



Notre Dame

R E P O R T

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1991-92

The University

Libraries Receive Irish Postage Stamps

The University Libraries have received a major collection of Irish postage stamps that includes nearly all the postal issues used in Ireland since its independence in 1922. Charles B. Wolf of Bloomfield Hills, Mich., a 1953 alumnus, donated the collection.

The collection includes overprints, commemoratives, booklets, first-day envelopes and a complete set of the special St. Patrick's Day postcards issued by the Irish government. In addition, there are two 17th-century letters exhibiting postal marks and illegal stamps used by the Irish political organization Sinn Fein between 1907 and 1922.

Simon Family Endows Scholarship

The parents of a 1969 Notre Dame graduate have established a \$500,000 endowed scholarship at the University in memory of their late son.

The Douglas G. Simon Family Scholarship Fund, created by William and Alice Simon of Newport Beach, Calif., provides assistance to deserving undergraduates in need of financial aid.

Doug Simon received his bachelor's degree from Notre Dame in English, then earned a law degree from the University of Southern California in 1972. After a year of postgraduate work at Oxford University, Simon joined the Los Angeles law firm of Simon and Sheridan as a defense attorney. In 1978-79, he took a leave to serve as the deputy staff director for the Defense Department's audit, investigation and inspection task force. He returned to Simon and Sheridan in 1980 and continued practicing law until his death in 1983.

Pearl Receives de Fleury Medal

A 1985 Notre Dame alumnus, Capt. Jo Anne Pearl, became the first woman to receive the coveted de Fleury medal from the U.S. Army Engineer Regiment. Pearl, stationed at Fort Rucker, Ala., and seven others from the 46th Engineer Battalion were honored for their civil engineering roles in Operation Desert Storm.

The de Fleury medal was the first to be ordered struck by the Continental Congress; its first recipient was Gen. George Washington. To date fewer than 160 medals have been awarded by the Engineer Regiment. The medal was first struck in 1779 to honor French engineer Francois Louis Tesseidre de Fleury, who in 1777 had volunteered to serve with the American army in its fight for independence from Britain.

Faculty Notes

Appointments

Alexander J. Hahn, professor of mathematics, has been named director of the international study program at Innsbruck, Austria, for the 1992-93 academic year. He replaces Brian Pavlac, visiting associate professor of history, who has directed the program for the past four years. Hahn also will serve as a visiting professor of mathematics at the University of Innsbruck.

Honors

James J. Kolata, professor of physics, has been appointed to the editorial board of *Physical Review C* which is published by the American Physical Society. This is the premier journal for the publication of research in nuclear physics.

Gilbert D. Loescher, professor of government and international studies, was elected a member of the International Institute for Strategic Studies. He was appointed a consultant to the Ford Foundation's International Affairs Program, Rights and Social Justice Program and Governance and Public Policy Program to review programming and issues in the international migration and refugee field.

Hermann J. Pottmeyer, visiting professor of theology, was awarded the Johannes Quasten Medal by the Catholic University of America, Dec. 6.

Michael K. Sain, Freimann professor of electrical engineering, was named a member of the Prize Paper Committee, Awards Board, for the Institute of Electrical and Electronics Engineers, 1992.

William L. Wilkie, Nathe professor of marketing, was named a member of the advisory board for the inaugural competition of the Marketing Science Institute to sponsor research on the topic "Using Marketing to Serve Society."

Activities

Joan Aldous, Kenan professor of sociology, presented the paper "Defining Families through Helping Patterns" at the International Sociological Association Committee on Family Research Seminar in Oslo, Norway, July 29-Aug. 3. She served as chairperson of the pre-conference workshop "Theory Construction and Research Methodology" at the National Council on Family Relations Conference in Denver, Colo., Nov. 15-16.

Paul F. Bradshaw, professor of theology, gave the Stanley A. Schmidt endowment lecture "The Common Roots of Jewish and Christian Worship" to the Kentuckiana Interfaith Conference at Louisville, Ky., Dec. 8.

Joan F. Brennecke, assistant professor of chemical engineering, presented an invited lecture titled "Controlling Local Environments to Enhance Reactions in Supercritical Fluids" at the Department of Chemical and Petroleum Engineering at the University of Pittsburgh in Pittsburgh, Pa., Dec. 13.

John Chateauneuf, assistant professional specialist in the Radiation Laboratory, gave the invited seminar "Laser Flash Photolysis Studies in Supercritical Fluids" to the Chemistry Department at Tufts University in Medford, Mass., Dec. 12.

Leonid E. Faybusovich, assistant professor of mathematics, presented a paper titled "Interior-point Methods and Entropy" at the 30th conference on Decision and Control in Brighton, England, Dec. 13.

