



Notre Dame

R E P O R T

Contents:

July 12, 1991

The University

- 427 *Attridge Named Dean of Arts and Letters*
- 427 *Robotics Research Receives Award*
- 427 *Hessert Gives Gift to Aerospace Engineering Lab*
- 428 *Eck, Advanced Drainage Support Baseball Stadium*
- 428 *Financial Aid Provided to Potawatomi Indians*
- 428 *DeCrane Is New Sorin Society Chairman*
- 428 *Pew Offers Grant to Philosophy of Religion*
- 429 *N.D. Magazine Wins Gold Medals*
- 429 *Doctor of Juridical Science Degree Approved*
- 429 *Five Faculty Win NEH Fellowships*
- 430 *Accounting Program Ranks Fifth*
- 430 *Voluntary Support Rankings Announced*

Documentation

- 437 *240th Graduate Council Minutes*
April 24, 1991
- 441 *Faculty Senate Journal*
March 6, 1991
April 9, 1991
- 446 *University Committee on Libraries*
May 14, 1991
- 447 *University Libraries' Hours During Intersession*
July 31 - August 26, 1991

Faculty/Administrators' Notes

- 431 *Faculty Appointments*
- 431 *Faculty Honors*
- 432 *Faculty Activities*
- 436 *Administrators' Appointments*
- 436 *Administrators' Honors*
- 436 *Administrators' Activities*

The Graduate School

- 448 *Current Publications and*
Other Scholarly Works
- 454 *Awards Received and Proposals Submitted*
- 455 *Awards Received*
- 457 *Proposals Submitted*

19

1990-91

The University

Attridge Named Dean of Arts and Letters

Harold W. Attridge, professor of theology, will become dean of the College of Arts and Letters effective in August. He will succeed Michael J. Loux, professor of philosophy, who is returning to teaching and research.

Attridge, a specialist in Hellenic Judaism, second century church history, and the New Testament, came to Notre Dame in 1985 after eight years on the faculty of Southern Methodist University's Perkins School of Theology. The most recent of his seven books are *Nag Hammadi Codex I (The Jung Codex)* and *Hebrews: A Commentary on the Epistle to the Hebrews*.

Attridge received his Ph.D. from Harvard in 1975. While still a candidate for his doctorate, he studied at the Hebrew University of Jerusalem on a Harvard travelling fellowship. From 1974-77 he was a junior fellow of Harvard's distinguished Society of Fellows. He holds bachelor's and master's degrees from Cambridge University, where as a Marshall Scholar he read Greek philosophy for part II of the Classical Tripos. The Massachusetts native also holds a bachelor's degree summa cum laude from Boston College. He was the recipient of a Guggenheim Fellowship in 1983-84.

Arts and Letters is the largest college in the University, with 17 departments in the humanities, the social sciences and the fine and performing arts; a current enrollment of 2,558 undergraduates; and more than 300 teaching and research faculty. Over the past seven years the faculty of the college has been awarded 24 National Endowment for the Humanities research fellowships, the fifth best record in American private higher education.

Robotics Research Receives Award

The University Robotics Research Laboratory has been awarded \$2,500 from the South Bend Police Department to build a manipulating device for the removal of explosives by the department's bomb disposal team.

The device, a lightweight, telescopic stick extending to about 15 feet, will be operated by a fully-suited bomb technician, who will control a grappling hook on the extended end to move bombs and other explosives.

The robotics laboratory personnel will work from schematics of such devices already commercially available but will include additional features. With Notre Dame's help, the police department will have a device that improves on what is commercially available and costs less.

Hessert Gives Gift to Aerospace Engineering Laboratory

A \$1.6 million gift from Thomas J. Hessert, a member of the Engineering Advisory Council since 1972, has allowed for the renovation of a former power plant building that now houses the Aerospace Engineering Laboratory, the Hessert Center for Aerospace Research.

The primary focus of the project is relocation of the laboratory's five wind tunnels. The two subsonic wind tunnels and three supersonic tunnels range from 15 feet to 25 feet in length and weigh up to 20,000 pounds each.

The tunnels, which are central to research in aerodynamics, were the first of their kind when developed at Notre Dame beginning in the 1930s by aerospace engineering department founder F.N.M. Brown.

The new location includes a slight modification to the wind tunnels, renovation of a 56-foot-long atmospheric tunnel, and construction of an anechoic wind facility — a chamber free of echoes in which acoustic intensity can be measured.

Hessert, a 1948 graduate of Notre Dame, is the retired president of T.J. Hessert Construction Co. of Cherry Hill, N.J.

Eck and Advanced Drainage Systems Support Baseball Stadium

Advanced Drainage Systems, Inc., of Columbus, Ohio, and Notre Dame alumnus Franklin E. Eck, the firm's chairman, president and chief executive officer, have made a gift of \$1 million to the University for construction of a new baseball stadium.

The stadium will be part of a general redevelopment of the playing fields for both intramural and intercollegiate athletics. It will replace Jake Kline Field, the University's baseball facility since 1963, freeing that site for future construction. The new facility will be named Frank E. Eck Stadium and will feature a lighted grass playing field with 1,500 permanent and 1,500 temporary seats.

Eck was graduated from Notre Dame in 1944 with a degree in chemical engineering. He previously has endowed a collection in chemical engineering in the Hesburgh Library and underwritten construction of Eck Tennis Pavilion, an indoor recreational tennis facility. He has served as a member of the College of Engineering Advisory Council since 1984.

Advanced Drainage Systems, Inc. is a producer of corrugated plastic drainage pipe for agricultural, commercial and construction purposes.

Financial Aid Provided to Potawatomi Indians

Notre Dame has announced a plan to provide financial aid to students who are members of the Potawatomi Indian nation. The plan will make funds from the University's Holy Cross Scholarship Program available to all admitted students who can prove Potawatomi tribal membership and demonstrate financial need.

In the early 1830s, responding to an appeal made by the Catholic Potawatomi chief Leopold Pokagon, Rev. Stephen T. Badin re-established the mission of Ste. Marie des Lacs on the present site of the University of Notre Dame. In the fall of 1838, most of the Potawatomi living near the mission were expelled by the U.S. military, and one of Father Badin's successors, Rev. Benjamin Petit, died accompanying them on their forced march to the Osage River in Kansas.

DeCrane Is New Sorin Society Chairman

Texaco Inc. Chairman of the Board Alfred C. DeCrane Jr., a 1953 graduate of the University, is the new chairman of the Edward Frederick Sorin Society, comprised of alumni and other benefactors who contribute \$1,000 or more annually in unrestricted gifts.

DeCrane replaces Edmond R. Haggar, chairman of the board of Haggar Apparel Company, who completed his second two-year term in April. During Haggar's chairmanship, the Sorin Society tripled in size to 4,630 members and in 1990 raised a record \$4.5 million.

DeCrane earned a bachelor of arts degree from Notre Dame in 1953 and a law degree from Georgetown University in 1959. Immediately after law school he joined Texaco as an attorney and rose rapidly through the ranks, serving as assistant to the vice chairman of the board, assistant to the chairman of the board and general manager and vice president of the Producing Department/Eastern Hemisphere.

In 1976 DeCrane became senior vice president and general counsel for Texaco Inc. and a year later was elected to the board of directors. He was elected executive vice president and joined the board's executive committee in 1978, and five years later became president of the company. In October 1986 he was elected chairman of the board. DeCrane serves as a director for CIGNA Corp. and is a trustee of the Committee for Economic Development.

The Sorin Society, named after Notre Dame founder Rev. Edward F. Sorin, C.S.C., was established in 1976 and is the flagship of the Annual Fund. As part of the University's recent commitment to establish \$100 million in new scholarship endowments in the next 10 years, the Sorin Society has pledged \$5 million in the first four years and up to \$2 million per year thereafter.

Pew Charitable Trusts Offer Grant to Center for the Philosophy of Religion

Notre Dame has received a three-year \$400,000 grant from The Pew Charitable Trusts for its Center for the Philosophy of Religion. The grant is contingent upon the University's raising an additional \$1.32 million in gifts toward the center's endowment.

The University

The Center for the Philosophy of Religion was established in 1976 to promote, support and disseminate scholarly work in Christian philosophy and the philosophy of religion. In addition to providing fellowships for scholars visiting Notre Dame, it sponsors lectures, conferences, colloquia and summer seminars on such topics as the theistic proofs, the rationality of belief in God, the problem of evil, and the nature of religious language. The center is directed by Alvin Plantinga, John A. O'Brien professor of philosophy.

The Pew Charitable Trusts, a national philanthropy, supports nonprofit activities in the areas of conservation and the environment, culture, education, health and human services, public policy and religion. Through their grantmaking, the trusts seek to encourage individual development, and personal achievement, cross-disciplinary problem solving, and innovative, practical approaches to meet the changing needs of society.

N.D. Magazine Wins Gold Medals

Notre Dame Magazine has won medals in five categories of a competition sponsored annually by the Council for the Advancement and Support of Education (CASE).

The magazine won the Gold Medal for University Magazines. It was one of seven periodicals so honored among 94 entries. In addition, the magazine has been awarded a Gold Medal as one of the nation's top 10 higher education periodicals. The CASE top 10 are chosen from among the gold medalists in three categories: university, college and research magazines. It also won a Silver Medal for Periodical Special Issues, one of five periodicals chosen from a field of 89.

CASE awarded its Gold Medal for Best Article of the Year to "Over the Rise," by Kerry Temple, managing editor, which appeared in the Spring 1990 issue. The article was one of two so honored among 165 entries. A Silver Medal for Best Article of the Year was awarded to "Bang," by Mitch Finley, which appeared in the Autumn 1990 issue. The article was one of six so honored among 165 entries.

The magazine also has received third place for personality profiles in the Catholic Press Association's 1991 awards competition. The winning profile, "The Uncommon Courage of Imani Kuumba," concerns a single mother raising a family in the midst of the poverty, violence and drugs of New York City's South Bronx. It was written by Guy Trebay, a senior editor of *The Village Voice*, and appeared in the magazine's Winter 1990 issue.

Doctor of Juridical Science Degree Approved

The Notre Dame Law School this fall will introduce a graduate program leading to the most advanced degree in the field of law. A doctor of juridical science (J.S.D.) program has been approved by the Academic Council and William M. Lewers, C.S.C., professor of law, will direct the program. The J.S.D. is a research degree parallel to the Ph.D. primarily for those interested in an academic career.

About 15 law schools in the country offer this degree, and an institution cannot lay claim to being a top research law school without such a program. The Notre Dame J.S.D. program will focus on human rights law and will include only two or three students at any one time.

Students in the program face a one-year residency requirement, during which they will develop dissertation outlines and participate in course work as students or teachers. It should then take about two years for the students to complete work on their dissertations. The work must be finished in a maximum of five years.

Founded in 1869, Notre Dame's was the first American law school under Catholic auspices. It currently ranks among the top 25 in the country.

Five Faculty Win NEH Fellowships

Five members of the faculty have won fellowships from the National Endowment for the Humanities for the 1991-92 academic year. The five awards continue a trend at Notre Dame, which has had 24 NEH faculty fellows since 1985-86 — the fifth highest in the nation among private universities and tied for seventh overall.

The NEH fellows from Notre Dame for 1991-92 are:

Theodore J. Cachey, assistant professor of romance languages and literatures, who joined the Notre Dame faculty in 1990. He received a \$30,000 fellowship for a project titled "Between History and Literature: Romance Representation of New World Encounter (1492-1992)." Cachey holds a bachelor's degree from Northwestern University and master's and doctoral degrees from UCLA.

