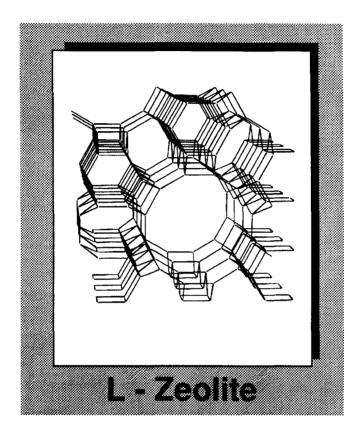
Department of Chemical Engineering

ALUMNI NEWS



in this issue . . .

•	Zeolite Center page 4
•	Department Visitors page 7
•	Alumni Correspondence page 10

LSU

ACKNOWLEDGEMENTS

In addition to our Alumni, two other groups are instrumental in maintaining excellence in our academic program. The first of these is our superior students. The second is our industrial partners. The faculty and staff of the department wish to acknowledge their achievements and support.

UNDERGRADUATE AWARDS

JESSE COATES James L. Dautenhahn

PAUL HORTON

Given to the graduating senior with the highest GPA who attends graduate school in chemical engineering at LSU.

SENIOR SCHOLARSHIP Vicke Labauve

Given by the AIChE Chapter to the student with the highest GPA during their academic career.

DOW OUTSTANDING JUNIOR Randall S. Barton

Given by Dow Chemical U.S.A. to an outstandingjunior to recognize achievements in scholarship, leadership, and campus activities.

AMERICAN INSTITUTE OF CHEMISTS Lisa K. Comeaux

JUNIOR SCHOLARSHIP Lisa K. Comeaux

Given by the Department to the student with the highest GPA at the end of the junior year.

SOPHOMORE SCHOLARSHIP .lose Tabora

Given by the National AIChE to the student with the highest GPA at the end of their sophomore year.

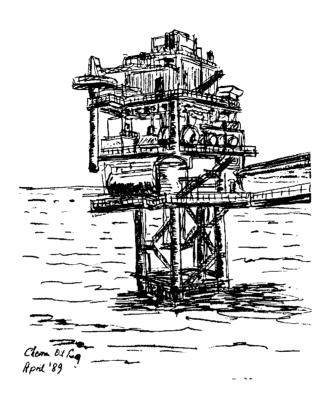
SENIOR DESIGN AWARD

Lisa Comeaux Michael Achacoso
Mike Terry Nicholas Vassiliou
Awarded to encourage distinction in undergraduate design activities.

INDUSTRIAL CONTRIBUTORS

Atlantic Richfield Air Products Exxon Freeport Chemical Occidental Tenneco Allied Chemical Chevron Dow Marathon PPG Texaco Council for Chemical Research DuPont Amoco Union Carbide Mobay Shell **BASF** Copolymer Ethyl

Chemical Engineering Alumni News



Not only are industry and undergraduate students important to the department, but they also are important to each other. This sketch was drawn by Dr. Freshwater on a trip he and some chemical engineering students made to a Chevron drilling platform.

In January of 1989, eight members of the student chapter of AIChE along with Dr. Freshwater and his wife were invited by Martin Dale of the Chevron Corporation to visit one of their oil rigs in the Gulf of Mexico. The group took a helicopter from New Orleans to the platform. Their tour began with the issuing of safety equipment

and a safety briefing. They were then escorted to the drill well to see where the oil is removed from the ground. After being introduced to the processing techniques, they were treated in the cafeteria. According to one student, it was "some of the best cooking" he had ever had.

All on the tour had a fun and educational visit and are looking forward to other opportunities to visit industries. A similar trip, also sponsored by Chevron, is scheduled for March 31,1990. These trips are just some examples of the strong relationship between the students and industry.

ADMINISTRATION



Department of Chemical Engineering

LOUISIANA STATE UNIVERSITY AND AGBILLEURAL AND MECHANKAL COLLEGE
BATON, ROLIGE - LOUISIANA - 7000-7303

504 : 388-7426

Dear Alumni and Friends:

My first year as chairman of Chemical Engineering at LSU is complete, and during that year I have been impressed particularly with the strength and vitality of the faculty and staff in our department. This past year has been another year of difficult budgets for the State, University, College and Department. In spite of that, the department has excelled in research productivity, teaching excellence, and service. Both the undergraduate and graduate students continue to rate instruction by the faculty highly. The faculty and students have also voiced strong appreciation for the support staff that although few in number (two clerical and two technical for 16 full-time, and 4 part-time faculty, and 6 post-doctoral associates) have produced high quality and efficient service. Our success in obtaining grants has been exceptional and is detailed in a separate article.

Dr. Edward McLaughlin continues as Dean of Engineering and Dr. Arthur Sterling was appointed associate Dean, both maintain active research programs; Dr. Ralph Pike remains as Associate Vice Chancellor for Research and continues to teach

and conduct research.

It was a disappointment to have Chancellor Wharton step down from his position, although he has continued to serve the University and State in a special assignment related to the current consent decree actions. Former ChE chairman and chancellor Paul Murrill has been appointed to the three member committee that will monitor the consent decree. Dr. Frank Groves as undergraduate coordinator, Dr. Danny Reible, as graduate coordinator and Dr. Arthur Sterling as prior acting chairman and special advisor to me during my acclimation, have all been extremely valuable in maintaining and enhancing our programs while continuing their research efforts. Dr. Louis Thibodeaux continues as director of the Hazardous Waste Research Center and maintains his active research in the area. Dr.'s Kerry Dooley and F. Carl Knopf continue efforts in supercritical extraction and reaction engineering. Carl also has presented workshops in and written programs for the use of pinch technology. Dr. Richard Rice continues his separations research and Dr. Adrain Johnson has developed an active relationship with Exxon Chemical Co., complementing his university activities. Other activities of the faculty are discussed in special articles.

I am stressing industrial involvement related to academic research and teaching and Dr.'s Armando Corripio, Geoffrey Price and Adrian Johnson are participating in these activities. At least two more such arrangements should be initiated soon; if any

of you want to assist in developing an arrangement please contact me.

Our most critical problem continues to be a shrinking state funding portion of our budget and related faculty salaries that are below the regional averages. Hopefully the governor and the legislature will turn some of their attention to our financial problems in higher education.

We still need your financial and general support of our department. When making

contributions please designate the ChE department

When you are in the area you should plan to stop by and see us.