Denis A. Goulet, O'Neill professor of education for justice, Department of Economics, delivered the keynote address titled "Development Ethics: Tasks and Challenges" to the annual assembly of World University Service of Canada in Ottawa, Canada, Nov. 15.

John D. Halfman, assistant professor of civil engineering and geological sciences, presented the paper titled "New Geochronologic Controls on Paleoclimatic Signals from Lake Turkana, Kenya" co-authored with Elizabeth A. Kowalski, University of Notre Dame, and John W. King, University of Rhode Island, at the American Geophysical Union fall meeting in San Francisco, Calif., Dec. 13.

Christopher S. Hamlin, associate professor of history, organized and served as a commentator in the session "Resisting Systems: Alternative Patterns of Technological Change" at a meeting of the Society for the History of Technology in Madison, Wis., Nov. 3. He presented the seminar "Public Health as Imperative, Public Health as Ideology, or Public Health as Idiom: The Edinburgh 'Foul Burns' Controversy of 1839-40" to the Department of History and Sociology of Science at the University of Pennsylvania in Philadelphia, Pa., Dec. 2. He gave the seminar "The Genesis of the Municipal Engineering Profession in Britain, 1840-1890" for the Department of History at the University of Delaware in Newark, Del., Dec. 3.

Janis L. Johnston, associate director of the law library, gave the invited presentation and led a discussion on "Training New Law Library Personnel" at the annual meeting of the Ohio Regional Association of Law Libraries held at Notre

Faculty Notes

Dame, Ind., Oct. 15. She presented the invited workshop on "Law Serials Management" at the Northeast Regional Conference of Law Libraries in Philadelphia, Pa., Nov. 8. She served as an invited consultant to the Marquette University Law Library to evaluate their current library organization and technical services management in Milwaukee, Wis., Nov. 18-20.

Gary A. Lamberti, assistant professor of biological sciences, presented the invited talk "Ecosystem Implications of Grazer-Periphyton Interactions" and co-authored the papers "Factors Influencing Macroinvertebrate Diversity in High Desert Streams" and "Temporal Patterns of Competition Between Stream Herbivores *Juga silicula* and *Dicosmoecus gilvipes*" at the annual meeting of the North American Benthological Society held in Santa Fe, N.M., May 20-25.

A. Eugene Livingston, associate professor of physics, presented an invited talk titled "Atomic Physics Research at ATLAS" at the ATLAS Program Advisory Committee Meeting at Argonne National Laboratory in Argonne, Ill., Dec. 6.

Gilbert D. Loescher, professor of government and international studies, was a commentator at a conference on Prospective Migration and Emigration from the Former U.S.S.R. at the Rand Corporation in Santa Monica, Calif., Nov. 17-19. He was an invited participant and discussant at the North-South Roundtable Discussion on "Movements of People in the 1990s: Challenges for Policymakers" jointly chaired by UNICEF and UNHCR in Evian Les Bains, Haute Savoie, France, Dec. 15-17.

Rev. Richard P. McBrien, Crowley-O'Brien-Walter professor of theology, gave the adult education lecture "The Future of the Church: Looking Toward the 21st Century" at the Cathedral of Christ the King in Lexington, Ky., Dec. 4. He presented "The Future of the Church: Looking Toward the Third Christian Millennium" at FutureChurch of Cleveland at St. Raphael's Church in Bay Village, Ohio, Dec. 6.

Mark J. McCready, associate professor of chemical engineering, presented the papers titled "Effects of Jet Characteristics on Particles Formed from the Expansion of Supercritical Solutions" co-authored with G.R. Shaub and Joan F. Brennecke, assistant professor of chemical engineering, and "Disturbance of Origination and Propagation in Open Flow Systems" at the AIChE annual meeting in Los Angeles, Calif., Nov. 17-22. He co-authored the papers titled "Transitions to Three-Dimensional Waves on Horizontal Gas-Sheared Liquid Films" with T. Prokopiou and Hsueh-Chia Chang, chairman and professor of chemical engineering, "Spatial Instability of Two Phase Stratified Flow: Theory and Experiment" with M. Sangalli and Chang, and co-chaired two sessions on "Fundamental Research on Multiphase Flows" at that meeting.

Ralph M. McInerney, Grace professor of medieval studies, director of the Maritain Center and professor of philosophy, gave three lectures on Saint Bonaventure at Saint Bonaventure University in St. Bonaventure, N.Y., Oct. 23-24. He presented "Golden Rule and Thomas Aquinas" at St. Thomas More College in Saskatoon, Canada, Nov. 2. He presented "Literature and the Mystery Novel" at the Evansville-Vandenburg Public Library in Evansville, Ind., Nov. 14. He lectured on "How to Talk About God" at the Forever Learning Institute in South Bend, Ind., Nov. 20. He gave a talk to the Board of Governors of Thomas Aquinas College and presented "Golden Rule and Thomas Aquinas" at Thomas Aquinas College in Santa Paula, Calif., Nov. 26-27.