Ethan T. Haimo, chairman and professor of music, who will work on a project involving Arnold Schoenberg and the birth of atonality with a \$30,000 fellowship. Haimo, a member of the faculty since 1976, has a bachelor's degree from the University of Chicago and a master's and doctorate from Princeton University.

The University

Carlos Jerez-Farrán, assistant professor of romance languages and literatures, received a \$30,000 fellowship to study the theatre of Federico Garcia Lorca and the hidden sources of his inspiration. Jerez-Farrán came to Notre Dame in 1986. He earned his bachelor's degree at the University of Sheffield in England and his master's and doctorate from the University of Massachusetts at Amherst.

Donald P. Kommers, professor of law and professor of government and international studies, will work with an \$85,505 fellowship to study American constitutionalism in comparative perspective. Kommers, a member of the faculty since 1963, is also director of the Center for Civil Rights, director of the West European Studies Program and editor of *Review of Politics*. He holds a bachelor's degree from Catholic University of America and a master's and doctorate from the University of Wisconsin.

Thomas V. Morris, associate professor of philosophy, received a \$52,148 fellowship for work on Pascal's posthumously published *Pensées*. A Notre Dame faculty member since 1981, Morris earned a bachelor's degree from the University of North Carolina and his master's and doctorate from Yale University.

Notre Dame is tied with Rutgers University for seventh among all schools in the number of NEH fellowships won since 1985-86. Leading the way are Columbia, Harvard and Princeton Universities with 31 each. The University of Michigan is fourth with 27, followed by the University of California at Berkeley with 26 and the University of Chicago with 25. Trailing Notre Dame and Rutgers are Indiana University in ninth with 23 and Stanford University with 21.

Accounting Program Ranks Fifth

Notre Dame's undergraduate accounting program is the fifth best in the nation, according to a national survey of accounting professors published in the June 15 issue of *Public Accounting Report*.

The Universities of Illinois, Southern California and Texas, and Brigham Young University are ranked numbers one through four in the publication's 10th annual survey. *Public Accounting Report* is a privately circulated biweekly newsletter of the accounting profession.

Voluntary Support Rankings Announced

The University ranks first among the nation's Catholic universities and 16th among all private universities in voluntary support, according to the annual report of the Council for Aid to Education. The report covers giving to American higher education during the 1990 fiscal year.

Notre Dame received a total of \$53,781,368 in private gifts, grants and bequests during fiscal 1990. This total excludes support received from federal, state and local government and their agencies, as well as from contract research.

According to the council, Notre Dame ranked third among private universities in parental support (\$3.1 million), behind only Princeton University and Boston College and third also in corporate matching gifts (\$2.4 million), behind only Harvard and Yale Universities.

Notre Dame was fifth among all private universities in the percentage of solicited alumni who contributed (51 percent), following Cornell University (62 percent), Dartmouth College (60 percent), and Duke and Lehigh Universities (52 percent). Notre Dame ranked 10th in terms of dollars contributed by alumni (\$24.7 million), behind six Ivy League institutions, Stanford University, M.I.T. and Johns Hopkins University.

The market value of Notre Dame's endowment (\$605.6 million) ranked 15th in the country.

In support from corporations and business, Notre Dame ranked 17th (\$10.1 million), and in foundation grants, 24th (\$8.4 million). Harvard, Yale and Duke Universities led all schools in foundation donations, while M.I.T. along with Stanford and Cornell Universities received the most money from the business sector.

The Council for Aid to Education reported that overall giving to American higher education was up 10 percent in 1990.

Faculty Notes

Appointments

Steven C. Bass, professor of electrical and computer engineering at George Mason University in Fairfax, Va., has been appointed Schubmehl-Prein professor of computer science and engineering at Notre Dame. The appointment is effective in August for the fall semester. Bass, who holds bachelor's, master's and doctoral degrees in electrical engineering from Purdue University, additionally will chair the Department of Computer Science and Engineering. Published extensively in the fields of integrated circuit design and in signal processing, Bass has several U.S. and foreign patents, and his research has been supported with grants from the National Science Foundation, the U.S. Air Force, International Business Machines and MITRE Corp. The Schubmehl-Prein Chair in Computer Science and Engineering is endowed by the H. Edward Prein family in memory of June Prein's father Raymond J. Schubmehl, a member of the Notre Dame engineering faculty for 50 years.

Kathie E. Newman, associate professor of physics, has been named associate dean of the College of Science. Newman, who joined the Notre Dame faculty in 1983, is a specialist in solid state and statistical physics. She received her bachelor's degree from Michigan State University and her doctorate from the University of Washington. In her position in the dean's office, she will oversee the college's undergraduate programs, chair the undergraduate studies committee and administer the college's student council.

Honors

Karl P. Ameriks, professor of philosophy, received an NEH Travel to Collections grant to the Marburg Kant-Archive. He was elected president for North American Kant Society for the term 1991-93.

Leo M. Corbaci, associate professor emeritus of economics, has received the 1991 Professional Development Award from the American Association of Collegiate Registrars and Admissions Officers for distinguished contributions to the association's national and state branches.

Daniel J. Costello Jr., acting chairman and professor of electrical engineering, was selected as one of 100 Seattle University alumni to receive the Centennial Alumni Award in recognition of alumni who have displayed outstanding service to others, exceptional leadership or uncommon achievement. The award was presented at the Centennial Alumni Awards Dinner in Seattle, Wash., June 7.

Stephen A. Fredman, associate professor of English, was appointed to be editorial board of *The William Carlos Williams Review*.

Yusaku Furuhashi, Herrick professor of international business, has been named a recipient of Seattle University's Centennial Alumni Award.

Kimberly A. Gray, assistant professor of civil engineering, has received the National Science Foundation 1991 Presidential Young Investigator Award. The award amounts to \$500,000 for research over the next five years.

Raymond C. Gutschick, professor emeritus of earth sciences, is the 1992 recipient of the Raymond C. Moore Medal awarded annually by the Society for Sedimentary Geology (SEPM-Society of Economic Paleontologists and Mineralogists established 1926) for excellence in paleontology. This organization is affiliated with the American Association of Petroleum Geologists. The Moore Medal will be presented at the SEPM/AAPG annual meeting in Calgary, Canada, in spring 1992.

A. Eugene Livingston, associate professor of physics, has received a \$25,000 Research Opportunity Award given by the Research Corp. to support basic scientific research. The award will help fund the research project "Precision Lifetime Measurements as a Test of Atomic Many-Body Theory in Parity."

Rev. Edward A. Malloy, C.S.C., president and professor of theology, was inducted into the Indiana Academy at the academy's 21st annual symposium in Indianapolis, Ind., June 5. Founded in 1970 by Associated Colleges of Indiana, the Indiana Academy was established to further the development of public service, higher education, the arts and sciences, literature and the general culture of the state through recognition of individual leadership, achievement and philanthropy. The academy currently includes 93 active and 25 honorary members.

Anthony N. Michel, McCloskey dean of engineering and Freimann professor of electrical engineering, has been awarded a Fulbright Scholar Grant for the upcoming academic year. Michel, who has been at Notre Dame since 1984, received his grant to lecture and conduct research at Technical University of Vienna, Austria, from March to June 1992.

Robert C. Nelson, associate chairman and professor of aerospace and mechanical engineering, was honored by the American Society of Engineering Educators (Aerospace Division) and the American Institute of Aeronautics and Astronautics at the annual conference in New Orleans, La., June 15-20. He was named the winner of the 1991 John Leland Atward Award which is bestowed annually upon an outstanding aerospace engineering educator in recognition of the educator's contributions to the profession and is sponsored by the Rockwell Foundation.

Faculty Notes

Barth Pollak, assistant chairman and professor of mathematics, has served as a member of the Internal Review Committee for the Department of Government and International Studies during the 1990-91 academic year.

Frank K. Reilly, Hank professor of business administration, received the degree of Doctor of Laws, *honoria causa*, at the 1991 Commencement of Saint Michael's College in Burlington, Vt., May 12.

Donald E. Sporleder, professor of architecture, was reappointed to the Master Juror Committee for the National Council of Architectural Registration Boards for fiscal year 1992. The committee will set grading criteria and instructions for jurors for use at the July 1991, January 1992 and July 1992 grading of the Architects Registration Examination, Division C: Building Design—administered to candidates for licensure.

Activities

Karl P. Ameriks, professor of philosophy, read the invited paper "Recent Work on Kant's *Critique of Pure Reason*" at Central APA meetings in Chicago, Ill., April 25. He was invited to speak on "Kant and Hegel on Freedom" at the meeting of the Internationale-Hegel-Vereinigung, Moscow Institute for Philosophy (U.S.S.R. Academy of Sciences), May 26.

Stephen M. Batill, associate professor of aerospace and mechanical engineering, coordinated a student presentation titled "Simulation Study on the Design of a Commercial Transportation System" at the NASA/USRA Advanced Design Program Summer Conference held at Cocoa Beach, Fla., June 17-21.

Joseph P. Bauer, associate dean and professor of law, was invited to be a member of a commission for the review and formal approval of a thesis submitted by a former Notre Dame LL.M. student in completion of her Ph.D. requirements at the University of Groningen in The Netherlands, June 6.

Gary H. Bernstein, assistant professor of electrical engineering, presented a poster titled "On the Attainment of Optimum Developer Parameters for PMMA Resist" at the international symposium on Nanostructures and Mesoscopic Systems in Santa Fe, N.M., May 19-24.

William B. Berry, associate chairman and professor of electrical engineering, presented a paper titled "Transit System Third Rail Deicing by Radio Frequency Induction" co-authored by C.A. Waller and R.L. Kleinman, of ElectroCom Automation L.P., at the 1991 IEEE/ASME Joint Railroad Conference in St. Louis, Mo., May 21-23.

Jacqueline Vaught Brogan, associate professor of English, presented "Stevens and the Law: The Vatican Line" at the American Literature Association Convention in Washington, D.C., May 26.

Rev. James T. Burtchaell, C.S.C., professor of theology, lectured on "How to Argue over a Consistent Life Ethic" sponsored by the Catholic Center at Purdue University in West Lafayette, Ind., Jan. 28. He lectured on "The Place of Theology in the Liberal Arts Curriculum" as the annual Theology Department Lecture at Mount Saint Mary's College in Emmitsburg, Md., Jan. 29. He delivered a Hesburgh Lecture on the community organization of the earliest Christian churches to the Notre Dame Alumni Club of Eastern Virginia at Norfolk/Virginia Beach, Va., Feb. 5. Burtchaell delivered a Hesburgh Lecture on the morality of human fetal tissue transplantation research, sponsored by the Notre Dame Alumni Club of Eastern North Carolina and the Center for Health and Public Policy Research and Education of Duke University in Durham, N.C., Feb. 6. He delivered the Hesburgh Lecture "Palestine: The Enduring Irritant in the Gulf Dispute" sponsored by the Notre Dame and Saint Mary's Alumni Clubs of Washington, D.C., and by the Center for Contemporary Arab Studies at Georgetown University in Washington, D.C., Feb. 7. He presented a paper on the secularization process in higher education at the weekly Colloquium on Religion and Culture at Princeton University in Princeton, N.J., Feb. 15. He lectured on the earliest Christian communities as a suggestive model for planning the church to come at the annual convention of the Conference for Pastoral Planning and Council Development in Indianapolis, Ind., March 6. He lectured on the consistent life ethic for the training program for deacons and their wives of the diocese of Trenton, N.J., March 11. He spoke at a Colloquium on Medical-Moral Issues in Assisted Reproductive Technology sponsored by the Catholic Physicians Guild of St. Louis, Mo., March 13. He lectured on "How to Argue over a Consistent Life Ethic" in the *Rerum Novarum* series at Saint Joseph's University in Philadelphia, Pa., March 20.