Sincerely

John R. Collier

Department of Chemical Engineering Visiting Advisory Committee (1989-90)

Members From Industry

Clarence M. Eidt, Jr., Chairman Vice President, Petroleum and Synthetic Fuels Exxon Research and Engineering Company Florham Park, New Jersy

C. Glendon Bradley
President and CEO
CIBA Vision Corporation
Division of CIBA Geigy Corporation
Atlanta, Georgia

Larry D. Adcock General Manager, Louisiana Division Dow Chemical U.S.A. Plaquemine, Louisiana

M.F. "Bim" Gautreaux Senior Vice President Ethyl Corporation Baton Rouge, Louisiana

Paul A. McKim Senior Vice President Texas Eastern Corporation Houston, Texas

Edward T.L. Borie Senior Vice President Walk-Haydel and Associates Baton Rouge, Louisiana P.L. Thibaut Brian
Vice President — Engineering
Air Products and Chemicals, Inc
Allentown, Pennsylvania

Roy D. Gerard General Manager Westhollow Research Center Shell Development Corporation Houston, Texas

Mary L. Good President and Director Signal Research Center, Inc Des Plaines, Illinois

Otha C. Roddey Director The Parsons Corporation Pasadena, California

Cecil L. Smith
President
Cecil L. Smith, Inc.
Baton Rouge, Louisiana

Dan C. Borne President Louisiana Chemical Association Baton Rouge, Louisiana

Members from Academia

Robert B. Stobaugh Charles E. Wilson Professor Graduate School of Business Admin. Harvard University Boston, Massachusetts Stanley I. Sandler H.B. DuPont Professor University of Deleware Newark, Deleware

Dan Luss
Professor and Chairman
Department of Chemical Engineering
University of Houston
Houston, Texas

Zeolite Synthesis Center Proposed

Since 1950, there has been an increasing research effort in zeolites because they have proven to be very useful materials. Their applications in sorption, catalysis, and ion exchange were recognized very early and are now the basis for major industries. Other applications have been slower developing but are no less promising.

The Department of Chemical Engineering received seed money from the State of Louisiana for a Zeolite Synthesis Laboratory in 1987. Currently, the laboratory is fully operational and includes synthesis autoclaves, a Scintag PADV x-ray diffractometer, a Perkin-Elmer microbalance system, and peripheral equipment and supplies. Closely coupled to the zeolite laboratory are heterogeneous catalysis laboratories including IR, GC/MS, catalytic reactors, and other characterization equipment. The department also houses automated BET surface area, mercury porosimeter, and chemisorption equipment which represents a sizable seed for a successful zeolite synthesis operation.

Behind the establishment of this laboratory are Geoffrey L. Price (Chemical Engineering) and Harry E. Robson (Chemistry). Dr. Price has spent the majority of his career in the study of heterogeneous catalysis, including many investigations dealing with zeolites. His interest in zeolite synthesis grew out of an assignment at the Mobil Central Research Laboratories in Princeton, New Jersey, where he was part of one of the eminent synthesis groups in the world. Dr. Robson is retired from a long and successful career with Exxon where he led zeolite synthesis efforts for the Exxon Research and Development Laboratories in Baton Rouge. Dr. Robson has numerous patents and articles on the synthesis of zeolites, and is a recognized international

figure in zeolite synthesis. Together, Drs. Robson and Price represent the backbone of the technical and administrative aspects of the zeolite laboratory.

Dr. Price and Dr. Robson have teamed up with coinvestigators:

Kerry Dooley
Greg Griffin
Les Butler
Steve Watkins
Harvill Eaton
Chem. Engineering
Chemistry
Chemistry
Mech. Engineering

and published a prospectus which proposes the establishment of a Zeolite Synthesis Center based upon a National Science Foundation program for Industry/University Cooperative Research. If you would like to have a copy of the prospectus, you can contact Dr. Price directly.

The proposed Center will rely upon industrial sponsors and the National Science Foundation to provide funding to make a vast effort in zeolite synthesis successful. Anticipated total funding levels would approach \$500,000/year.

Primary missions of the proposed center include providing zeolite samples for industrial sponsors and exploratory research in the synthesis of new zeolitic phases.

Student Enrollment

Undergraduate enrollment, although still depressed, is continuing a slow increase both in numbers and in test scores of entering students. Fall '89 enrollment was 143, up from a low of 102 in the Fall '87. High school students expressing an interest in chemical engineering at the annual Engineering Day was up from 350 last year to 800 this year.

This increase in enrollment is probably due to the increased demand for chemical engineers and increased diversification in the job market. According to a survey in 1988, the unemployment level for B.S. graduates improved from 20.16% in 1986 to only 8.72% in 1988. Furthermore, there has been an increase in the number of job areas in which chemical engineering graduates are being sought. Besides their traditional employment in the chemical industries, graduates are also being employed in such areas as: biotechnology; environmental engineering; fuels; food and consumer products; electronics; and pulp and paper. The forty-nine school seniors that registered for chemical engineering at Spring Testing in 1988 had an average ACT of 27. Also, there were twenty-nine freshman accepting scholarships from the department in the fall of 1989.

This increase in test scores, along with enhanced entrance requirements instituted this past year should lower the attrition rate in the department. Currently there are 143 upperclassmen, 92 declared freshmen, and 63 graduate students. Undergraduates are one third female and one sixth minority.

Summer Transition Program Instituted

The department has instituted a ten week summer program to facilitate the transition of B.S. graduates from related disciplines to chemical engineering. The summer session is divided into two consecutive five week periods. Students take two of the required undergraduate courses in each period, leaving only one course they must take in the fall to complete the transition. Excellent students from chemistry, math, and petroleum, textile, and

aeronautical engineering backgrounds have used this program to prepare for their graduate chemical engineering courses. These summer offerings may also be taken by ChE undergraduates so to permit the initiation of a co-op program.

Professorships and Chair Funded

Funding of the Jesse Coates and the Charles Horton titled Professorships in the department has been accomplished. An external selection committee is now choosing faculty members who have been here at least three years that will be nominated for these positions.

A new titled professorship fund will be initiated soon. A minimum endowment of over \$100,000 is needed since these are considered a supplement to the State funded position. Contributions toward titled professorships would be greatly appreciated.

The Ethyl/Gautreaux Endowed Chair of Chemical Engineering has been approved by the Boards, and the \$600,000 donation by Ethyl was matched by \$400,000 from the Louisiana Educational Quality Support Fund. A committee is being formed to search for qualified candidates.