Rev. Ernan McMullin, professor of philosophy, lectured on "Realism and Epistemic Virtue" at the Rochester Institute of Technology in Rochester, N.Y., Nov. 6. The lecture was part of a course on philosophy of science to be released on videotape.

Philip E. Mirowski, Kroc professor of economics and the history of science, organized "Natural Images in Economics," a conference inaugurating the Carl Koch Chair in Economics at the University of Notre Dame, Notre Dame, Ind., Sept. 26-29. He delivered the inaugural lecture "The Realms of the Natural" and will edit conference proceedings. Mirowski delivered the paper "What Could Replication Mean in Econometrics?" to the conference on testing in econometrics at Tilburg University in the Netherlands, Dec. 16. He gave the invited talk "What Were Von Neumann and Morgenstern Trying to Accomplish?" at Roosevelt University in Chicago, Ill., Dec. 6.

Samuel Paolucci, associate professor of aerospace and mechanical engineering, presented the paper "Equilibrium Sound Speed Behavior in Material Mixtures Obeying Amagat's Law" co-authored with D.R. Chenoweth and chaired a session on Multiphase Flows at the 44th annual meeting of the Division of Fluid Dynamics of the American Physical Society in Scottsdale, Ariz., Nov. 24-26.

Morris Pollard, Coleman director of the Lobund Laboratory and professor emeritus of biological sciences, was an invited participant in the annual "Focused Giving" symposium sponsored by the Johnson & Johnson Company in New Brunswick, N.J., Dec. 3-4.

Hermann J. Pottmeyer, visiting professor of theology, lectured on "Continuity and Innovation in the Development of Dogma" at Fordham University in New York, N.Y., Nov. 21. He gave three Lonergan lectures on "Issues in Ecclesiology Today" at Boston College in Boston, Mass., Nov. 22-23. He presented "Submission or Reception?" at Georgetown University in Washington, D.C., Dec. 5. He lectured on "The Traditionalist Temptation of the Contemporary Church" at the Catholic University of America in Washington, D.C., Dec. 6.

Faculty Notes

Joseph M. Powers, assistant professor of aerospace and mechanical engineering, presented a paper titled "Asymptotic and Numerical Predications of Oblique Detonations with Simple Finite-Rate Chemistry" co-authored with Matthew D. Grismer, University of Notre Dame, and Shaye Yungster, ICMP-NASA Lewis Research Center, at the fourth international conference on Numerical Combustion held in St. Petersburg, Fla., Dec. 2-4.

Irwin Press, professor of anthropology, presented an invited lecture titled "Patient Satisfaction as a Quality Indicator" to the annual meeting of the American Academy of Medical Administrators in Las Vegas, Nev., Nov. 6.

Eugene W. Rochberg-Halton, associate professor of sociology, presented "From the Walled City to the Malled City" to the American Sociological Association in Cincinnati, Ohio, Aug. 24. He gave the keynote address "Literature and Social Theory: Who Needs Literature?" for the inaugural lecture series for the Program in Comparative Literature at Michigan State University in East Lansing, Mich., Oct. 1. He presented the invited lecture "Between Play and Purpose" for the symposium on "The Cultural Environment on Psychology" in Merligen, Switzerland, Oct. 22. He gave the invited lecture "Public Philosophy and the Big Picture: Between Nature and World Civilization" for the symposium "The Good Society: Sources of Public Philosophy in America" at the University of California at Berkeley, Calif., Nov. 8-9.

James P. Sterba, professor of philosophy and faculty fellow in the Institute for International Peace Studies, presented a paper titled "Does Libertarianism Require Socialism?" at the seventh international conference on Social Philosophy held at Colorado Springs, Colo., Aug. 9-11. He visited the University of Latvia in Riga and was to present a paper titled "Recent Work in Environmental Ethics," Aug. 19, but plans were altered by the military coup. He presented a paper titled "How to Make People Moral" to the 15th world congress for the International Association for Philosophy of Law and Social Philosophy held in Gottingen, Germany, Aug. 21. He presented a commentary titled "How Practical Can You Get?" at a conference honoring Onora O'Neill held at the University of Notre Dame, Notre Dame, Ind., Sept. 27-28. Sterba presented the papers "War with Iraq: Just Another Unjust War" and "Reflections on Recent Events in What Used to be Called the Soviet Union" at the fifth national conference of Concerned Philosophers for Peace held at the University of Tennessee in Knoxville, Tenn., Oct. 25-27. He presented the papers titled "Reconciling Conceptions of Justice" and "Why Many of the Punishments Inflicted under our Judicial System are Unjustified" at Denison University in Granville, Ohio, Dec. 5-6.