Theodore Cachey, assistant professor of romance languages and literatures, gave the invited lecture "Literature of Discovery and Exploration in the Italian Trecento: Boccaccio's *De Canaria*" at the conference "Literature and History in the Italian Trecento" held at Northwestern University in Evanston, Ill., May 17-18.

Hsueh-Chia Chang, chairman and professor of chemical engineering, presented an invited talk titled "Pairing of Longitudinal Vortex Rolls in Free Convection Boundary Layers on an Inclined Plane" at the NATO Workshop on Taylor-Couette Flow at Ohio State University in Columbus, Ohio, May 22-24. He presented a talk titled "Numerical Study of Heat Transfer Enhancement by Chaotic Mixing" and a poster "The Effect of Internal Circulation in a Liquid Bubble and a Falling Film on an n-th Order Chemical

Faculty Notes

Reaction" at the Mixing XIII Engineering Foundation Conference in Banaff, Canada, June 10-15.

John E. Chateaufneuf, assistant professional specialist in the Radiation Laboratory, gave the invited paper "Spectroscopic and Kinetic Characterization of Chlorine Atom in Solution" at the 15th DOE Solar Photochemistry Conference in Snowmass, Colo., June 3-6.

Leo M. Corbaci, associate professor emeritus of economics, gave a lecture/presentation to the regional association officers of the American Association of Collegiate Registrars and Admissions Officers providing instructions for developing state and regional association histories by their respective groups based on his experiences while writing the book "A History of the Indiana Association of Collegiate Registrars and Admission Officers at the national meeting in Honolulu, Hawaii, April 17.

Xavier Creary, professor of chemistry, presented a lecture titled "Reactions of Halodiazirines with Nucleophiles. Anionic, Cationic, Radical and Radical Anion Intermediates" at the J.F. Bunnett symposium at the Department of Chemistry at the University of California in San Cruz, Calif., May 18.

William G. Dwyer, professor of mathematics, was an invited participant in the international conference on Homotopy Theory held at the University of Trent, Ontario, June 10-15. He gave a talk titled "Maximal Tori for Finite Loop Spaces" at that conference, June 13.

Guillermo J. Ferraudi, professional specialist in the Radiation Laboratory, gave the invited paper "Photochemical Reactivity of Re(I) Carbonyl Complexes from the Standpoints of Monophotonic and Sequential Biphotonic Irradiations" at the 15th DOE Solar Photochemistry Conference in Snowmass, Colo., June 3-6.

Alfred J. Freddoso, professor of philosophy, replied to a paper titled "Aquinas on Dimensions and Individuation" by Brian Leftow at the meetings of the Central Division of the American Philosophical Association in Chicago, Ill., April 27.

Gregory I. Gellene, assistant professor of chemistry and biochemistry, presented an invited talk titled "Symmetry Constraints in Chemical Reactions; A New Kinetic Isotope Effect" at Brookhaven National Labs in Upton, N.Y., June 26.

Denis Goulet, O'Neill professor in education for justice, delivered an invited paper titled "Biological Diversity and Ethical Development" at the symposium on "Ethics, Value and Religion as Basis for the Conservation of Biological Diversity" at the XVII Pacific Science Congress held in Honolulu, Hawaii, May 27-June 2.

Kimberly A. Gray, assistant professor of civil engineering, presented the invited paper titled "Alternative Uses of Semiconductor Systems: Photocatalytic Degradation of Hazardous Substances" at the 44th annual conference on the Society for Imaging Science and Technology in St. Paul, Minn., May 17.

Charles R. Hohenstein, adjunct assistant professor in the arts and letters core course, taught "The Church's Vision and How It Works" at a two-day course on ecclesiology for the Lay Academy of the South Bend District of the United Methodist Church in Lakeville, Ind., May 4, 11.

Gordon Hug, associate professional specialist in the Radiation Laboratory, gave the invited paper "Quenching of Luminescent Probes in Polyelectrolyte Solutions" at the 15th DOE Solar Photochemistry Conference in Snowmass, Colo., June 3-6.

Roger F. Jacobs, professor of law, law librarian, director of research in the Kresge Law Library and associate dean for Research and Information Services, gave the invited presentation titled "How Does Your Garden Grow? Or What Is a Volume Equivalent Anyway?" at the program ABA Accreditation Requirements: "Demystifying the ABA Questionnaire and the Standards for Approval of Law Schools" held on the campus of Indiana University-Purdue University at Indianapolis, Ind., June 11-12.

Robert C. Johansen, senior fellow in the Institute for International Peace Studies and professor of government and international studies, delivered the paper "The Changing Definition of Security" at the Triangle Universities Security Seminar co-sponsored by Duke University, University of North Carolina at Chapel Hill and North Carolina State University held in Chapel Hill, N.C., Dec. 4-6.

Prashant V. Kamat, associate professional specialist in the Radiation Laboratory, gave the invited paper "Photosensitization of Large Bandgap Semiconductor Colloids. Short Bandgap Semiconductor Colloids and Squaraine Dyes as Sensitizers" at the 15th DOE Solar Photochemistry Conference in Snowmass, Colo., June 3-6.

Thomas A. Kselman, chairperson and associate professor of history, delivered the invited paper "The French as Chosen People" at the conference on religion and nationalism at the German Historical Institute in Washington, D.C., June 13-16.

John M. LoSecco, associate professor of physics, gave the invited talk "Physics with IMB" at the International School of Particles and Cosmology, sponsored by the Institute for Nuclear Research of the Academy of Sciences of U.S.S.R. in Baksan Valley, Caucasus, U.S.S.R., May 7.

Faculty Notes

Scott P. Mainwaring, senior fellow in the Kellogg Institute and associate professor of government and international studies, presented "Multiparty Systems, Presidentialism, and Democracy" at the Hoover Institution at Stanford University in Stanford, Calif., Feb. 14. He presented "Parties, Clientelism, and Economic Decline: Brazil in the 1980s" to the Latin American Studies Association in Washington, D.C., April 4. He gave "The Africanization of Brazil? Parties, Clientelism, and Economic Decline" at the Center for Latin American Studies and "The Contemporary Political Economy of Latin America" at Stanford University in Stanford, Calif., April 25. He presented "Problems and Prospects of Democracy in Brazil" at a symposium on Democracy in Brazil at the University of California in Santa Cruz, Calif., May 29. Mainwaring presented "Parties, Clientelism, and Economic Demise: Brazil in the 1980s" and "Democratization in Latin America and Eastern Europe" at the University of California in Los Angeles, Calif., June 7.

Rev. Edward A. Malloy, C.S.C., president and professor of theology, testified before the Subcommittee on Postsecondary Education of the U.S. House Committee on Education and Labor at the Rayburn House Office Building, June 5. The subcommittee is conducting hearings on the reauthorization of the Higher Education Act, including federal student aid programs.

Rev. John Melloh, S.M., coordinator of the Marten Program in Homiletics and Liturgics and associate professional specialist in theology, preached at the opening prayer service on "Christ is Risen, But the Spirit Descends" at the annual meeting which he organized as president of Catholic Association of Teachers of Homiletics on the theme "Preaching, Culture and Social Justice" held in San Francisco, Calif., April 4-7. He presented and discussed "Homily and Sermon," "Structural Exegesis for Preaching," "Method of Homily Preparation" and "Consideration on a Phenomenological Approach to Preaching" at the Center for Continuing Formation in Ministry at Notre Dame, Ind., April 11-12. He lectured on "Hymns and Homilies: Points of Conversion" for pastors and musicians in the Archdiocese of Milwaukee, Wis., April 19.

Martin F. Murphy, assistant professor of anthropology, gave the invited papers "Quiénes son los culpables? Las causas externas e internas de la crisis actual en la República Dominicana" (Who Is Guilty? The External and Internal Causes of the Present Crisis in the Dominican Republic) and "Cultura política y partidos políticos en la República Dominicana" (Political Culture and Political Parties in the Dominican Republic) at the XVI Conference of Caribbean Studies Association in La Habana, Cuba, May 22.

Robert C. Nelson, associate chairman and professor of aerospace and mechanical engineering, presented a lecture titled "Unsteady Aerodynamics of Slender Wings" at the AGARD Short Course titled "Aircraft Dynamics at High-Angles-of-Attack: Experiments and Modelling" at NASA Langley Research Center in Hampton, Va., April 8.

William A. O'Rourke, associate professor of English, was a panelist for "Speak No Evil: Censorship in Everyday Life" sponsored by the Blank Center for the Arts and the Michigan City Library at the public library in Michigan City, Ind., May 18.

Daniel J. Pasto, professor of chemistry, chaired a session and gave an invited lecture titled "Stereochemical Features of the Formation and Reactions of Substituted Homotrimethylenemethane Diradicals" at the 1991 Joint Central-Great Lakes Regional Meeting of the American Chemical Society in Indianapolis, Ind., May 31.

Larry P. Patterson, faculty fellow in the Radiation Laboratory, gave the invited paper "Effects of Molecular Organization on Interfacial pH and on Base Catalyzed Reactions of Chlorophyll at the Lipid Water Interface" at the 15th DOE Solar Photochemistry Conference in Snowmass, Colo., June 3-6.

Morris Pollard, Coleman director of the Lobund Laboratory and professor emeritus of biological sciences, presented the National Cancer Institute Lecture "Prevention of Prostate Cancer by Retinoids" in Bethesda, Md., May 23.

Wolfgang Porod, associate professor of electrical engineering, presented the talk titled "Computation in Granular Flatland: Discrete Space-Time Cellular Automata" at the Granular Nanoelectronics Workshop at the Beckman Institute at the University of Illinois at Urbana-Champaign, Ill., May 15-17. He co-authored the poster paper titled "Local-Field Effects in Self Consistent Transport Calculations for Narrow Split-Gate Structures" by Henry K. Harburg and Craig S. Lent, assistant professor of electrical engineering, at the international symposium on Nanostructures and Mesoscopic Systems in Santa Fe, N.M., May 19-24.

Joseph M. Powers, assistant professor of aerospace and mechanical engineering, presented an invited seminar titled "Comparisons of Numerical and Exact Solutions for Oblique Detonations with Structure" as part of the Internal Fluid Mechanics Division Seminar Series at the NASA Lewis Research Center near Cleveland, Ohio, June 17. He presented a paper co-authored with Matthew J. Grismer, graduate assistant, titled "Comparisons of Numerical and Exact Solutions for Oblique Detonations with Structure" at the AIAA 22nd Fluid Dynamics, Plasma Dynamics and Lasers Conference held in Honolulu, Hawaii, June 24-26.

Faculty Notes

Kathy A. Psomiades, assistant professor of English, presented the paper "Unpublished Blood: Periodicity/Feminity/Technology" at the Interdisciplinary Nineteenth-Century Studies Conference at Yale University in Princeton, N.J., April 6.