LSU ChE Leading in External Funds

The faculty in the department secured \$1,130,000 in Louisiana Educational Quality Support Funds which represents one fourth of the total available for all departments state wide. Additional grants from other sources bring the total for new and continuing research support to \$3,600,000. This represents an external grants budget for this year of \$1,000,000 compared to our university budget (exclusive of these funds) of \$1,247,000. On August 30, 1989, The Baton Rouge Morning Advocate reported

DEPARTMENT NEWS

the department as having more in external grants per faculty than both the mechanical engineering and physics departments. The August 21, 1989 issue of the Chemcial and Engineering News reported National Science Foundation Data on total research and federal research spending in chemical engineering for the top thirty departments. LSU ChE ranked in the top twenty on both total (19th) and federal (20th) research spending. When this was calculated on a per full time faculty member basis, the department ranked in the top ten.

Departmental Gift

The department received a pilot plant liquid extraction unit from Rhone Poulenc. The unit, comprised of a number of glass mixer settlers, associated pumps, and piping, is valued at \$75,000. It was obtained for the department through the good offices of a former graduate, Fielding Johnson of Barber & Johnson Inc.

Annual Lectureships

The department held its annual Agrico Chemical Company and Bicentennial Commemoration lectureships. The speakers were specialists in environmental issues in chemical engineering and thermophysics.

The Agrico Chemical Company Annual Lectureship in Chemical Engineering was held in April and featured "Whitman's Two Film Theory Rediscovered," by Donald Mackay. MacKay spoke of applying Whitman and Lewis' "two film" concept to environmental issues such as the exchange of organic chemicals between lakes and the atmosphere and toxicity tests in fish. He also used the theory for estimation of vola-

tilization rates from lakes, rivers, and waste treatment lagoons.

Mackay is a professor in the Department of Chemical Engineering and Applied Chemistry and in the Institute for Environmental Studies at the University of Toronto. He received his Ph.D. in Glasgow, Scotland in 1961. He has published some 300 papers and edited two books. He was the Distinguished Lecturer of the Association of Environmental Engineering Professors in 1983 and is a consultant to a number of companies and various agencies of the Canadian and U.S. governments.

The Annual Bicentennial Commemoration Lectureship concerned the development of accurate representations of the various thermophysical properties in the critical region of fluids. Also discussed were the current attempts to deal with the issue of determining the behavior of the thermodynamic properties in a large range of densities and temperatures around the critical point.

The lecture, held on October 27, was given by Jan V. Sengers. He is a professor at the Institute for Physical Science and Technology of the University of Maryland and also teaches in the Chemical Engineering Department. Before joining the faculty at Maryland, he earned his Ph.D. at the Van der Waals Laboratory of the University of Amsterdam in 1962. Sengers is a fellow of the American Association for the Advancement of Science and the American Physical Society. He is also a member of the American Society of Mechanical Engineers and the American Institute of Chemical Engineers. Aside from being Associate Editor of the International Journal Thermophysics, Sengers, also serves on the editorial board of Physica A.

Departmental Visitors

The department had several visiting scholars this year. Two scientists from the Soviet Union, two visiting scholars from China, and a Bulgarian scientist came to pursue their research interests at LSU.

Two Soviet scientists from the Institute for Experimental Meteorology visited Dr. Reible during September as part of a scientific exchange program coordinated by the EPA and its Soviet counterpart. The scientists were Michail Novitsky, head of a laboratory at the institute, and Oleg Vozzhennikov, a senior scientist in Novitsky's laboratory. The scientists collaborated with Dr. Reible on problems of modeling the rates and mechanisms of transport of atmospheric and water-borne contaminants in coastal environments.

The Russians were at LSU for a month, repaying a visit Reible made recently to Obninsk, a city near Moscow built around ten research institutes including the Institute for Experimental Meteorology. Dr. Reible expects to return to the Soviet Union to continue the collaboration in April and May of 1990.

Another visiting scholar to the department was Dr. Xiang-Yung Wang of Nanjing Chemical Company. Dr. Wang, after reading a paper in *Chemical Engineering Science*, wrote and requested to study with Dr. Rice on gas-liquid reactions. He was appointed Visiting Research Scholar and started working on the Pressure Response Method for measuring gasliquid reaction kinetics of CO₂ - bicarbonate systems. His work culminated in a publication in *I.E.C. Research* entitled "Absorption Kinetics and Mixing Studies in PRC" (Rice, King & Wang).

Dr. Thibodeaux is currently hosting another scholar from China. Professor Xian-Qing Wang is Professor of Chemical Engineering and Director of the Environmental Engineering Laboratory at the University of Petroleum, Beijing, China. He is here on sabbatical leave, developing an experimental procedure for testing the efficacy of in-situ capping of contaminated bed sediment.

Professor Wang was to be at LSU for one year, returning to China in May 1990. Last month, he received notice that the University of Petroleum will be forming an Environmental Engineering Research Center. He was requested to return early and assume the directorship. Professor Wang now plans to return in February.

Dr. Vladislav Kanasirev (Vlado), an Associate Professor at the Bulgarian Academy of Sciences, was a Visiting Professor from October, 1989 through January, 1990, as an exchange fellow through the National Academy of Sciences. During his visit, Dr. Kanasirev worked with Dr. Price and Dr. Dooley on light paraffin aromatization catalysts containing Gallium.

Dr. Kanasirev's visit was extremely productive. One paper has been submitted to *Chemical Communications*, a second and third are in preparation, and a patent application is in the works. The productivity was a result of Dr. Kanasirev's extensive experience in light paraffin aromatization coupled with the excellent equipment available at LSU, which is not readily available in Bulgaria. We hope that he will be back to visit again within the next four years

We were delighted to have all of the visiting scientists at LSU, not only for their earnest research activities but also for their warmth and genuine affection for their fellow researchers.

FACULTY AND STAFF NEWS

Professor Armando Corripio was selected as the Dow Outstanding Teacher. He is the Vice-Chairman of the Baton Rouge Chapter of AIChE and was selected as a fellow of the society by the national body of AIChE. He was invited to present a paper, co-authored by Art Sterling, entitled "Status of Computer Integrated Manufacturing in the Process Industries of the United States" at the Eighth Instrumentation Seminar in Rio de Janeiro, Brazil, in June 1989. He and Professor Demetre Arigialas of the Department of Civil Engineering were awarded a \$307.000 grant from the Louisiana Board of Regents to study "Methodology for Automated Design and construction for Renovation of Process Industries Facilities."