James VanderKam, professor of theology, presented "The Dead Sea Scrolls and their Light on Jewish and Christian Theology" to the Forever Learning Institute in South Bend, Ind., Nov. 6. He spoke at career day at St. Joseph's High

School in South Bend, Ind., Nov. 7. He presented "The Dead Sea Scrolls: Controversies and Commentary" at Temple Beth-el in South Bend, Ind., Nov. 10. VanderKam presented "The Dead Sea Scrolls" at Bethel College in Mishawaka, Ind., Nov. 12. He chaired the Ancient Manuscripts Committee meeting, attended meetings of the Research and Publications Committee, Ad hoc Committee on the Composition and Size of the Executive Committee, SBL Council, and chaired the Pseudepigrapha Group session at the annual meeting of the Society of Biblical Literature in Kansas City, Mo., Nov. 21-26.

Arvind Varma, Schmitt professor of chemical engineering, served as the chemical engineering program evaluator for the ABET accreditation visit at Oklahoma State University in Stillwater, Okla., Nov. 4-5.

Stephen H. Watson, associate professor of philosophy, presented "Person and Event: On Fragmented Transcendence" at a conference on the Concept of Person held at Mansfield College in Oxford, England, Sept. 5. He organized the 30th annual meeting of the Society for Phenomenology and Existential Philosophy in Memphis, Tenn., Oct. 13-15. He delivered an invited paper "Merleau-Ponty, the Ethics of Ambiguity and the Dialectics of Virtue" at an international symposium on the Philosophy of Merleau-Ponty held at the University of Louvain, Louvain, Belgium, Nov. 30.

John P. Welle, associate professor of romance languages and literatures, gave the paper "Pasolini's Movie Poems" at the American Association of Teachers of Italian national conference at Washington, D.C., Nov. 25.

William L. Wilkie, Nathe professor of marketing, served as chairman of the "Consumer Responses to the Retail Setting" session at the national conference of the American Marketing Association held in San Diego, Calif., Aug. 18. He was a discussant at the "Issues in Consumer Protection" session at the annual conference of the Association for Consumer Research in Chicago, Ill., Oct. 20.

Eduardo E. Wolf, professor of chemical engineering, presented a paper titled "STM Studies of Supported Pt and Pd Catalysts; Morphology and Microstructure" Co-authored by K. Yeung at the American Vacuum Society Meeting in Seattle, Wash., Nov. 11-15. He co-authored the papers "STM Studies of Supported Pt and Pd Catalysts" with K. Yeung, "Transient Isotopic Studies of Methane Oxidative Coupling on Sr/La₂O₃ Catalysts" with Z. Kalenik and "Infrared Thermography Studies of Temperature Pattern Formation During Forced Feed Concentration Oscillations on Rh/SiO₂" with J. Kellow at the 1991 annual meeting of the American Institute of Chemical Engineers in Los Angeles, Calif., Nov. 7-22. He also chaired the Programming Committee Meeting on Kinetics Catalysis and Reaction Engineering at that meeting.

Administrators' Notes

Appointments

Douglas R. Hemphill, assistant to the provost and executive director of the Notre Dame Sesquicentennial, has been appointed employment manager for the Department of Human Resources. Hemphill replaces Sharon A. Veith, who will become the human resource representative for the University libraries. Hemphill was graduated from Bucknell University and holds a master's degree in government and international studies from Notre Dame. He had completed 25 years of active military service when he retired as lieutenant colonel in the U.S. Army last August. For the last five of these, he was chair of the University's department of military science. As employment manager, Hemphill will oversee staff recruiting, affirmative action, temporary and summer employment, and the human resources employment staff. In addition, he will continue to direct Sesquicentennial activities until April.

Honors

Adele Lanan, assistant director/media for Student Activities, received the Presidential Citation for Meritorious Service for College Media Advisers, Inc.

Activities

Sue C. Cunningham, coordinator for the Center for Social Concerns, presented "Volunteerism-Student Involvement" at the Indiana College Personnel Association conference in Bloomington, Ind., Nov. 13.

Adele Lanan, assistant director/media for Student Activities, presented the educational session "Multiculturalism: The Present Reality" at the Indiana fall conference of the National Association for Campus Activities in South Bend, Ind., Nov. 22.

The Graduate School Research Division

Current Publications and Other Scholarly Works

Current publications should be mailed to the Research Division of the Graduate School, Room 312, Main Building.

COLLEGE OF ARTS AND LETTERS

Art, Art History and Design

Rosenberg, Charles M.

- C.M. Rosenberg. 1991. Arte e Politica Alle Corti di Lionello e Borso d'Este. Pages 39-52 in, M. Natale, et al, eds., Sassi. Le Muse e il Principe. Arte di Corte nel Rinascimento Padano. Cosimo Panini, Modena, Italy.