Frank K. Reilly, Hank professor of business administration, presented "Investing in the '90s" at the AMOA Conference held at the Center for Continuing Education at the University of Notre Dame, Notre Dame, Ind., April 8. He presented "New Techniques in Security Valuation" at the 1991 Canadian Investment Seminar in St. Jovite, Quebec, Canada, April 29-30.

John H. Robinson, director of the White Center on Law and Government and assistant professor of philosophy, gave the Aquinas Lecture "Moral Philosophy and Public Policy" at Mount Mercy College in Cedar Rapids, Iowa, March 12. He spoke on "The Defense of the (Probably) Guilty Client" at Coe College in Cedar Rapids, Iowa, March 13.

James H. Seckinger, director of the National Institute for Trial Advocacy and professor of law, served as program coordinator and a faculty member for the NITA/Jones, Day, Reavis & Pogue Law Firm Advanced Deposition Program in Lake Lanier, Ga., May 1-4. He gave a lecture to the faculty on Effective Teaching Techniques. Seckinger was a consultant to the Australia Law Council for developing a national advocacy training organization and to the New Zealand Law Society for advocacy training.

Dennis Snow, associate professor of mathematics, gave an invited lecture on "Dual Varieties of Homogeneous Spaces" at the 1991 summer meeting of the Canadian Mathematical Society at the University of Sherbrooke in Sherbrooke, Quebec, Canada, May 29-June 1.

Kazimierz Sobczyk, visiting professor in civil engineering, gave the invited seminar "Stochastic Wave Propagation — The Existing Methods and New Results" at the Department of Aeronautical and Astronautical Engineering at the University of Illinois at Urbana-Champaign, Ill., May 3. He gave a seminar on "Stochastic Modelling of Fatigue Accumulation" at the Michigan State University Department of Mechanics and Material Science in East Lansing, Mich., May 17.

Donald E. Sporleder, professor of architecture, participated in the Seismic Design Workshop, Buildings at Risk, for Architects in the Central United States held in St. Louis, Mo., April 26-27.

Nancy K. Stanton, professor of mathematics, gave a colloquium lecture on "Spectral Invariants of Conformal and Pseudo Conformal Manifolds" at Northwestern University in Evanston, Ill., April 24.

James P. Sterba, professor of philosophy and faculty fellow of the Institute for International Peace Studies, gave the 1991 Lecture in the Disputed Question Series "Just War Theory: Its Justification and Current Applications" at Walsh College in Canton, Ohio, April 6. He presented the Wayne Leys Memorial Lecture "How to Make People Moral" at the 25th anniversary celebration of the Doctoral Program at Southern Illinois University in Carbondale, Ill., April 12-14. He presented the paper "Reconciling Pacifists and Just War Theorists" at a symposium sponsored by the Gandhi-King Society during the American Philosophical Association Meeting in Chicago, Ill., April 24-27. He was an invited participant at a conference on Climate Change and Global Security at Argonne National Laboratory near Chicago, Ill., May 8-10. He gave an NEH sponsored workshop in ethics for college teachers at Orem, Utah, May 13-15.

Wilhelm F. Stoll, Duncan professor of mathematics, was a member of the Japan-U.S. Mathematics Institute at Johns Hopkins University in Baltimore, Md., April 1-30. He participated in the workshop and the conference on algebraic and complex geometry, April 1-7. He gave a lecture titled "Defect Relations for Moving Targets" in the workshop, April 2, and a lecture in the regular seminar of the institute titled "A Moving Target Defect Relation," April 11. Sterba gave a colloquium lecture titled "Defect Relations for Holomorphic Maps" at Howard University in Washington, D.C., April 19. He gave a lecture on "Defect Relations for Moving Targets" in the symposium on Complex Analysis honoring Professor Walter Rudin at the University of Wisconsin in Madison, Wis., June 2-7.

Thomas R. Swartz, professor of economics, presented the paper "The Cost of the New System of Fiscal Federalism in the United States" at the international symposium on Fiscal Federalism organized by the Institut Fur Finanzwissenschaft Der Universitat Innsbruck in Seefeld/Tyrol, Austria, March 17.

Arvind Varma, Schmitt professor of chemical engineering, presented an invited research seminar titled "Optimal Catalyst Activity Profiles in Pellets" at the Shell Development Company, Westhollow Research Center, in Houston, Tex., June 18.

Eduardo E. Wolf, professor of chemical engineering, presented the papers "Transient and Isotopic Studies of the Role of Oxygen During Oxidative Coupling of Methane over Sr/La₂O₃ co-authored by Z. Kalenik and "Scanning Tunneling Microscopy Studies of the Morphology of Pt and Pd Supported Catalysts" co-authored by K. Yeung at the 12th North American Meeting of the Catalysis Society in Lexington, Ky., May 5-9.

Administrators' Notes

Appointments

Dennis K. Brown has been appointed as an assistant director of public relations and information. A 1976 graduate of Washington University in St. Louis with a bachelor's degree in political science, Brown began his journalism career at the *Colorado Springs Sun* as a sports-writer. He continued in sports as a writer and editor at the *Phoenix Gazette* from 1980-88. In 1988, he worked for the San Diego County edition of the *Los Angeles Times* while on a leave of absence from the *Gazette*. Brown then shifted to news editing from 1989-91 at the *San Diego Tribune*. He also worked for a short time on the news copy desk of the *South Bend Tribune*.

Charles F. Lennon Jr., executive director of the Alumni Association, has been named an assistant vice president of University Relations. Lennon has served as executive director of the Alumni Association since December 1981. Under his leadership, the association has earned a national reputation for innovation in programming. It was the first to offer interactive continuing education seminars via satellite and has initiated community service programs that have been emulated throughout American higher education.

Honors

Howard Adams, executive director of the National Consortium for Graduate Degrees for Minorities in Engineering Inc. (GEM), has been chosen the 1991 recipient of the Vincent Bendix Minorities in Engineering Award by the American Society for Engineering Education. Established in 1979, the award is presented annually to an educator for outstanding achievements in increasing minority and female participation in engineering programs.

Activities

Marilyn Van Bergen, project coordinator of the Office of University Computing, co-led a workshop "Dilemmas in the Ethical Use of Information" at the National Educational Computing Conference in Phoenix, Ariz., June 15.

Documentation

240th Graduate Council Minutes April 24, 1991

Dr. Nathan O. Hatch opened the meeting at 3:30 p.m. on April 24, 1991, in Room 210, Center for Continuing Education.

Members absent and excused: Ms. Uma Balakrishnan; Dr. Joseph A. Buttigieg; Dean Francis J. Castellino, replaced by Dr. John G. Duman; Dr. Gary M. Gutting; Dean John G. Keane; Dr. Lawrence C. Marsh, replaced by Dr. Martin H. Wolfson; Dr. Vicki J. Martin; Dr. Albert E. Miller; Mr. Kurt A. Mills; Dr. Barbara M. Turpin.

Guests of the council: Associate Dean Joseph P. Bauer, Dr. Hsueh-Chia Chang, Dr. William G. Gray and Rev. William M. Lewers, C.S.C.

I. Minutes of the 239th Meeting

The minutes of the 239th meeting were approved without change.

II. Proposal for Doctor of Juridical Science

Dr. Hatch called on the Rev. William M. Lewers, C.S.C., director of the Center for Civil and Human Rights, to present the proposal to begin a program in the Law School leading to the Doctor of Juridical Science degree.

Father Lewers said he would comment on the written proposal included with the council agenda. He then made the following major points:

- 1) At least initially, a Doctor of Juridical Science (J.S.D.) program would concentrate in international human rights law.
- 2) The Law School is trying to move into international and comparative law, and to establish itself in the first rank of research law schools. The University has established programs leading to the LL.M. degree in London (1986) and at Notre Dame (1989). There are currently 15 law schools in the United States which grant the J.S.D. Adding such a program at Notre Dame would enhance research in international human rights law, make the Law School more attractive to faculty and visiting scholars and enlarge the number of alumni(ae) teaching law, especially in foreign countries.
- 3) Establishing a J.S.D. program would not involve significant additional expense. Present law and other University

faculty would be sufficient. No new courses would be needed; students' special interests could be handled through directed readings. The Law School has already strengthened its library collection in international law.

4) Admission requirements would include the following: 1) a first law degree, either the LL.B. or the J.D., 2) the LL.M. and 3) a proposed plan of study. Admission would be granted by the Law School's Committee on Graduate Studies.

5) Degree requirements would include the following: 1) two semesters of residence beyond time spent in residence for the LL.M., 2) six hours of course or other credit-bearing work, 3) honors level research and writing leading to presentation of a thesis of publishable quality within five years and 4) an oral thesis defense. Two semesters of residence beyond the LL.M. is a requirement most J.S.D. programs do not have. Each student's doctoral committee would consist of a thesis advisor and two other faculty members.

Dr. Hatch called for questions or discussion.

Dr. Goerner inquired about stipends for J.S.D. students, and asked if the program would eventually expand into comparative and/or constitutional law.

Father Lewers said students would be supported by a current Ford Foundation grant, by money from other foundations and, in the long run, by income from an endowment. Initial concentration on international human rights law could conceivably lead to concentrations in comparative or constitutional law. Basic issues in human rights evolve easily into basic issues in the other two areas.

Mr. Miller asked and was told that initially there would be only one to three J.S.D. students in residence at any one time.

Dr. McComas asked and was told that J.S.D. students would probably be classified as students in the Law School, as are students studying for the LL.M.

Dr. Hatch said this question could certainly be resolved to the satisfaction of all concerned, as could any other jurisdictional issues which might arise. One issue would be integrating the thesis requirement for the J.S.D. with the Graduate School's dissertation requirements for the Ph.D.

Prof. Bauer pointed out that the LL.M. program in London does not require a thesis, but the program at Notre Dame does. The J.S.D. thesis would be similar in quality to a Ph.D. dissertation. Its length or style might differ, but it would certainly be an academic project, not a classroom exercise. Completing it would take more than one year.

Documentation

Dr. Duman asked and was told that the accumulation of credits by a J.S.D. student would be approximately 90 from the first law degree (LL.B. or J.D.), 24 from the LL.M. and six from the J.S.D.

Dr. Hatch said that comparability to the Ph.D. should be the benchmark.

Father Lewers noted that requiring one year of residence beyond the LL.M., though unusual, is good academic practice. It would free students from professional activity as they begin serious research on a thesis, and thus make completion of the program more likely.

Mr. Miller asked and was told that the Graduate School would not provide stipends for J.S.D. students, but that it would be willing to discuss providing tuition scholarships.

Dr. Hatch asked and was told that there would be few new courses, and that tutorials or special studies work would be comparable to that in other doctoral programs.

Prof. Bauer pointed out that many law schools offering the J.S.D. do not require any additional courses or credits at all. Also, the LL.M. and J.S.D. degrees are more pertinent for persons teaching in law schools abroad. In fact, international students are the principal clientele for most LL.M. and J.S.D. programs.

Mr. Miller asked and was told that Notre Dame's J.S.D. program would be accredited by the American Bar Association.

The proposal to establish a J.S.D. program was approved without dissent or change.

III. Department of Chemical Engineering Review

Dr. Hatch called on Dr. William G. Gray, chairman of the Chemical Engineering review committee, to comment on the committee's report.

Dr. Gray offered the following remarks:

- 1) The department is developing well. Its quality is high, and it has made significant progress since the last review.
- 2) There has been some problem with communication among faculty and with the department chair, but this is being addressed.
- 3) The department will attempt to hire a senior person of "star" quality. Additional discussion of criteria for this effort is needed.