Associate Professor Kerry M. Dooley chaired a chemical engineering panel at the NSF Instrumentation and Laboratory Improvement Proposal reviews.

Professor Don Freshwater was appointed to a permanent faculty position after being a visiting professor for 3 years. He was awarded an Honorary Doctor of Science by the Loughborough University of Technology, United Kingdom.

Associate Professor Gregory L. Griffin scored a "daily double" in this year's competition for research grants from the Louisiana Education Quality Support Fund. In subprogram A, which is intended to assist university faculty in developing research programs with national recognition, he received a grant to investigate chemical vapor infiltration as a materials processing technique for advanced ceramics. In subprogram B, which is intended for research

to improve the state's commercial technology, he received a grant to develop an aerosol reactor for manufacturing uniform size distributions of aluminum nitride powder. He is a lead investigator in a collaborative project with IBM and the LSU Center for Advanced Microstructures and Devices (CAMD), aimed at developing chemical vapor deposition of copper thin films. He was also granted tenure this year.

Professor Douglas P. Harrison has been appointed Alumni Professor of Chemical Engineering. He chaired the search committee for a chairman and also served on the search committee for a new chancellor.

Associate Professor Martin Hjortsø was granted tenure and promoted to associate professor.

Associate Professor Danny Reible visited the Institute for Experimental Meteorology in Obninsk, USSR, in October, 1989, as part of an EPA administered environmental scientist exchange program. Two scientists from that institute visited him from August 25 to September 25, 1989. He also hosted a graduate student from the University of Hamburg during the summer of 1989. He co-chaired technical sessions at the Houston AIChE meeting in April of 1989 and the San Francisco AICh Emeeting in November, 1989. He is the Meeting Program Chairman for the Summer 1990 AIChE meeting in San Diego. He and Dr. Thibodeaux were invited speakers at the "Intermedia Pollutant Transport: Modeling and Field Measurements" workshops in August. The conference was hosted by a sister EPA organization to the Hazardous Waste Research Center at LSU.

FACULTY AND STAFF NEWS

Professor Richard G. Rice has received another NSF Creativity Award to study "Selective Adsorption of Heavy Water on Paladium Coated Carbon," with prospects to observe cold-fusion. He also received a new NSF grant to study "Circulation and Mixing in Bubble Columns." He recently returned from Sonthofen, Germany where he presented first results for his NSF sponsored work on "Radial Flow Chromatography." He delivered a seminar at Ohio University and chaired a session on adsorption at the 2nd International Conference on Separation Science and Technology in October, 1989. He will also chair a session on Mixing at the Chicago Meeting of AIChE (1990). He continues to serve as LSU chapter President of the American Association of University Professors.

Professor Arthur M. Sterling was appointed Associate Dean for Research and Graduate Activities for the College of Engineering.

Professor Louis J. Thibodeaux was part of an expert team convened to provide input to the Science Advisory Board of the U.S. EPA on the subject of clean-up of oily beeches. His contribution to the clean-up effort of the Exxon Valdez spill in Prince William Sound, Alaska was concerned with the chemodynamics and transport of the fertilizer component onto and within the oily spots.

Professor David M. Wetzel returned to full time teaching and research after spending two years as Associate Dean for Instruction and Undergraduate Activities for the College of Engineering. Dr. Julius Langlinais from Petroleum Engineering takes his place as Associate Dean.

Eugene C. Hadlock continues to contribute to the department's laboratory training and supervision of contract separation for industry on the computer controlled stainless steel distillation column. The unit has engendered \$70,000 in income for the department this past fiscal year.

Dr. Javanto K. Ghosh is working as a postdoctoral Research Associate with Dr. Collier. He received his undergraduate degree in Chemistry and Chemical Engineering from the University of Calcutta, India. He has an M.S. and Ph.D. in Chemical Engineering from Ohio University. His current work involves studies of the polymer melt transformation extrusion process. experimental part of his project focuses on extrusion die design for fibers and ribbons, development of flow visualization techniques for velocity and streamline measurements, and optimization of the experimental conditions. The modeling part of his project involves development of a finite element code for simulating the flow of non-Newtonian fluids, in the converging channel the extrusion dies, with different types of consititutive equations.

Dr. Usha Mukundan is currently working as a post-doctoral Research Associate with Dr. Hiortsø. She is on leave from the Department of Biological Sciences at R.J. College, The University of Bombay, Bombay, India. The project she is working on is "Production titled of Secondary Metabolites from Root Cultures" and attempts to optimize the production of secondary metabolites by using elicitors. The plant derived products have industrial applications ranging from agrichemicals and pharmaceuticals to flavors and fragrances. She will return to India in June, 1990.

1920's

C.A. Barrere (BS ChE '26) retired and was made a Fellow of AIChE on Sept. 9, 1979.

1930's

William Kenda (BS ChE '38) is a consultant for P3GI Indonesion Sugar Research Institute in Pasuruan, Indonesia.

1940's

Armando M. Abay (BS ChE '48) reports that Guillermo A. Dominguez (BS ChE '48) is a chemical engineer in the sugar industry in the Republic of Panama.

James M. Gill (MS ChE '48) is senior vice president and member of the Ethyl Corporation Board (retired).

Howard E. Huckins (MS ChE '48) after receiving his MS at LSU he went on to get a PhD in ChE from the University of Iowa in 1951, and started work with Dupont where he spent his entire career. He retired in 1985 as manager of the Technical Assistance Section in the Design Division, Engineering Department. Since retirement he has been a consultant in the field of pressure relief for a small manufacturer of rupture disks and pressure relief valves, and recently he started working part-time as a staff member of AIChE's Center for Chemical Process Safety. He is now living in Wilmington, Virginia.

Virgil Orr (MS ChE '48, PhD '50) is retired from Louisiana Tech and a member of the Louisiana House of Representatives.

Marvin S. Park (BS ChE '48) is retired and living in Beaumont, TX.

Davis E. Speeg (BS ChE '48) is retired. He was past State President of Louisiana Water Pollution Control Association, Commander of New Orleans Power Squadron and National Board Director of WPCF.

1950's

Roland de Pitray (BS ChE '50) is retiring after 38 years with the Eimco Corporation. They specialize in vacuum filtration and sedimentation or thickening.