Economics

Dutt, Amitava K.

- A.K. Dutt. 1991. Review of Comparative Advantage and Growth by D. Evans. *Journal of Economic Literature* 29(4):1763-1764.

English

Brogan, Jacqueline V.

- J.V. Brogan. *The Wallace Stevens Journal: Stevens and Structures of Sound* 15,2(1991):107-241. Guest Editor.

Gernes, Sonia G.

- S.G. Gernes. 1991. Poems. Glazier's Daughter and The First Year of Living Alone. *Indiana Review* 14(3):87-88.

Walton, James H.

- J.H. Walton. 1991. Editor. The Space Between: Poets from Notre Dame, 1950-1990. University of Notre Dame Press, Notre Dame, Indiana. xxvi + 311 pp.

History

Biddick, Kathleen A.

- K.A. Biddick. 1991. Interruption, Reconstellation and Limitation: Postcolonial Pedagogies in Teaching Gender and Medieval History. *Medieval Feminist Newsletter* (12):1-5.

Philosophy

Burrell, David B.

- D.B. Burrell and Y. Landau. 1991. Editors. Voices from Jerusalem. Paulist, Mahwah, New Jersey. 192 pp.

McInerney, Ralph M.

- R.M. McInerney. 1991. *Chambre Froid*. Editions Axel Noel. Paris, France. 244 pp.

Theology

Buckley, S.J., Michael J.

- M.J. Buckley, S.J. 1990/91. Ateisma Origini. Pages 83-91 in, R. Latourelle and R. Fisichella, eds., *Dizionario di Teologie Fondamentale*. Cittadella Editrice, Assisi, Italy.
- M.J. Buckley, S.J. 1991. The Structure of the Rules of Discernment. Pages 219-237 in, P. Sheldrake, S.J., ed., *The Way of Ignatius Loyola: Contemporary Approaches to the Spiritual Exercises*. SPCK, London, Great Britain.
- M.J. Buckley, S.J. 1991. The Church and its Responsibility to Foster Knowledge. *Current Issues in Catholic Higher Education* 12(1):41-46.

Duffy, Regis A.

- R.A. Duffy. 1991. Book Review of *La Liturgie dans l'Histoire*. *Worship* 65(November):558-560.

Ulrich, Eugene C.

- E.C. Ulrich. Cotranslator with Members of the Catholic Biblical Association. *The Revised Psalms of the New American Bible*. Catholic Book Publishing Company, New York, New York. 280 pp.

- E.C. Ulrich. 1990. Associate Editor. *Bulletin of the International Organization for Septuagint and Cognate Studies* 23:1-42.

COLLEGE OF SCIENCE

Biological Sciences

Duman, John G.

- J.G. Duman and S.L. Montgomery. 1991. Subzero Temperature Adaptations in Arthropods from the Summit of Mauna Kea, Hawaii. *Journal of Experimental Zoology* 259:409-412.

- J.G. Duman, D.W. Wu, P.K. Wolber, G.M. Mueller and L.G. Neven. 1991. Further Characterization of the Lipoprotein Ice Nucleator from Freeze Tolerant Larvae of the Crane fly *Tipula Trivittata*. *Comparative Biochemistry and Physiology* 99B:599-607.

- D.W. Wu and J.G. Duman. 1991. Activation of Antifreeze Proteins from the Beetle *Dendroides Canadensis*. *Journal of Comparative Physiology B* 161:279-283.

- D.W. Wu, J.G. Duman, C.-H.C. Cheng and F.J. Castellino. 1991. Purification and Characterization of Antifreeze Proteins from Larvae of the Beetle *Dendroides Canadensis*. *Journal of Comparative Physiology B* 161:271-278.

- D.W. Wu, J.G. Duman and L. Xu. 1991. Enhancement of Insect Antifreeze Protein Activity by Antibodies. *Biochimica et Biophysica Acta* 1076:416-420.

- See under COLLEGE OF ENGINEERING; Wolf, Eduardo E. 1991. *Journal of Vacuum Science and Technology B* 9:1197-1201.

- L. Xu and J.G. Duman. 1991. Involvement of Juvenile Hormone in the Induction of Antifreeze Protein Production by Fat Body of Larvae of the Beetle *Dendroides Canadensis*. *Journal of Experimental Zoology* 258:288-293.

The Graduate School Research Division

J.G. Duman, L.X. Xu, L.G. Neven, D. Tursman and D.W. Wu. 1991. Hemolymph Proteins Involved in Insect Subzero Temperature Tolerance: Ice Nucleators and Antifreeze Proteins. Pages 94-127 in, R.E. Lee and D.L. Denlinger. *Insects at Low Temperatures*. Chapman and Hall.