4) The external reviewers recommended that technical support services needed by the department be provided by a college-sponsored central facility and staff. The department is not sure this would be suitable.

5) The department should provide a greater variety of courses for graduate students.

6) The department should allow a longer time for new graduate students to select their research area.

Dr. Hatch called next on Dr. Hsueh-Chia Chang, chairman of the Department of Chemical Engineering, for any comments he might have.

Dr. Chang made the following major points:

1) The faculty is happy with the external reviewers' reports, which confirm the department's nationally recognized success in teaching and research. The final report, prepared by Dr. Gray and the other internal reviewers, is more critical and does not reflect that success.

2) The department now schedules faculty meetings once a month instead of once every three months. Also, junior faculty members will meet with the Committee on Appointments and Promotions for an annual review.

3) The department's goal to be ranked among the top 10 departments in the nation has been criticized as a quest for ratings, but the faculty believes this goal is compatible with solid achievement in both educational programs and research.

4) If there is diversity of opinion regarding criteria for hiring a new senior faculty member, there is unanimity about the need for more faculty positions. The criteria for faculty hires will always include 1) intellectual talent and 2) how well a candidate's research field fits with the department's current teaching and research interests.

5) The department needs an electronics technician.

6) Because it is necessary to offer stipends as high as \$17,000 a year to the very best students, the department needs more student financial support from the Graduate School.

Dr. Hatch called next on Dr. Anthony N. Michel, dean of the College of Engineering, who offered the following comments:

1) The department has made great strides toward excellence in the last 20 years. It has added both junior and senior faculty of very high quality; it has streamlined its course offerings and research interests, and it has been successful in

Documentation

attracting financial support from industry. More can be done, and this pattern of improvement will continue.

2) As senior faculty members retire, appropriate replacements will have to be found. The internal reviewers were right to recommend that the department regard quality of achievement as more important than improvements in its ranking when new appointments are considered.

3) The college may well be able to add resources to the department under the upcoming five-year plan, but the department will have to choose among priorities — e.g., a junior faculty member vs. an electronics technician.

4) The University will have to look for ways to help the department replace aging research equipment.

5) The Graduate School has been generous in helping the department offer more competitive graduate student stipends. Such help is needed by all the departments in the college.

6) The college encourages cooperation among its departments as they build and restructure their educational programs.

7) Everyone is confident the Department of Chemical Engineering will continue its present momentum. That will assure both high quality and higher rankings.

In response to various questions, Dr. Chang provided the following information:

1) The trend of G.R.E. scores in the department is up. There are more international students with higher quantitative, although lower verbal, scores.

2) There are 11 faculty members in the department. All are active researchers. All are funded, although some not as well as they might be.

3) There are approximately 40 graduate students in the department, of whom 80 percent will continue to the Ph.D. With only 11 faculty members — there are approximately 90 in the College of Engineering as a whole — the department has produced 40 percent of the college's Ph.D.s in the last five years.

4) The department is currently ranked 19th in the nation in production of Ph.D.s.

5) The student/faculty ratio is higher in the top 10 Chemical Engineering departments than it is at Notre Dame.

Dr. Goerner inquired about the structure for providing technical support services to the department.

Dr. Michel responded by giving an overview of this issue:

1) Support services may either be centralized and managed at the college level, or they may be decentralized and under the control of each department. Both formats are found among universities the size of Notre Dame.

2) In the early 1980s, the College of Engineering switched from a centralized to a decentralized format. Funds were dispersed to the departments, and therefore no longer exist at the college level.

3) Although a strong case can be made for a centralized system, it is generally held in the college that local, department control is best.

4) If the college returned to a centralized system, each department would have to contribute resources to support it. Also, a centralized system is at times unfair, since some departments use technical services more than others.

Dr. Kantor noted that in a decentralized format it is sometimes difficult to provide the necessary range of skills. Perhaps the best system would be a combination of the two formats.

Dr. Chang added that whatever the format, present support services within the college do not meet the need.

Dr. Hatch pointed out that it is always more difficult to find money for support activities than for faculty and similar academic needs.

Dr. Duman noted the cost effectiveness of having technicians for research equipment rather than very expensive service contracts. It might even be smart to hire technicians to serve more than one college.

As the discussion drew to a close, Dr. Kantor offered a final comment on the issue of criteria for hiring senior faculty: Intellectual talent vs. higher ranking is not an interesting, or the most appropriate, way to frame the question. The department should understand its hiring process as seeking to assure the best possible education and research.

A motion to approve the Department of Chemical Engineering graduate program passed unanimously.

Documentation

IV. Admission of Students to Degree Candidacy

The list of students seeking admission to degree candidacy was approved without change.

V. Chairman's Remarks

Dr. Hatch offered the following remarks:

1) The School of Architecture has added a new concentration to its Master of Architecture program. The new concentration will allow students who have majored in architecture, but have not earned the first professional degree, to earn that degree at Notre Dame. Since the change does not involve a new degree, it was not thought necessary to bring the matter before the council.

(Mr. Miller wondered if making it possible to earn a Master of Architecture degree as a first professional degree did not in fact mean offering a new degree. Dr. Hatch said it did not; the change is only a shift in the present Master's program.)

2) Three new members have been elected to the council. They are Professors Ethan Haimo (Music), Kathie Newman (Physics) and John Van Engen (Medieval Institute).

3) The Graduate School Award, given annually to a faculty member for distinguished contribution to graduate education, will be presented on Tuesday, May 21, at the President's Dinner for the faculty.

4) The awards for best graduating student in each division of the Graduate School will be presented on Friday, May 17, immediately preceding the Vice President for Graduate Studies' annual commencement weekend reception for degree recipients.

5) The Alumni Association has inaugurated three new awards for graduate students. They are for teaching, for research and for service to the University or local community, and will be given annually.

6) The Midwest Association of Graduate Schools (MAGS) has selected Mr. Richard Conroy of the Institute for International Peace Studies to receive its 1990-91 award for best Master's thesis. MAGS consists of 161 institutions. Mr. Conroy has since been accepted in the Ph.D. program in Notre Dame's Department of Government and International Studies.

7) The Graduate School has determined that Notre Dame stipends are on average \$1700 below those of institutions with which it competes. At the same time, it will be more difficult to obtain money from the University to overcome this gap, since the rate at which undergraduate tuition increases will decline. Consequently, the Graduate School presented a five-year plan for improving graduate student support to the Advisory Council for Graduate Studies and Research at a meeting in New York on April 26. The plan consists of the following major features:

- Stipends in each department will be brought to competitive levels over the next five years by increasing the stipends of entering classes.
- The number of Presidential Fellowships will be raised to 40.
- There will be 85 new graduate assistantships.
- The plan assumes 1) a 5 percent increase in the regular budget, 2) \$200,000 in new money for four years and 3) a new endowment of \$16,000,000.

Dr. Hatch thanked the members of the council for their service in 1990-91, and adjourned the meeting at 5 p.m.

Documentation

Faculty Senate Journal March 6, 1991

The chair Professor Paul Conway called the senate to order at 7:35 p.m. in room 202 of the Center for Continuing Education. After an opening prayer by Professor Clark Power, the chair called upon the standing committees to report.

Standing Committee Reports:

Academic Affairs: Professor John Yoder, chair, presented a resolution from his committee calling upon the administration to make several improvements in the University Libraries, including additional funding. After much discussion, the senate asked the committee to review its resolution and report back at a later date. Yoder also reported that the Governance Review Committee had organized itself and held several meetings; he is the senate's liaison with that group and will continue to report on its activities.

Administration: The chair Professor Frank Connolly asked the senators for comments on the proposed discriminatory harassment policy, to guide his committee in their review of the provost's suggested document. Members distinguished between "offensive" and "harassing" behavior which would lead to physical injury, property damage or personal intimidation; preventing the latter should be the real intent of the policy. He also had serious reservations on the First Amendment aspects of the proposal. The senate's lengthy discussion indicated that others were concerned with these problems too. In addition several members felt the relationship of this proposal to the sexual harassment policy had to be clarified. The general feeling was that senators objected strongly to possible infringements on free speech and academic freedom and Connolly said the committee would weigh such comments carefully.

Student Affairs: Professor Sandra Harmatiuk, co-chair, reported on a recent meeting of the Campus Life Council, of which she is an ex officio member for the senate; it considered several revisions to *du Lac* and two proposals on the honesty code.

Benefits: Chair Professor Frank Bonello reported that the sub-subcommittee of the Budget Priorities Committee, of which he is a member, has considered the senate's proposal on parental leave; legal challenges have recently called into question whether the University would be in compliance with the law even with the senate's proposal, so further work is needed there. The group has also been considering some changes in TIAA/CREF policies. The senate's Benefits Committee would welcome comments from senators and will have a resolution on the subject in April.

The senate proceeded to vote for its representatives on the following University committees: Academic and Faculty Affairs of the Board of Trustees; Campus Life Council; Board of Traffic and Parking Appeals; and Judicial Review Board. The staff secretary will count the ballots and notify the winners.

Under "Old Business," Professor Ronald Wasowski, C.S.C., asked that the journal be distributed promptly. Professor David O'Connor welcomed the publication in the *Notre Dame Report* of the minutes of the Faculty Board in Control of Athletics meetings.

As "New Business," Professor Panos Antsaklis reported on his work as the senate's representative to the University Parking Committee. The committee is considering several changes in parking regulations to improve the situation and would like suggestions from the senate. Antsaklis opened the floor for discussion. Issues raised included the percentage of reserved spaces on the inner campus; the split in reserved spots for faculty vs. reserved spots for administration; the seemingly haphazard nature of reserved parking on the inner campus; the possibility of an annual parking fee; and the installation of parking lot gates. Antsaklis asked if there was a deep concern on the reserved parking issue and little was shown.

Professor Sterling called for adjournment. Fuchs seconded and the senate agreed at 9:29.

Respectfully submitted,

Peter J. Lombardo
Secretary

Members Present: Antsaklis, Bender, Bentley, Blenkinsopp, Bonello, Chang, Connolly, Conway, Falkenberg, Fallon, Fuchs, Harmatiuk, Jordan, Leighton, Lombardo, Miller, Moody, O'Connor, Parnell, Pillay, Porter, Power, Powers, Pratt, Sheehan, Sporleder, Sterling, Vecchio, Wasowski, Yoder, Mills

Members Absent: Bandyopadhyay, Bartlett, Borelli, Bunker, Costigan, Delaney, Esch, Hayes, Hemphill, Herro, Jerez-Farran, Johnson, C.L., Johnson, P.G., Lapsley, MacKenzie, McCarthy, Nichols, Pilkinton, Scully, Tageson, Labaree

Members Excused: Despres, Martin, Weaver

Documentation

Discriminatory Harassment Policy

April 5, 1991

1. POLICY:

The University of Notre Dame believes in the intrinsic value of all human beings. It is, moreover, committed to the full peaceable participation of all its members in the educational endeavor it fosters. This is the reason that the University prohibits discriminatory harassment as defined below. The University is also committed to the free expression and advocacy of ideas; it wishes to maintain the integrity of this commitment as well. For this reason, cases of verbal harassment are defined here with great caution.

While harassment in general is prohibited elsewhere in the University's regulations, all should be aware that behavior which, in addition, constitutes discriminatory harassment, will be treated as a more serious offense.

2. PROHIBITION:

All discriminatory harassment is prohibited on this campus.