Warren J. Molaison (BS ChE '51) retired from Hercules, Inc. ('84) in Hopewell, VA. He has done some consulting work in the field of cotton cellulose processing in USA and Israel. He is enjoying motor home travelling the U.S. and Canada and is planning a trip to Alaska.

Eugene A. Rozas (BS ChE '51) is division manager (Sarnia) at Dow Chemical USA in Port Huron Michigan.

Sam W. Bergeron, Jr. (BS ChE '56, MS '60) works at Exxon Company USA in Baton Rouge, LA.

James A. Breaux (BS ChE '56) is the president and general manager of Bowater Southern of Calhoun, Tennessee.

M.F. Gautreaux (PhD ChE '58) is a member of the National Academy of Engineering and senior vice president of the board of Ethyl Corporation.

1960's

Leonard H. Sedlin (MS ChE '61) took an early retirement from a career of 23 years with Kaiser Aluminum in April, 1988. He

is currently a Project Director for G & E Engineering, Inc. He is responsible for scheduling all projects/activities; interface with clients; direct project management of certain specialized and sensitive projects; employee development; and marketing. He has been named "1987 Chemical Engineering Outstanding Fellow" by the Chemical Engineering faculty of the University of Alabama.

Donald H. Daigle (BS ChE '63) is a vice president of engineering for the Exxon Company USA, Baton Rouge Refinery.

Camille J. LeCompte (BS ChE '66) works for Shell Oil Co. in Norco Mfg. Complex as Manager of distribution field.

Randall J. Indovina (BS ChE '68) is an Environmental Superintendent at LaRoche Chemicals (formerly Kaiser).

Edward A. Schmitt (BS ChE '69) has been appointed to plant manager for Georgia Gulf Corporation's chemical division, Plaquemine.

1970's

Emmanuel Michel Fleurant (BS ChE '73) is technical advisor of a sugar factory and plant manager of a distillery producing superfine alcohol from cane sugar molasses at Grays Refinery Ltd., in Mauritius. He is member of the Institution of Engineers in Australia, member of the American Institute of Chemical Engineers, and also a consultant for alcohol distillation plants in Western Africa.

Wilson T. Gautreaux, Jr. (BS ChE '73, MS '79, PhD '81) is working for Westvaco Paper Co. He is doing process develop-

ment work, converting batch to continuous process, and recruiting.

Donald K. Pearson (BS ChE '73) is a senior process engineer at the PPG in Lake Charles, LA. He reports that Carol Norris Tollett (BS ChE '73) works in product development for Proctor and Gamble in Cincinnati, OH.

James R. Madden (BS ChE '72, MS '74) is a process development engineering in Research and Development at Ethyl in Baton Rouge, LA. He and his wife Daphne are raising a son, Paul Grady Madden, born 4-30-84.

Jorge R. Ochomogo (BS ChE '74) lives in Gretna, LA and is employed by Monsanto Co. in Luling, LA.

Patrick E. Byrd (BS ChE '77) moved recently. He is still in the New Orleans area and still works for Freeport McMoran.

Susan N. Douglas (B'S ChE '77) is presently working as an environmental engineer for Waste Management, Inc. doing environmental compliance and permitting. She gave birth to her daughter, Katharine Elizabeth, on November 6, 1989.

Michael C. Campagna (BS ChE '78) is employed by Rubicon Inc. in Geismar, LA as a production engineer. He lives in Baton Rouge, LA.

David M. Mongrue (BS ChE '78) works for Union Carbide in Hahnville, LA, as IPAC/Order Processing Supervisor in the Industrial Chemicals Division. He lives in Luling, LA. He also reports that a Lost Alumni Jules A. Lambert (BS ChE '69) works for Ethyl Corp. on GSRI Rd. in Baton Rouge

and that he lives out in the Denham Springs - Walker area.

Thomas J. Senyard (BS ChE '78) is president of Quad-S Consultants, Inc. of Baton Rouge.

Beverly Stokes Mentzer (BS ChE '79) is Supervisor of the Planning group at Exxon USA's Eastern Production Division. On May 1, 1989, she and her husband, Ray, became the proud parents of their son, Nathan Arthur.

1980's

Richard S. Sanders, Jr. (BS ChE '80) has recently been promoted to Nitrogen Area Production Manager for Agrico Chemical in Donaldsonville, LA.

James J. Spivey (PhD ChE'80) was named Director of Research Triangle Institute's Center for Process Research. The center, located in Research Triangle Park, North Carolina, is part of the environmental sciences and engineering unit at RTI. It conducts projects in catalysis, fuel technology, and adsorption.

Jay J. Zimmer (BS ChE '81) is the Pilot Plant Co-Ordinator and Senior Chemical Engineer for the Technology Division of the Cabot Corporation in Pampa, Texas.

Hector Vila, Jr. (BS ChE '80) is in his 4th year at LSU Medical School as a Senior. He lives in Napoleonville, LA.

Edgar Hernandez (MS ChE '80, PhD '81) is currently Technical Service Manager for Merck Sharp and Dohme of Puerto Rico. He has been with Merck since 1986 after 4 years with the Department of Chemical

Engineering at the University of Puerto Rico at Mayaguez as Assistant Professor and Associate Director.

Rita Sagel Alleman (BS ChE '82) was Senior Engineer for Exxon, Co. USA Production Department. She has accepted an offer from Standard Alaska Production Co., which is a BP American Subsidiary, as a Facilities Engineer for the Prudhoe Bay Business Development Group in Anchorage, Alaska. (Effective 12/19/88)

Michael M. Tassin (BS ChE '82) is President/Owner of Pathway ICS, Inc. Pathway is a full service computer company offering sales, consulting, customized programming and hardware, maintenance/repair. He achieved 1/4 million sales in the 1st quarter of 1988.

James H. Dowling (BS ChE '82) has been employed since 1985 by Tenneco. He is presently assigned to the Economics and Planning group as an analyst.

Michael J. Richard (MS ChE '82, PhD'87) is now with the Technology Division of International Paper in Mobile Alabama.

Wylie A. Barrow (BS ChE '83) is the superintendent of the Specialty Chemicals Department at Cyanamid's Mobile plant. He was awarded the 1988 Manufacturing Award for Excellence, being one of only 15 employees to receive this honor.

Sheng-Yang Ju (MS ChE '84, PhD '87) is now with the Process Research Department of the Chinese Petroleum Corporation, Chia-Yi, Taiwan.