Kambhampati, Srinivas

S. Kambhampati, W.C. Black, IV, and K.S. Rai. 1991. Geographic Origin of the U.S. and Brazilian *Aedes Albopictus* Inferred from Allozyme Analysis. *Heredity* 67:85-94.

S. Kambhampati and K.S. Rai. 1991. Patterns of Morphometric and Allozyme Variation in *Aedes Albopictus*. *Entomologia Experimentalis et Applicata* 60:193-201.

Rai, Karamjit S.

See under Kambhampati, Srinivas. 1991. *Heredity* 67:85-94.

See under Kambhampati, Srinivas. 1991. *Entomologia Experimentalis et Applicata* 60:193-201.

Chemistry and Biochemistry

Castellino, Francis J.

See under Duman, John G. 1991. *Journal of Comparative Physiology B* 161:271-278.

Freeman, Jeremiah P.

A. Ghosh, W. Wang, J.P. Freeman, J.S. Althaus, P.F. Von Voigtlander, T.A. Scahill, S.A. Miszak and J. Szmuszkovicz. 1991. Stereocontrolled Syntheses of Some Conformationally Restricted Analogs of Serotonin. *Tetrahedron* 47:8653-8662.

Szmuszkovicz, Jacob

See under Freeman, Jeremiah P. 1991. *Tetrahedron* 47:8653-8662.

Mathematics

Brockett, Roger W.

R.W. Brockett and L. Faybusovich. 1991. Toda Flows, Inverse Spectral Transform and Realization Theory. *Systems and Control Letters* 16:79-88.

Faybusovich, Leonid

See under Brockett, Roger W. 1991. *Systems and Control Letters* 16:79-88.

L. Faybusovich. 1991. Hamiltonian Structure of Dynamical Systems Which Solve Linear Programming Problems. *Physica D* 53(Nos. 2-4):217-232.

Physics

Rosenthal, Joachim J.

J.J. Rosenthal and M.K. Sain. 1991. On Kronecker Indices of Transfer Functions and Autoregressive Systems. Pages 173-176 in, Proceedings Second International Symposium on Implicit and Robust Systems. Warsaw University of Technology, Warsaw, Poland.

Blackstead, Howard A.

H.A. Blackstead. 1991. Current Activated Residual Surface Resistance in High Temperature Superconductors. *Solid State Communications* 80:401-404.

COLLEGE OF ENGINEERING

Chemical Engineering

Strieder, William C.

See under Varma, Arvind. 1991. *Chemical Engineering Science* 46(12):3317-3319.

Varma, Arvind

M.C. Regalbuto, W.C. Strieder and A. Varma. 1991. Approximate Solutions for Nonlinear Diffusion-Reaction Equations Using the Maximum Principle: The Effects of Pellet Geometry. *Chemical Engineering Science* 46(12):3317-3319.

Wolf, Eduardo E.

K.L. Yeung, E.E. Wolf and J.G. Duman. 1991. A Scanning Tunneling Microscopy Study of an Insect Lipoprotein Ice Nucleator. *Journal of Vacuum Science and Technology B* 9:1197-1201.

Electrical Engineering

Alcock, Charles B.

R. Shaviv, E.F. Westrum, C.B. Alcock and B. Li. 1991. Thermodynamics of the La-Sr-Cu-O High Tc Superconductors. Pages 200-205 in, Y.-H. Kao, P. Coppens and H.-S. Kwok, eds., *Superconductivity and Its Applications*, American Institute of Physics Conference Proceedings 219. American Institute of Physics, Buffalo, New York.

Madej, Thomas

T. Madej and D.B. West. 1991. The Interval Inclusion Number of a Partially Ordered Set. *Discrete Mathematics* 88:259-277.

T. Madej. 1991. Bounds for the Crossing Number of the N-Cube. *Journal of Graph Theory* 15:81-97.

Sain, Michael K.

C.B. Schrader and M.K. Sain. 1991. Extended Notions of Zeros in Implicit Feedback Systems. Pages 177-180 in, *Proceedings Second International Symposium on Implicit and Robust Systems*. Warsaw University of Technology, Warsaw, Poland.

See under MATHEMATICS; Rosenthal, Joachim J. 1991. Pages 173-176 in, *Proceedings Second International Symposium on Implicit and Robust Systems*. Warsaw University of Technology, Warsaw, Poland.

The Graduate School Research Division

COLLEGE OF BUSINESS ADMINISTRATION

Finance and Business Economics

Keating, Barry P.

B.P. Keating and J.H. Wilson. 1992. *Managerial Economics*. Harcourt Brace Jovanovich. New York, New York. 749 pp.

LAW SCHOOL

Shaffer, Thomas L.

T.L. Shaffer. 1991. Review of Abe Fortas, by Laura Kalman. *Christian Legal Society Quarterly* 12(2):26.

UNIVERSITY LIBRARIES

Jordan, Mark D.