3. ADMINISTRATION:

It is appropriate to report any incident of discriminatory harassment to the authorities of the University. The ways available for doing this are as follows.

Students: A case of harassment by a student toward another student which occurs outside a residence hall is to be reported to the Office of Residence Life and shall be handled in the same manner as other violations of University rules and regulations. (See *du Lac: Student Life Policies and Procedures; University Standards of Behavior.*)

Likewise, any incident of discriminatory harassment by a student toward a faculty member or staff member is to be reported to the Office of Residence Life. Any incident of discriminatory harassment by a student toward any other student which occurs in a residence hall is to be reported first to the rector and, in consultation with the Office of Residence Life, a determination shall be made as to whether the incident should be handled at the hall level or whether the matter should be referred to the Office of Residence Life.

Faculty: An incident of discriminatory harassment by a faculty member is to be reported to the chair of the academic department or, in cases involving the chair, to the dean of the college. If the matter cannot be resolved at the department or college level, it is to be referred to the provost's office.

Staff: An incident of discriminatory harassment by a staff member is to be reported to the Director of Human Resources, and shall be handled by the Human Resources office in the same manner as any other violation of University Rules and Regulations as outlined in the University Human Resources Manual.

Administration: An incident of discriminatory harassment by an administrator is to be reported to the immediate superior of the person involved.

Ombudsman: Notwithstanding the above, a person alleging discriminatory harassment may choose to report the incident to the University Ombudsman. This is to be a member of the University community, selected by the provost for that task. The ombudsman after taking information on the incident, is to help the complainant handle the matter either by informal conciliation, or by helping the complainant proceed with the reporting procedure described above.

Resolution on Transferability and Cashability of TIAA Accumulations

Whereas new options regarding the transfer of TIAA accumulations to alternative funding vehicles and cashability, up to 100 percent, of TIAA accumulations on termination of employment or retirement became available on April 1, 1991.

Whereas the Faculty Senate has previously recommended that the University of Notre Dame approve and provide similar options with respect to CREF accumulations, and

Whereas these new TIAA options must be approved by the employer,

Be it resolved that the Faculty Senate recommends that the University of Notre Dame approve and provide both of the two new TIAA options: 1) the transfer of TIAA accumulations to alternative funding vehicles and 2) cashability, up to 100 percent, of TIAA accumulations on termination of employment or retirement to the TIAA-CREF participants in its employ.

Documentation

Library Resolution

Whereas: The administration and faculty have made research a major priority for the national standing of the University and an essential component of faculty evaluation, the library is of paramount importance.

Whereas: The Association of Research Libraries as reported in *The Chronicle of Higher Education* (June 27, 1990) gave the library of Notre Dame an overall ranking of 72nd out of 106 research libraries in 1988-89 based on collection size (62nd), acquisitions (38th), current serials (80th), staff size (94th), and total expenditures (96th), the noted progress of the last decade must be continued and accelerated.

Be It Resolved: The administration should make the increase of the library budget and endowment a higher priority. Underfunding is particularly acute in the following areas: 1. Additional library staff. 2. Serial Collections. 3. Small departments whose holdings are essential for not only the field of the department, but for other fields as well, e.g., Classics and Oriental Languages.

Be It Further Resolved: The almost 20 percent of space currently occupied by non-library functions in the Hesburgh Library be transferred to other locations on campus and that as a matter of future policy, library space be reserved for library use. We recommend that the new space be devoted to the creation of permanent reserve sections which would supplement the reference collection.

Faculty Senate Journal

April 9, 1991

The meeting was called to order by the chair Professor Paul Conway at 7:30 p.m. in room 202 of the Center for Continuing Education. Professor John Yoder led the prayer.

Report of the Chair

Conway reported that the Indiana Conference of the AAUP has invited the Faculty Senate to its program on governance which will be held at Notre Dame on Saturday, May 4. A panel composed of members from various state and local institutions will discuss the role of the faculty in governance. Provost Timothy O'Meara will be part of the panel. Conway speculated that there are close to 50 dues-paying members of the AAUP on campus but there is no organized chapter. He urged all senators to attend the program in view of the senate's strong interest in this topic.

Conway announced that the next Academic Council meeting would be held on April 16. Topics include the merger of the earth sciences and civil engineering departments, and updates on the topics of cultural diversity and a policy statement on discriminatory harassment. Another meeting will be held in late April or early May. The probable agenda for this meeting will be a report on athletics by Fr. Beauchamp and the senate proposal for opening-up the tenure process. Conway reminded the senate that our faculty poll on this subject showed that of the 36 chairpersons responding, not one favored the status quo. It also revealed that 164 of 210 present or former members of departmental CAPS (78 percent) were in favor of having candidates notified of the department decision as soon as it went to the dean. He noted that our present policy is not consistent with our peer institutions. However, Provost O'Meara has indicated that our tenure policy should not be affected by what our peer institutions do. This is inconsistent with his previous requests for us to supply data from our peer institutions when proposing to discuss a particular topic with him.

Conway also announced that the elections for vacancies in the senate would be taking place in the colleges, library and special groups. Voting results are due by April 16. He urged members to aid this process as much as possible. Following the procedures of recent years, the executive committee, which includes representatives from all colleges, will serve as the nominating committee for this year's senate elections. Walter Pratt will be added to the committee as the law school representative. All senators, however, are free to submit nominations by the third week of April but each should get the approval of their nominee(s) beforehand. Nominations will also be able to be made the night of the elections if the nominee has agreed to stand for election. Finally, he announced that the last meeting of this year will be held on May 1.

Documentation

Standing Committee Reports:

Academic Affairs: Committee Chair John Yoder, submitted a resolution formulated by the committee supporting some concerns of the library administration, with changes suggested at the last senate meeting (pulling apart questions concerning space and budget). He moved the resolution as rewritten and resubmitted. In the discussion, Margaret Porter underlined the need to make the administration aware of the need for further funding, especially of serials. Professor Joseph Blenkinsopp asked support for a petition being circulated not to have the presidential dinner this year and put its cost toward serial purchases. The committee resolution was unanimously approved (see enclosed copy). The question was raised as to whom the resolution should go; it was decided to send it on to the provost.

Administration: Committee Chair Frank Connolly took the podium to lead the discussion on the committee's final draft of a Discriminatory Harassment Policy. (He added that the committee will come back at the next meeting with a recommendation for the administration to make a concerted and caring effort to raise this issue of cultural diversity and mutual respect to the University community). He pointed out that this present report was made as a joint effort with the committee appointed by the provost, and raised two issues: 1) the general principle involved; 2) why protect any selected group?

Re 1) the report intends to address the problem of harassment in the dictionary meaning of the term — an action intended to damage the victim. The policy is not aimed at offensive speech in general. This is not included in the definition, and the committee upheld the need to support the right to express opinions. The policy attempts to look at two vital interests: a) peace on campus; b) and unfettered access by all to the benefits of University life. Penalties on dismissal of faculty members are not mentioned, though they were contained in the original. It is felt that the administration already has ample powers in this area, particularly concerning recalcitrant cases, e.g., salary, etc. Finally, it treats discriminatory harassment as more serious than "ordinary" harassment and mentions certain groups. Why should we? Because such groups tend to be subjected to repeated harassment, and its patterns are more damaging.

Connolly then asked guest Eileen Kolman, dean of Freshman Year and chair of the provost's committee, to comment on the policy. She pointed out that the senate already knew some of the history behind it. The provost's committee had concluded last spring that Notre Dame needs a clear statement as to the kind of community we want. No written statement had as yet been formulated. After much research and thought, the committee came up

with a statement that prohibits discriminatory harassment while preserving First Amendment rights and academic freedom, and submitted it to the provost. The issue was then remanded to the senate. Since December, when the Administration Committee first took it up, the issue has received a lot more attention on campus. This committee saw shortcomings and set about addressing them. As chair of the provost's committee and speaking for other members, Dean Kolman feels that the amended policy expresses the best of what they had in mind and covers their original goals very well. She concluded by recommending it to the senate's attention.

In the discussion that followed, Professor Morton Fuchs raised a technical question: He was struck by comments concerning the protection of someone's right to express an opinion...? Does this constitute a loophole? Connolly responded that he thought someone could. However, the policy deals first with physical attacks and incitement to retaliation. The question of what constitutes intimidation took up most of the committee's time. It was decided 1) that it has to be harassment, and 2) one has to prove hostile intent and intent to intimidate based on the demeaning statements.

Professor Harvey Bender brought up some examples: What if in math class a professor says that in his experience women do not have good math skills and he expects that to be true, or a biology professor states that minorities are deficient in one way or another? Connolly: You are showing limitations of the policy, unless you can show intent to intimidate persistently. Bender: In other words, if you are a knowledgeable Philistine, it's harassment; if not, it's not...! Connolly: you have to prove intent. Bender: Even though the person is equally devastated in either case? According to Professor Robert Vecchio, the First Amendment may protect you unless you use "fighting words." Therefore, an enforcement policy may be possible. Pratt responded that the committee already discussed this issue and will come up with a recommendation — education is needed, not just punitive statements. Vecchio: But if someone is creating an environment of intimidation— couldn't you use that argument? Connolly: The Civil Rights Act mandates that an employer may not allow an intimidating environment to persist. Professor David O'Connor was bothered that the policy is so "example poor." David gave example of two roommates, one from a protected group, who get into a shoving match. One makes a racial remark; it seems like we have a clear case of harassment in one case, but not the other. Different remedies would ensue — one is considered more serious than the other. He wanted more specific examples. Connolly referred to pending Wisconsin court cases; some are pretty clear, and in one, the student even admits his intent.

Documentation

Professor Stephen Fallon thought the committee was casting a wide net. On page 4 of the policy, rationale does not seem to be equal to page 2. Connolly argued that the definition on page 4 includes the one on page 2. The issue is not common understanding but accordance with law. For Professor Moody, the logic was not clear that discriminatory harassment is somehow separate. Connolly pointed to page 22 of *du Lac*, where harassment is already prohibited. Sexual harassment is dealt with elsewhere. Professor Anand Pillay said this was not just a political issue; it was a social one as well. Consider the recent Los Angeles police brutality case. There is a social context occurring here. Moody thought there was a double social context, and wondered if Notre Dame should follow the pack. The Oshkosh case seemed covered by freedom of speech, but apparently was an issue because of the threat of violence. Supposing this were against a handicapped or rich person? He was not sure the category mitigates the action. Professor Gregory Sterling said we haven't set the agenda in this matter. In an ideal world, there should be no distinctions, but this is not an ideal world. Should we not take a moral stance? Pratt responded that we were being asked to take more than a moral stance. Such problems should be dealt with by more speech and education, not with sanctions. Connolly: you can't rebut with more speech what is not solely a matter of speech. You must prove that the victim was intimidated.... Yoder didn't see anything about sanctions in this policy, but about conflict resolution. Connolly said the intent was to develop a policy; someone else would then develop sanctions. Kolman made two points: While supporting the proposed policy she doubted we can make everyone happy. There is no way we could make a policy that would prevent certain statements. This policy is so narrow that the possibility of someone being punished is very remote. She was not happy with that, but felt it important that the University come up with some position on this. Her committee looked first at racial harassment. Out of five faculty members on the committee, there was only one white male. The two students were both minorities. All were sensitive to these issues. They are looked at differently by the majority. For minorities there is more of an urgency — this is not a pleasant environment for them. Connolly thought we were now more diverse. Can we not be generous? All we aspire to is to make this place more fair. Fallon: It does come down to the good guys versus the bad guys. I am horrified when I hear such demeaning statements. But is this policy sufficiently clear? It's not a question of generosity.

