and was soon taking individual instruction from Computer Science faculty.

Chen worked 20 hours per week at the F.I.T. computer center while enrolled in three graduate courses. He still found time to teach Chinese brush painting at the Brevard Art Museum, at Hoover Junior High School, and to participate in numerous art shows.

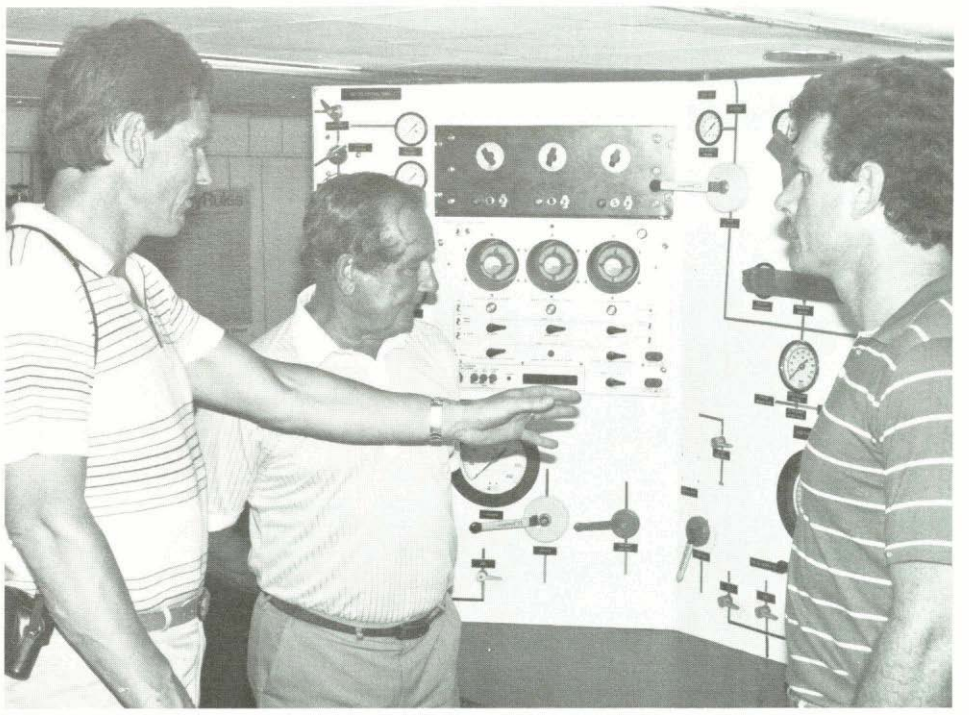
"I have taught hundreds of students the



art of Chinese brush painting," said Chen. "What I enjoyed the most was the cultural exchange. My students would ask questions about other aspects of life in mainland China and we would talk for hours," said Chen. Sharing his artistic talents was a way of expressing gratitude for the opportunity to come to the U.S.

Chen came to Melbourne in 1981, the journey made possible by the efforts of Franklin DeGroodt, former mayor of Palm Bay. He met Chen at an art show during a visit to Shanghai.

The new graduate is to work at a Los Angeles textile manufacturing firm. He has been charged with the responsibility of combining the firm's art and fashion departments by developing specialized computer programs. He would like to eventually return to China to teach computer science and share his American experiences.



Diving experts visit

Visitors from Europe, Per Rosengren (left) and Commander Jackie Warner (center) examine the recompression chamber control panel with F.I.T.'s Charlie Vallance.

Diving program gets European O.K.

Commander Jackie Wamer, the Inspector of Diving for the British Department of Energy. and Per Rosengren, the Norwegian Diving Inspector for the Norwegian Petroleum Directorate, have approved F.I.T.'s commercial diving program to train air divers for operations in the North Sea offshore petroleum industry.

Warner and Rosengren recently spent two days inspecting the facilities and diving operations on the Jensen Beach campus of Florida Institute of Technology.

After the inspection Warner said, "F.I.T.'s instructional standards surpass those required by my agency."

"Students who successfully complete the commercial diving program at F.I.T. will qualify for certification to dive the North Sea," said Per Rosengren.

To date, F.I.T. is the only diving school in the U.S. approved to train divers for North Sea operations entirely at its own facilities.

Charles Vallanm, Department head of the Underwater Technology Program noted that. "F.I.T. will be able to provide the additional training and open sea dives required for North Sea certification to students from other commercial diving schools — as long as their previous training meets the standards of the British and Norwegian governments.

Certification by the British and Norwegian governments is required for all divers who wish to work in the North Sea and United Kingdom. The standards they have established are rapidly being adopted as the international standards for commercial divers.

Aviation management now MBA option

An option in Aviation Management within the master of business administration (MBA) degree program is to be offered beginning in September.

The new option will allow MBA students to elect to take a series of five aviation management courses ranging from "Aviation Economics," to "Airport Development" and "Management of the Nation's Airspace System.

The general business courses of the program will be administered through the School of Management and Humanities, while the School of Aeronautics will administer specialized aviation courses.

"Our goal is to train students who are prospective middle-managers and executives for the nation's air-transportation system," said J.A. Lauderbaugh, Dean of the School of Aeronautics.

Lauderbaugh believes that as a result of the changing complexion of the nation's aviation industry, there is an increased demand for highly skilled managers who are proficient in modern analytical methods and problem solving.