M.D. Jordan. 1991. Introduction: Prejudices, Disciplines and Preservation. *Contributions in Academic Librarianship* 1(1):1-6.

Jordan, Sophia K.

S.K. Jordan. 1991. Editor. Preserving Libraries for Medieval Studies: Colloquium on Preservation Issues in Medieval Studies. March 25-26, 1990. *Contributions in Academic Librarianship* 1(1):68.

The Graduate School Research Division

Awards Received and Proposals Submitted

AWARDS RECEIVED

In the period November 1, 1991, through November 30, 1991

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	3	122,741	10	389,204	13	511,945
Facilities and Equipment	0	0	0	0	0	0
Instructional Programs	1	3,750	0	0	1	3,750
Service Programs	0	0	0	0	0	0
Other Programs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	4	126,491	10	389,204	14	515,695

PROPOSALS SUBMITTED

In the period November 1, 1991, through November 30, 1991

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	11	2,704,844	26	4,753,410	37	7,458,254
Facilities and Equipment	0	0	4	314,168	4	314,168
Instructional Programs	0	0	1	137,915	1	137,915
Service Programs	0	0	0	0	0	0
Other Programs	<u>1</u>	<u>327,291</u>	<u>3</u>	<u>247,915</u>	<u>4</u>	<u>575,206</u>
Total	12	3,032,135	34	5,453,408	46	8,485,543

The Graduate School Research Division

Awards Received

In the period November 1, 1991, through November 30, 1991

Department or Office	Principal	Short Title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Aerospace and Mechanical Eng.	Skaar	Camera-Based Manufacturing Control	Department of the Navy	68,396 24
Aerospace and Mechanical Eng.	Skaar	Camera-Based Manufacturing Control	Department of the Navy	22,799 15
Aerospace and Mechanical Eng.	Szewczyk	Bluff Body Wake Flows	Department of the Navy	65,250 26
Aerospace and Mechanical Eng.	Szewczyk	Bluff Body Wake Flows	Department of the Navy	21,750 17
Biological Sciences	Martin	Grants for Jason Van Lieshout/ Gordon Brumwell/Rebecca Potratz	Indiana Academy of Science	2,500 12
Biological Sciences	Kulpa	Microbial Desulfurization of Petroleum Distillates	Environmental Bioscience Corp.	82,741 12
Chemical Engineering	Chang	Nonlinear Dynamics and Control of Complex Patterns	National Science Foundation	78,256 12
Chemical Engineering	Brennecke	Polymer Powders from the Expansion of SCF Solutions	DSM Research	25,000 12
Chemical Engineering	Brennecke	Increased Understanding of Supercritical Fluids	BP Research	5,000 12
Chemical Engineering	Brennecke	Studies of Supercritical Materials	Exxon Educational Foundation	10,000 12
Chemistry and Biochemistry	Tannor	Control of Photochemical Reactions	Department of the Navy	28,813 9
Chemistry and Biochemistry	Tannor	Control of Photochemical Reactions	Department of the Navy	86,440 18
Physics	Furdyna	Pseudomorphic Growth and Ordering of Semiconductors	Department of the Navy	15,000 20
AWARDS FOR INSTRUCTIONAL PROGRAMS				
Law School	McLean	The Food and Drug Law Course	Food and Drug Law Institute	3,750 4

The Graduate School Research Division

Proposals Submitted

In the period November 1, 1991, through November 30 1991

Department or Office	Principal	Short Title	Sponsor	Dollars Months
PROPOSALS FOR RESEARCH				
Aerospace and Mechanical Eng.	Atassi	Aerodynamics and Aeroacoustics of Nonuniform Flows	NASA - Lewis Research Center	63,994 12
Anthropology	Schurr, Bellis	Woodland and Early Historic Period Settlement Patterns	Indiana Dept. of Natural Resources	46,151 10
School of Architecture	Stroik	Vitruvius For My Master and Guide	Gladys Kriebel Delmas Foundation	10,000 2
School of Architecture	Stroik	Vitruvius For My Master and Guide	American Philo- sophical Society	2,650 3
Biological Sciences	Kulpa	Fine Acid Degradation in Annerobic Biofilm	Amoco Chemical Research Center	78,243 12
Biological Sciences	McAbee	Clathrin-independent Pinocytosis	National Science Foundation	848,724 48
Biological Sciences	Saz	Intermediary Metabolism of Helminths	National Institute of Health	224,368 12
Biological Sciences	Kulpa	Biodegradation of Paraffin	Oxychem Tech- nology Center	97,607 12
Biological Sciences	Carlton	The Role of Chemical Microenvironments	University of North Carolina	28,250 24
Biological Sciences	Hyde	Presidential Faculty Fellows Program	National Science Foundation	500,000 60
Biological Sciences	Martin	Stem Cell Development	National Science Foundation	478,622 36
Ctr. for Bioeng. Pollution Cnt.	Bumpus, Irvine	Bioremediation of Water Contaminated with TNT	U.S. Geological Survey	415,255 36
Ctr. for Bioeng. Pollution Cnt.	Irvine	NSF-Oxygen Transfer	National Science Foundation	202,926 24
Civil Eng. and Geological Science	Silliman	Estimating Flux Through Creek Sediments	U.S. Geological Survey	41,206 12
Civil Eng. and Geological Science	Irvine	NSF-Halophile	National Science Foundation	259,772 24
Civil Eng. and Geological Science	Gray, W.	Physically-Based Description of Hysteresis in Two Phase Flow	U.S. Geological Survey	165,291 24