O'Connor returned to his concern that we are so example poor, and worried about exposing people to public embarrassment for trivial cases. He was worried about the abuse of it. Professor William Tageson agreed with Yoder: The thrust of the committee's approach was conflict resolution, not public embarrassment. That is why it was felt an

ombudsman should be available to try and reconcile all parties first. Vecchio wanted to suggest that this be made more explicit, since it was not clear as it stood. Professor Clark Power said his Student Affairs Committee anticipated some of this and was calling for a mediation board to address it. He was in sympathy with the problem of examples and believed we need to address the culture at Notre Dame. There ought to be a way to talk it out. But he was troubled by having to vote for or against this policy, and felt page 2 should be prefaced, because it does attempt to remedy creation of a hostile environment.

Connolly agreed with others and thought the policy was naked out of the context in which it was presented, but would have no problem in submitting the whole thing to the Academic Council. He would accept this as a friendly amendment. Professor Ellen Weaver so moved. Several suggestions were made for cuts in the contextual material, especially section #2, but Weaver wanted to leave it to the committee to reduce or summarize the material. Connolly accepted the suggestion as a friendly amendment. The senate then voted to send the whole document to the Academic Council with Section #2 removed.

Benefits Committee: Professor Frank Bonello, chair, reported on three items: 1) follow-up on parental leaves. It was suggested the University come up with an ad hoc committee to consider this issue, but it's being looked in a different area. 2) Transferability and cashability of TIAA accumulations: resolution submitted with change to "became available." This enhances the flexibility of employees, and is consistent with action taken re CREF. There would be no out-of-pocket expenses to the University. The resolution was unanimously approved. (See enclosed copy.) 3) Compensation report — given by Sheehan. In summary: Salaries continue to improve, but benefits are lacking and library faculty low. Salaries are competitive, fringe benefits improving by lagging, percentage of women faculty of concern. Two areas are not competitive—library faculty salaries and business school in some areas. There will be a section also on retirees. Report has not been changed since 1984. Bonello: I move that a copy of this report be appended to the minutes, and sent to all faculty. Unanimously approved. The senate subsequently decided to mail the completed report to all members of the faculty. The chair congratulated Connolly on the success of his efforts on the discriminatory harassment policy, and the senate agreed with its applause.

Student Affairs Committee: Clark Power, chair, had nothing to vote on, but at the next meeting will have a short proposal re discriminatory harassment mentioned previously, as well as revisions of *du Lac* (some way of incorporating students and faculty).

Documentation

Governance Committee: John Yoder reported that senior faculty are being interviewed concerning their special perspectives on governance.

There was no old Business.

Under New Business, Pratt presented on behalf of several Law School colleagues a resolution on motherhood. Bonello indicated, in response to a question from the chair, that the Senate Benefits Committee had considered the resolution, and had decided not to endorse or pursue it. There was no second for Pratt's motion, and thus no discussion was possible.

The senate adjourned at 9:15 p.m.

Respectfully submitted,

William Tageson
Co-Secretary

Members Present: Bartlett, Bender, Bentley, Blenkinsopp, Bonello, Bunker, Connolly, Fallon, Fuchs, Hayes, Hemphill, Jordan, Leighton, Miller, Moody, O'Connor, Parnell, Pilkinton, Pillay, Porter, Power, Powers, Pratt, Sheehan, Sporleder, Sterling, Tageson, Vecchio, Weaver, Yoder

Members Absent: Antsaklis, Bandyopadhyay, Borelli, Chang, Conway, Costigan, Delaney, Despres, Esch, Harmatiuk, Herro, Jerez-Farran, Johnson, C., Johnson, P., Lapsley, MacKenzie, Martin, McCarthy, Nichols, Scully, Wasowski

Members Excused: Falkenberg, Lombardo

University Committee on Libraries May 14, 1991

The meeting was called to order at noon at the University Club by the chairman, John Lucey. Also in attendance were Harvey Bender, Leo Despres, Maureen Gleason, Robert Miller, Michael Morris, Dan Sheerin and secretary Melodie Eiteljorge.

The minutes of the meeting of April 11 were approved as written.

Robert Miller reported that the elevators in Hesburgh Library will be upgraded over the summer. Of the four existing elevators, two will be upgraded during the first half of the summer and the other two during the second half. Once the project is complete, efficiency should improve significantly, providing the equivalent of one additional car. The patience of all library patrons is requested, especially during the first phase of the project, when the only two elevators in service will be unimproved models. Throughout the summer, it is asked that patrons walk up one flight and down two whenever possible.

A collection was recently received on book collecting and the history of books and printing. An Irish stamp collection has also been acquired. The libraries are purchasing a collection on Soviet poetry, theatre and film.

John Lucey reported that he has requested an election for the at-large vacancy on the committee. This will be done before the fall semester begins.

Maureen Gleason reported that the serials review process is underway. Once objections for proposed cancellations are received, a revised list will be compiled. The final decision for any cancellations will be made by this committee. The process should be completed by August 1. The original list contained 200 titles. Approximately 30 objections have been received, and more are expected.

Harvey Bender suggested that a form be designed for incoming faculty, assessing their library needs. Miller agreed to pursue this possibility.

The next meeting is scheduled for Wednesday, June 12, 7:30 a.m., at the Morris Inn. The agenda will include suggestions for next year's calendar. There being no further business, the meeting adjourned at 1:10 p.m.

Respectfully submitted,

Melodie Eiteljorge
Secretary

Documentation

University Libraries' Hours During Intersession July 31 - August 26, 1991

Date	Hesburgh Library		Engineering and Life Sciences Libraries
	Building	Public Services	
Wednesday, July 31 through Friday, August 2	8 a.m.-midnight	8 a.m.-5 p.m.*	8 a.m. - 5 p.m.
Saturday, August 3	9 a.m.-midnight	9 a.m.-5 p.m.	Closed
Sunday, August 4	1 p.m.-midnight	Closed	Closed
Monday, August 5 through Friday, August 9	8 a.m.-midnight	8 a.m.-5 p.m.*	8 a.m. - 5 p.m.
Saturday, August 10	9 a.m.- midnight	9 a.m.-5 p.m.*	Closed
Sunday, August 11	1 p.m.-midnight	Closed	Closed
Monday, August 12 through Friday, August 16	8 a.m.-midnight	8 a.m.-5 p.m.*	8 a.m.-5 p.m.
Saturday, August 17	9 a.m.-midnight	9 a.m.-5 p.m.	Closed
Sunday, August 18	1 p.m.-midnight	Closed	Closed
Monday, August 19 through Friday, August 23	8 a.m. - midnight	8 a.m.-5 p.m.*	8 a.m-5 p.m.
Saturday, August 24	9 a.m.-midnight	9 a.m.-5 p.m.	Closed
Sunday, August 25	1 p.m.-midnight	Closed	Closed
Monday, August 26	All Libraries Return to Regular Academic Schedule		

*The following public services area will be open until 10 p.m.
Current Periodicals/Microtext

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

Core Course

Neiman, Alven M.

- A.M. Neiman. 1991. Comments of Garrison on Greene: Does Metaphysics Really Matter for Practice? *Educational Theory* 41(2):213-219.

American Studies

Giamo, Benedict F.

- B.F. Giamo. 1990. Chaplin's Gold Rush: A Comedy for the Twenties. *Connecticut Review* 12(2):37-52. Twayne, 1990. *Choice* 28(7):190-191.
- B.F. Giamo. 1991. Making Dust: The Symbolic Landscape of Homelessness. *Journal of Social Distress and the Homeless* 1(1):1-28.
- B.F. Giamo. 1991. Review of Ray Lewis White's *Winesburg, Ohio: An Exploration* (Twayne's Masterwork Studies, SS)

Economics

Kim, Kwan S.

- See under ACCOUNTANCY; Rivera, Juan M. 1991. *El Trimestre Economico* 58(229):213-232.

English

Jemielity, Thomas J.

- T.J. Jemielity. 1991. Review. Gabriel Josipovici, *The Book of God: A Response to the Bible*. *South Central Review* 8(1/Spring):119-120.

Vanden Bossche, Chris R.

- C.R. Vanden Bossche. 1991. Carlyle and the Search for Authority. Ohio State University Press, Columbus, Ohio. x+234.

Government and International Studies

Lopez, George A.

- G.A. Lopez. 1991. Data Needs and Data Sources in Human Rights Monitoring. Pages 72-85 in, A. Schmid, ed., *Monitoring Human Rights Observance*. Ploom/COMT, Leiden, Netherlands.

History

Hamlin, Christopher S.

- C.S. Hamlin. 1991. Review of C.W.S. Hartley, *A Biography of Sir Charles Hartley, Civil Engineer, (1825-1915): The Father of the Danube*. *Albion* 23(1):154-155.
- C.S. Hamlin. 1991. "Underground Manchester" at the Greater Manchester Museum of Science and Industry. *Technology and Culture* 32(1):97-101.

Music

Buranskas, Karen L.

- K.L. Buranskas and C.R. Plummer. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Ancilla College, Donaldson, Indiana.
- K.L. Buranskas and C.R. Plummer. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Blair School of Music, Vanderbilt University, Nashville, Tennessee.
- K.L. Buranskas and C.R. Plummer. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Notre Dame Department of Music, Notre Dame, Indiana.
- K.L. Buranskas and C.R. Plummer. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. University of Houston, Dudley Recital Hall, Houston, Texas.
- Plummer, Carolyn R.
- See under Buranskas, Karen L. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Ancilla College, Donaldson, Indiana.
- See under Buranskas, Karen L. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Blair School of Music, Vanderbilt University, Nashville, Tennessee.
- See under Buranskas, Karen L. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. Notre Dame Department of Music, Notre Dame, Indiana.
- See under Buranskas, Karen L. 1991. Duo Concert, Works by Boccherini, Martinu, Handel-Halvorsen and Kodaly. University of Houston, Dudley Recital Hall, Houston, Texas.

Philosophy

Ameriks, Karl P.

- K.P. Ameriks. 1991. Kant on Spontaneity: Some New Data. Pages 436-446 in, *Proceedings of the VII International Kant Kongress 1990*. de Gruyter, Berlin, Germany.

McInerny, Ralph M.

- R.M. McInerny. 1991. *Book Review of Eunuch for the Kingdom of Heaven: Women, Sexuality and the Catholic Church by Uta Ranke-Heinemann*. *Fellowship of Catholic Scholars Newsletter* 14(3):25-28.

The Graduate School Research Division

Program of Liberal Studies

Nicgorski, Walter J.

W.J. Nicgorski. 1991. Cicero's Focus: From the Best Regime to the Model Statesman. *Political Theory* 19:230-251.

W.J. Nicgorski and K.L. Deutsch, editors. 1991. Special Issue on Leo Strauss. *The Review of Politics* 53:245.

W.J. Nicgorski and K.L. Deutsch. 1991. Preface to this Special Issue. *The Review of Politics* 53:3-10.

Psychology

Cole, David A.

S. Edman, D.A. Cole and G.S. Howard. 1990. Convergent and Discriminant Validity of Faces III: Family Adaptability and Cohesion. *Family Process* 29:95-104.

Howard, George S.

G.S. Howard. 1990. Aristotle, Teleology and Modern Psychology. *Theoretical and Philosophical Psychology* 10: 31-38.