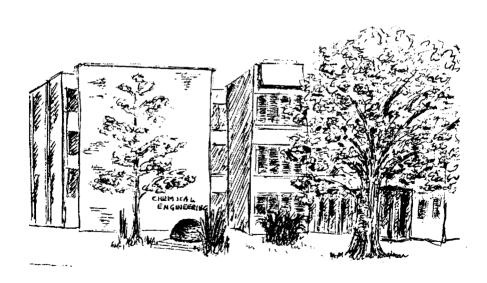
Jennifer A. Savoie (BS ChE '84) works for Rubicon, Inc. in Geismar, LA.

Jane Fougerousse Harrell (BS ChE '85) is employed as a Process Engineer for Mobil Oil M&R at the Chalmette Refinery (formerly Tenneco Oil Refinery). She has been married for 3 years.

Mark E. Malhiet (BS ChE '86) works for BASF in Houston as Process Engineer and will soon be receiving his MS. His wife Susan Anne Savant-Malhiet (MS ChE '86, PhD '88) recently received her PhD and now works for Shell Development, Houston.

Connie L. Puls (BS ChE '86) is Process Engineer for B.F. Goodrich, Geon Vinyl Division in Plaquemine, LA. She is currently working on her MBA at LSU.

Florine Y. Williams (BS ChE '87) is employed by Chemical Waste Management Inc. of Chicago IL. (on location) as an R&D Project Engineer in Lake Charles. She is working on a wastewater evaporative treatment system with catalytic oxidation (patent pending), 1 gpm capacity pilot system and plans to design a commercial unit up to 100 gpm capacity by 1989.



ALUMNI CONTRIBUTIONS

Your contributions are an investment in the future of the department's academic and research programs. Not one cent of our alumni contributions has been or will be spent! Rather, all contributions are placed in endowment accounts, which have grown to an accumulated value of \$338,000, as shown in the table below. It is only the interest from these accounts that will be used to fund departmental programs.

Two of these programs have been initiated this year. The Coates and Horton Professorship Funds exceeded their trigger value of \$100,000, and recommendations for the selection process have been received from a select outside committee. The interest from these funds will provide salary supplements to two, senior-level professors in the Department.

The average salary of a professor in our department is now 35% below the average for our peer institutions. Thus the Coates, Horton, and other Professorships will play a vital role in our effort to retain outstanding faculty.

You have also received an appeal for contributions from Dean Edward McLaughlin as part of a college effort to collect contributions centrally. If you choose to contribute through the College, rather than directly to the Department, you can still request that your contribution and company matching grants be credited to one of the department's endowment funds and should specify the department.

If you have not previously contributed, please consider doing so this year.

Endowment Fund Accounts — June 30

Fund	1988	1989
Coates Professor Fund	\$109,138	\$128,800
Horton Professor Fund	105,220	120,954
Development Fund	61,373	88,589

Alumni Contributions 1988-89

Fund	Number	Amount	Matching	Total
Coates Professor	15	\$ 2,708	\$ 3,164	\$ 5,872
Horton Professor	15	6,525	2,725	9,250
Development Fund	40	9,095	14,275	23,370
Total	70	\$18,328	\$20,164	\$38,492

ALUMNI CONTRIBUTIONS

CONTRIBUTORS — 1988-89

1922	1948	1960	1975
⁴ Alexis Voorhies, Jr.	² Howard E. Huckins ⁵ William G. Reymond	⁵ Geoffrey R. Say	³ Richard J. Spies
1926	1949	1961	1976
³ Roy P. Daniels	⁵ Henry G. Abbott	² Leonard H. Sedlin	³ James W. Turner
1928	⁵ J. F. Butterworth, Jr. ² Edmund F. Metz	1962	1977
⁵ Jesse Coates	³ Murray W. Rosenthal ⁵ Roy L. Trusty	³ Paul W. Murrill	² Patrick E. Byrd ² James B. Gibson, III
1935	1951	1963	³ Edward F. Pittman
³ Vito E. Dimiceli ² William W. Hannaman ⁵ Lewis C. Price	⁵ P.L. Thibaut Brian	² Alfred P. Anderson ² Armando B. Corripio ⁴ George A. Daniels	1979 ² Wayne D. Jensen
1936	³ Marc F. Fontaine ¹ Warren J. Molaison ⁶ Eugene A. Rozas	1964	² Beverly K. Mentzer 1980
³ Thomas C. Landrum	1953	³ Arthur K. Barton, III ¹ David B. Greenberg	³ F.N. Pebdani
1938 ² William Kenda	⁶ Roy D. Gerard	1965	² Pan L. Usie
1939	1954	¹ Stephen S. Melsheimer	² David W. Clary
Francis F. Cole	⁴ Bivins H. Williams	1968	1983
1940	1955	² Sidney V. Bourgeois, Jr	
² Walter J. Kuebler	² Jan Barlow, Jr. ³ Cushman M. Cambre	1969	¹ Kevin M. Duhe
1944	⁵ Jerry G. Moffett, Jr. ² Marvin D. Roof	¹ Jack Hopper ² Chi-Kwong Lam	1985
² Charles W. Arney ² Thomas S. Granberry	⁴ Jimmie D. Sippel	1971	⁴ Claire Roach Dooley ² Susanne C. Warren
1945	² Sam W. Bergeron, Jr.	² Lynn F. Guidry	Others
5Lester Gerard	³ Howell B. Payne, Jr.	1973	⁴ John H. Cartwright
³ Robert F. Westall	1958	² Oliver W. Hargrove, Jr. ² Wilson Gautreaux, Jr.	1 \$0-99
1947	² Marcelian F. Gautreaux	1974	² \$100-249 ³ \$250-499
¹ Joseph D. Chachere, Jr. ⁵ Otha C. Roddey		³ Manolo A. Garcia	4 \$500-999 5 \$1000-2499
⁵ Robert B. Stobaugh	² Riley Wilson	³ Thomas J. Guidry	§ \$2500 and up Includes Matching Funds

ADDRESSES FOR MANY ALUMNI NOT KNOWN

We have no addresses for the following alumni. We are certain that they would also appreciate receiving the Alumni Newsletter and renewing contact with the Department. If you know of a current address for any of them, please let us know.

Last year, Thomas C. Landrum (BS ChE '36) cleared 13 names from the missing alumni list. This year, no one cleared more than one name. So the record still stands. Who can beat it?