The Graduate School Research Division

Chemical Engineering	McCready, Chang, et al.	Study of Disturbances in Fluid-Fluid Flows	National Aero. Space Admin.	443,167 36
Chemical Engineering	McCready	Evolution of Flow Disturbances in Cocurrent Gas-Liquid Flows	Department of Energy	80,844 12
Chemistry and Biochemistry	Hayes	Core Excitation Chemistry	National Science Foundation	354,463 36
Chemistry and Biochemistry	Thomas	Reactions in Organized and Constricted Systems	National Science Foundation	617,509 36
Electrical Engineering	Bauer	Finite Precision Errors in Digital Filters	National Science Foundation	100,456 24
Electrical Engineering	Das	Novel Electro-Optic Interconnect	Institute Electric/Electronic Eng.	23,000 12
Electrical Engineering	Bernstein	Presidential Faculty Fellows Program	National Science Foundation	500,000 60
Electrical Engineering	Liu, Huang	Image Project Correlation Studies Report	W.J. Schafer Assoc., Inc.	50,000 12
Graduate School	Diffley	Fulbright-Hays Grants: Higher Education Programs	Department of Education	92,533 12
History	Wegs	Austrian Images of Youth	J.S. Guggenheim Memorial Fdtn.	34,201 9
History	Wegs	Austrian Images of Youth	American Council Learned Soc.	29,740 9
University Libraries	Miller, Jordan	University of Paris Microfilm Catalog Records	Department of Education	172,922 12
Mathematics	Pillay	Topics in Model Theory	National Science Foundation	125,926 36
Mathematics	Smyth, Xavier	Geometry of Submanifolds/Injectivity Problems in Geometry	National Science Foundation	156,591 36
Mathematics	Taylor, Dwyer	Algebraic and Geometric Topology	National Science Foundation	439,893 36
O.S.I.P.A.	Borelli	Minority High School Student Research Apprentice Program	National Institute of Health	15,000 12
Philosophy	Jenkins	Knowledge, Faith and Philosophy in St. Thomas Aquinas	Lynde & Harry Bradley Foundation	39,014 9
Physics	Johnson, Sapirstein	Weak Interactions in Atomic Physics	National Science Foundation	546,150 36
Physics	Marshalek	Theoretical Studies in Nuclear Structure	Department of Energy	62,614 12

The Graduate School Research Division

Program of Liberal Studies	Sloan	The Teleological Idea: German Teleological Development in England	National Endowment for the Humanities	44,610 12
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Radiation Laboratory	Schuler	Properties and Chemistry of Iodinanyl Free Radicals	National Science Foundation	66,562 12
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PROPOSALS FOR FACILITIES AND EQUIPMENT

Civil Eng. and Geological Science	Neal	Enhancement of Geological and Engineering Undergraduate Programs	National Science Foundation	32,058 12
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Chemistry and Biochemistry	Helquist	Undergraduate Chemistry Laboratory Improvement: NMR Purchase	National Science Foundation	135,350 12
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Computer Science and Engineering	Bass, Ubran	Commercial CAD Tools Laboratory	National Science Foundation	76,760 12
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Electrical Engineering	Minniti, Das, et al.	A Modern IC Fabrication Laboratory	National Science Foundation	70,000 30
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PROPOSALS FOR INSTRUCTIONAL PROGRAMS

Electrical Engineering	Das, Lemmon	Undergraduate Integrated Optics Laboratory	National Science Foundation	137,915 12
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PROPOSALS FOR OTHER PROGRAMS

College of Arts and Letters	Wright	Patricia Roberts Harris Fellowship Program	Department of Education	162,532 12
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Center for Educ. Opportunity	Outlaw, Smith, et al.	Talent Search	Department of Education	327,291 12
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Kellogg Inst. Intl. Studies	Wozniak	Political Development of Woman	Columbia University	2,500
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University Libraries	English	Cataloging the Slavic Component of the Marshall Archives	Social Science Research Council	82,883 12
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Notre Dame

R E P O R T

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