1915

Cyrus T. Helm Glynn H. Ledbetter John R. Mays, Jr.

1922

Norman G. Platts Ramachandra B. Padhye

1924

Emest E. McCollough

1933

Russell N. Lav Lawrence O. Lord

1934

Samuel R. Fitzgerald James E. Lindsay

1935

Henry P. Broussard, Jr. Mary L. Digirolamo Albert P. Garner Richard A. Pratt M.R. S. Rao

1936

James R. Colvin Lealand A. Enberg Louise T. Kennedy James H. McGee Francisco P. Pilapil Alvin D. Rolufs

1937

John L. Burt, Jr. Stephen A. Caldwell, Jr. Delma M. Cointment Angel A. Colon John T. Franques Edwin Liebert Morris L. Perlman

1938

William Y. Gissel Walter H. Johnson

1940

Henry Blanchet James W. Bridges Phelan W. Eatman Y. Ebra J. Lopez

1941

John P. Ketteringham, Jr. Charles A. Overstreet, Jr.

1942

William F. Daniels Gilbert F. Moore

1943

Thomas J. Becnel, Jr.

Manuel Mestre

Jack W. Racine 1945

Armando Alonso Juan Castresana Charles B. Richard

1946

Elbert R. Harris

1947

Floyd S. Edmiston

1948

Chimanbhai I. Amin Harry W. Brown William B. Chanceler Lee A. Crenshaw Harold L. Keaton Clarence E. McMillan, Jr.

1949

Maurice G. Baxter Edmund P. Davis Thomas M. Logan John R. Major Durward J. Templet

1950

Harish C. Anand Earl P. Babin Avice G. Dubuisson Albert L. Fourmy Gene A. Freiss Juan I. Gabilondo Thomas E. Linder Boyce Nunnally, Jr. Clarence E. Phillips Robert D. Platt Wilson C. Pullig Joseph E. Steiner

1951

Basil W. Andrews Albert L. Gagneux Ruble L. Huff Lonnie Z. Mallory, Jr. Ramon A. Merino Jimmie E. Middleton

1952

Omar Arape Fernando H. Bergonzoli Oscar D. Duncan

1953

Wilbur A. Kean

1954

George M. Guidroz Gene A. Johnson Humberto P. Machado Jose A. Moncada Mario Posada

1955

Zevada M. Avalos Albert K. Defrance, Jr. Raymond C. Hatfield Eugene W. Luce Guy C. McCombs, II Wilhelmus Melis Paul E. Otto

1956

Larry L. Devillier Thomas W. Howard Kenneth Hoy Robert Pole

1957

Yeganeh A. Amir Horacio Baena Maurice F. Beauvais Carl C. McCoy, Jr. Frederick E. Marsh, Jr. Norwood W. Matherne John W. Maurin

1958

Joseph M.P.H. Adam Augustine J. Corona Harry A. Edwards Franklin M. Ingram Mohan S. Kothari Euclide J. Leleux Jean P. Mariani William C. Meek, Jr. Bobby M. Miller Sayed H. Nassar Maurice K. Nasser Joseph T. Regard William C. Russo

1959

Charles E. Adams Troy E. Bain Richard I. Brown James K. Crochet Jai N. Goel Thomas C. James

1959 (cont.)

Robert H. Jines Gerald W. Kattong Habib Labbauf Freddy W. Landae Donald R. Megison Jerry C. Miller James S. Piker John M. Webre

1960

Charles E. Beckler Ronald G. Corley George P. Distefano Jose L. Fuertes Sebert A. Haynes Jewel A. Hymel Charles E. Knight Robert W. LaCour William F. Lanigan Michael I Maurin Fuertes J. Mendez John L. Morrison, Jr. Larry J. Remont Jacques L. Saudy Shwen-ih Wang Richard W. White Don W. Wolsefer

1961

Heraldo A. Agreda Lam C. Anglin, Jr. Jose G.L. Barredu Jorge A. Clemente Hector J. Corella Robert E. Eakin Jimmy M. Givens Carlos E. Gutierrez James C. Holland Manduley E. Insua Boyd Y. Leblanc Barrenda Jose G. Lopez Humberto E. Lopez Sanchez H. Lopez Enrique C. Manduley Jorge A. Pino Fernando X.W. Pires Emilio R. Rivera Knochudy N. Shenoy Glenn L. Wise Gary H. Young

1962

Jeff W. Baird Leonard M. Boudreaux Fred E. Causey Charles R. Guerin Jack W. Harris James M. McCormick John P. Moore, Jr. Walter H. Plain Henry M. Troth, Jr. James V. Valljant, Jr.

1963

Jose F. Agreda Maria Z. Aguilar Eunice E. Byrd Eugene G. Coco, Jr. Robert Guerra, Jr. Billy W. Magee Jimmie D. Pottorff Leo S. Sues

1964

David G. Caddy Ivan E. Caro Danilo P. Castillo Omar J. Esmai Vernon R. Hartdegen James T. Kennison Herbert J. Louque Gary M. Montgomery John L. Murray, Jr. Motiran K. Patil Pietro K. Piralla Denarakonda H. Rao Juan R. Santa-Coloma Robert G. Tripp Donald C. Warren Jerry W. Watts

1965

Nolan J. Adams Malcolm L. Dove Ronald E. Jones Mauricio A. Lopez M. S. R. Ramesh Eric A. Rini Nora A. Sanchez Roderick H. Simmons Antonio Velidanes

MISSING ALUMNI

1966

Charles C. Boudreaux Gerardo T. Brink Richard F. Buckley Jaime P. Bueno Orlando E. Cardoso Orie H. Gay, Jr. James E. Horn David Miner Pedro J. Nogueira Sims L. Roy, Jr. Richard J. St. Pierre Mario M. Salinus

1967

Richard G. Beecher Raul Cardenas James H. Doub Joseph L. Edmonson Howard M. Elder, Jr. Raul V. Fonte Wilbert S. Mackay Eduardo R. Martinez Hooshang S. Moghani

1968

Arunendu Bhattacharya Ricardo J. Gomez Guy J. Harel Chung Ying Liu Jorge L. Martinez Julio C. Padilla Timothy J. Pardue Kenneth J. Parent, Jr. Oscar A. Peraza Jerry D. Price

1969

Jose J. Aquirre
Byron B. Bacas
Darryl J. Barthlemey
Yu-Chin L. Chen
A. A. Deaguirre
Jerry D. Fourroux
Yu-Chin Liu
Charles W. Morgan
Ivan A. Navarro
Jose M.D. Paniza

1970

Alvaro Campuzano Kyle L. Preston, Jr. Luis Uguento

1971

Saeed Aflakian Sain D. Anand Jose F. Azouth Richard E. Dorris Donald D. Esch Segundo Fernandes, Jr. Steven R. Guidry Mark A. Jeffers Thomas R. Kohn M. C. McDonald, Jr. Haywood B. Miles, III Ronald D. Miles Danny J. Perrer Glen D. Savoy John H. Savov William A. Settoon, Jr. Vinodchandra R. Shah Ahmad Shariat Philip W. Smith Stephen R. Williamson

1972

Juan F. Ardila Bernado C.K. Chan Pak S. Fong Edward M. Keating, Jr. Michael Michaud Jose R. Morao Richard W. Nill Donald L. St. Germain

1973

Rafael D. Feo Oliver D. Habibe Simon Hacker Soo K. Han M. R. Karbassian Wendell Lattier Glen C. Lungard Ronald J. Manuel Madhusudan Nathany Carol Norris Mehmet O. Ozelsel Anan Sitipong Carol N. Tollett Roger E. Waguespack Clarence S. Waterman Claude A. Williams Wen-Ching Yu Emilio R. Zarruk

1974

K. Achampong-Baife Jamal M. Al Barzinji M. B. Behbehani A. Brandao-Dutray Galen M. Dino Frank D. Duringer Gangadhar D. Kane Sohan Lal Khungar Mostafa Mina Oscar I. Pinilla Najmeh Sadighi-Nouri Larry R. Vollmer

1975

Rabie Ahdott Mohammad A. Movahed Ahmad Sharonizadeh Paul T. Siegmund

1976

Marvin C. Haydel Stephen W. Krajicek John F. Kress Helen M. LeBlanc

1977

Abdul J. Ahussain Kenneth R. Clem Monroe J. Rathborne, IV Owaraknath Reddy Jay S. Robinson

1978

Michael G. Bruce Allen T. Marshall Danny R. Young

MISSING ALUMNI

1979

Manuel A.B. Arguello Ender J.B. Ferrer Daniel E. Fields James A. Guzman Le N. Hue Chin-Kwan Liu Patrick L. Mihalik Solaiman G. Sindy Carl E. Sladek Tuan A. Tang

1980

Jean Bale
Richard P. Bobbitt
Floyd K. Davis, Jr.
Villa D. Holland
Angela M.V. Labrador
Bernie J. Lofoso, Jr.
Anh M. Pho
Duc M. Pho
F. R. Roberts
Hamdani Saidi
Martin C. Wiewiorowski
Marsha D. Wittner

1981

Lynda L. Bonin Stephanie L. D'Antonio Martha L. Donley Cheryl J. Goudeau Joel H. Keiffer Gwendelyen A. Mayeux Todd G. Nilsen David M. Rieden Tuan A. Vu Chien Wang

1982

Adnan Abdulrahman Bradley H. Carter Jean E. Carvajal Richard D. Jordan Karen E. Kom Joseph K. Koro Robert B. Kuehn Alexis J. Meneses Aroon Mital Jaime A. Pineda Thomas A. Stroud

1983

Robert A. Bordlee Byron A. Harris Leslie W. Harris Kenneth M. Jones Julie A. Nierman

1984

Rudyard E. Davidson Yuanlisa Hudrono Albert C. Schwartz, Jr. Susan K. Snodgrass

1986

Paul T. West

IN MEMORIAM

Alvin T. Edgerton (BS '47), January 6, 1983.

Lewis Robert Krieg (MS '41), January 30, 1988.

John D. Ristroph (BS '35), January 24, 1989.

STUDENT NEWS

Anne Savant-Malheit, an Alumni Fellow and 4.0 graduate of McNeese, became the second woman Ph.D. of the department.

Karl G. Anderson will pursue Ph.D. studies at Princeton University with an NSF Fellowship. He completed his Master's degree in chemical engineering at LSU under Dr. R.G. Rice.

Chauchyun Chang, a graduate student of Dr. Dooley, presented a paper entitled "Diffusivit Estimation in Zeolites by a Kinetics/TPD Technique" at the 1988 ACS National Meeting in Los Angeles.

Mike Landry, a student of Dr. Wetzel, won 3rd place in the paper competition at the AIChE Southeast Region Student Meeting. The paper was on wet air oxidation of hazardous wastes.

Wahyudi B. Sediawan, a student of Dr. McLaughlin, received the Distinguished Dissertation Award for the entire university. The dissertation was entitled, "Statistical Mechanical and Experimental Studies of Thermodynamic Behavior of Aromatic Hydrocarbons."

Chi H. Cheng, a student of Dr. Price, received the award for Best Dissertation in Chemical Engineering awarded by the local chapter of AIChE for his dissertation entitled "The Investigation of PtTe/Al₂O₃ Bimetalic Reforming Catalysts."

James Dautenhahn graduated Summa Cum Laude in May '89.

Lisa Comeaux graduated Summa Cum Laude in May '89 and received a university medal for being the top BS graduate.

Jose E. Tabora was awarded a Southeastern Regional Fellowship in Chemical Engineering from Virginia Polytechnic Institute and State University. The fellowship carries a \$2,000/yr supplement to any other financial assistance he may obtain as he pursues his Ph.D. in Chemical Engineering at any one of the Southeast Consortium Schools.

The following students were given special awards for graduating within four academic years without dropping any courses: James Dautenhahn, Lisa Comeaux, Dawn Smith, Michael Achacoso, and Troy DeSoto.

The new AIChE student officers are:

President Eugene (Sonny) Bringol

> Vice-President Richard Fernandez

Treasurer Michael Nodier

Secretary Ann Crispino

Publicity Robert Vial

Engineering Council Representative Claudia Alexandroff

FILL OUT AND RETURN TO

John R. Collier
Department of Chemical Engineering
Louisiana State University
Baton Rouge, LA 70803

Name	Year Graduated and Date	
Address (home)		
Phone (home)		
Address (WOIK)		
Phone (work)		
	ES (employer, position, honors, etc.)	

Volume 7 Spring 1990

Department of Chemical Engineering Louisiana State University Baton Rouge, Louisiana 70803

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 733
BATON ROUGE, LA