G.S. Howard. 1990. At Last! A Book on Research Methods for Studying Meaningfulness. (Review of Interpreting the Interpreters). *International Journal of Personal Construct Psychology* 3:137-141.

G.S. Howard. 1990. Narrative Psychotherapy. Pages 199-201 in, J.K. Zeig and W.M. Munion, eds., What is Psychotherapy?: Contemporary Perspectives. Jossey-Bass, San Francisco, California.

G.S. Howard. 1990. On the Construct Validity of Self-Reports: What Do the Data Say? *American Psychologist* 45:292-295.

G.S. Howard. 1990. Personal Responsibility Therapy. (Review of Personal Responsibility Counseling and Therapy: An Integrative Approach.) *Contemporary Psychology* 35:741-742.

G.S. Howard and T. Fischer. 1990. The Validity of Life-Themes. *Methods* 5:1-17.

G.S. Howard and P.G. Konstanty. 1990. An Exercise for Personality Courses on Methodological Issues for Assessment. Pages 296-305 in, V.P. Makosky, C.C. Siles, L.G. Whittemore, C.P. Landry and M.L. Skutley, eds., Activities Handbook for the Teaching of Psychology. American Psychological Association, Washington, D.C.

G.S. Howard and P.R. Myers. 1990. Philosophy of Science and Counseling Research. Pages 5-19 in, E. Watkins and L. Schneider, eds., New Directions in Counseling Research. Erlbaum, Hillsdale, New Jersey.

G.S. Howard and P.R. Myers. 1990. Predicting Human Behavior: Comparing Idiographic, Nomothetic and Agentic Methodologies. *Journal of Counseling Psychology* 37:227-233.

G.S. Howard, P.K. Dunay and M.T. Crovello. 1990. An Exercise in Construct Validation for Research Methodology Courses. Pages 157-161 in, V.P. Makosky, C.C. Siles, L.G. Whittemore, C.P. Landry and M.L. Skutley, eds., Activities Handbook for the Teaching of Psychology. American Psychological Association, Washington, D.C.

See under Cole, David A. 1990. *Family Process* 29:95-104.

See under Maxwell, Scott E. 1990. *Psychological Inquiry* 1:162-164.

Maxwell, Scott E.

S.E. Maxwell and G.S. Howard. 1990. Thoughts on Meehl's Vision of Psychological Research for the Future. *Psychological Inquiry* 1:162-164.

Theology

Cunningham, Lawrence S.

L.S. Cunningham. 1991. Matters Historical and Ethical: Religious Booknotes. *Commonweal* 118(April 19):268-271.

Weaver, F. Ellen

F.E. Weaver. 1991. La Prière Contemplative: Zen et "la prière du pauvre." Pages 101-110 in, T. Goyet, T. Hasekura, J. Mesnard, P. Sellier and T. Shiokawa, eds., Pascal Port-Royal Orient Occident: Actes du Colloque de l'Université de Tokyo 27-29 September 1988. Klincksiek, Paris, France.

Yoder, John H.

J.H. Yoder. 1990. Epilogue "Bethany was Near to Jerusalem: About Two Miles Off." Pages 201-212 in, D.B. Eller, ed., Servants of the Word Ministry in the Believers' Churches. Bretheren Press, Elgin, Illinois.

J.H. Yoder. 1990. The One Or The Many? Pages 51-64 in, D.B. Eller, ed., Servants of the Word Ministry in the Believers' Churches. Bretheren Press, Elgin, Illinois.

Ambrosiana Collection

Gabriel, Canon Astrik L.

C.A.L. Gabriel. 1991. Description of the Summa Angelica. University of Notre Dame, Notre Dame, Indiana. 23 pp.

The Graduate School Research Division

COLLEGE OF SCIENCE

Biological Sciences

- Kambhampati, Srinivas
S. Kambhampati and K.S. Rai. 1991. Variation in Mitochondrial DNA of *Aedes* Species (Diptera: Culicidae). *Evolution* 45(1):120-129.
- Kumar, Arun
A. Kumar and K.S. Rai. 1991. Chromosomal Localization and Copy Number of 18S+28S Ribosomal RNA Genes in Evolutionarily Diverse Mosquitoes (Diptera: Culicidae). *Hereditas* 113(3):277-290.
- Munstermann, Leonard E.
L.E. Munstermann. 1991. SWAT Team Success Story. *Natural History* June:61-63.
- Rai, Karamjit S.
K.S. Rai. 1991. Structural and Functional Aspects of Mosquito Genomes. Pages 52-58 in, R.C. Sobti and G. Obe, eds., *Eukaryotic Chromosomes: Structural and Functional Aspects*, Narosa Publication House, New Delhi, India.
- See under Kambhampati, Srinivas. 1991. *Evolution* 45(1):120-129.
- See under Kumar, Arun. 1991. *Hereditas* 113(3):277-290.

Chemistry and Biochemistry

- Basu, Manju
K.K. Das, M. Basu, S.C. Basu, D.H. Chou and F.B. Jungalwala. 1991. Biosynthesis in Vitro of Glc β 1-3nLcOse4Cer by a Novel Glucuronyltransferase (GlcAT-1) from Embryonic Chicken Brain. *Journal of Biological Chemistry* 266:5238-5243.
- K.K. Das, M. Basu, Z. Li, S.C. Basu and F. Jungalwala. 1990. Characterization of Solubilized GlcAT-1(UDP-GlcA: nLcOse4Cer β 1-3Glucuronyltransferase) Activity from Embryonic Chicken Brain and Its Inhibition by D-Erythro-Sphingosine. *Indian Journal of Biochemistry and Biophysics* 27(6):396-401.
- J.W. Hawes, M. Basu, B. Geraghty, S. Ghosh and S.C. Basu. 1990. Biosynthesis of Sialo-Le^x and Le^x Glycolipid by FucT-3 (GDP-Fuc:SA-nLc4 Fucosyltransferase) from Embryonic Chicken Brain. *Glycoconjugate Journal* 7:450.
- J.W. Hawes, S. Ghosh, S.S. Basu, M. Basu and S.C. Basu. 1991. Glycoprotein Nature of Purified Glycosyltransferase Involved in Sialo-Le^x and GD1a Biosynthesis. *Federation of American Societies for Experimental Biology Journal* 5:A462.
- See under Basu, Subhash C. 1990. *Federation of American Societies for Experimental Biology* 4:2140.
- See under Basu, Subhash C. 1990. *Indian Journal of Biochemistry and Biophysics* 27(6):386-395.

- Basu, Subhash C.
S.C. Basu, S. Ghosh, M. Basu, J. Hawes, K.K. Das, B.-J. Zhang, Z. Li, S.-A. Weng and C. Westervelt. 1990. Carbohydrate and Hydrophobic-Carbohydrate Recognition Sites (CARS and HYCARs) in Solubilized Glycosyltransferases. *Indian Journal of Biochemistry and Biophysics* 27(6):386-395.
- S.C. Basu, S. Ghosh, M. Basu, S.-W. Weng, K.K. Das, J.W. Hawes, Z. Li and B.-J. Zhang. 1990. Effect of Hydrophobic Moieties of Substrates on Purified Glycosyltransferase Activities. *Federation of American Societies for Experimental Biology* 4:2140.
- S. Ghosh, K.K. Das, F. Daussin and S.C. Basu. 1990. Effect of a Fatty Acid Moiety of Phospholipid and Ceramide on Purified GalT-3 (UDP-Gal:GM2 β 1-3 Galactosyltransferase) Activity from Embryonic Chicken Brain. *Indian Journal of Biochemistry and Biophysics* 27(6):379-385.
- T.J. Kelley, C. Bradshaw and S.C. Basu. 1991. Glycoprotein Nature of DNA Polymerase-alpha/Primase Complex from Embryonic Chicken Brain. *Federation of American Societies for Experimental Biology Journal* 5:A437.
- A.T. Rosado, T.J. Kelley, P. McGovern and S.C. Basu. 1990. Stability of the DNA Polymerase-alpha/Primase Complex During the S-phase of PA-3 Cells. *Federation of American Societies for Experimental Biology* 4:2294.
- See under Manju Basu. 1990. *Glycoconjugate Journal* 7:450.
- See under Manju Basu. 1990. *Indian Journal of Biochemistry and Biophysics* 27(6):396-401.
- See under Manju Basu. 1991. *Federation of American Societies for Experimental Biology Journal* 5:A462.
- See under Manju Basu. 1991. *Journal of Biological Chemistry* 266:5238-5243.
- Chetcuti, Michael J.
M.J. Chetcuti, P.E. Fanwick, S.R. McDonald and M.N. Rath. 1991. Reactions of Compounds Containing Ni-Ni, Ni-Mo, and Ni-W Bonds with Allene and 1,1-Dimethylallene. X-ray Diffraction Studies of the π -Allylic Complexes NiMo(Co)₂(μ -n³-n³-C₉H₁₂)(n⁵-C₅H₅)(n⁵-C₅H₄Me) and NiMo(μ -CO)(CO)(μ -n¹,n³-C(Me)-C(Me)-CH₂)(n⁵-C₅H₅)(n⁵-C₅H₄Me)(Ni-Mo). *Organometallics* 10:1551-1560.
- Hayes, Robert G.
R.G. Hayes and W. Eberhardt. 1991. Electron-Ion and Ion-Ion Studies of the Behavior of CS₂ upon Core Electron Excitation. *Journal of Chemical Physics* 94(10):6398-6405.
- Miller, Marvin J.
C. Ma and M.J. Miller. 1991. Asymmetric Synthesis of α -Hydroxyethyl β -Lactam Derivatives: An Approach to Thienamycin. *Tetrahedron Letters* 32(23):2577-2580.
- M.A. Williams, C.-N. Hsiao and M.J. Miller. 1991. Direct Conversion of N-Alkoxy β -Lactams to Carbapenams: Applications to the Synthesis of the Bicyclic PS-5 Keto Ester. *Journal of Organic Chemistry* 56:2688-2694.

The Graduate School Research Division

Mozumder, Asokendu

See under RADIATION LABORATORY; LaVerne, Jay A.
1991. *Radiation Physical Chemistry* 38(1):75-81.

Thomas, J. Kerry

D.Y. Chu and J.K. Thomas. 1991. Characterization of Polymers by Excited State Techniques. Pages 49-102 in, J.F. Rabek, D.Sc., Ph.D., ed., *Photochemistry and Photophysics*. CRC Press, Boca Raton, Florida.

D.Y. Chu and J.K. Thomas. 1991. Photophysical Characterization of Polyelectrolytes in the Form of Polymerized Micelles from an Ionic Surfactant with a Terminal Double Bond. *Macromolecules* 24:2212-2216.

K.C. Dowling and J.K. Thomas. 1991. Photophysical Characterization of Water-Soluble Styrene-Grafted Poly(acrylamide) Copolymers. *Macromolecules* 24:2341-2347.

R. Krasnansky and J.K. Thomas. 1991. Diffusional vs. Non-Diffusional Fluorescence Quenching at the Silica Gel Liquid-Solid and Vacuum-Solid Interfaces: Pyrene Fluorescence Quenching by Oxygen, Nitromethane and Nitropropionic Acid. *Journal of Photochemistry and Photobiology A: Chemistry* 57:81-96.

Winicur, Daniel H.

D.H. Winicur. 1991. Bitnet, Internet and Electronic Mail Lists: What Are They and How Do I Get Started? Pages 189-204 in, H.K. Wakefield and J.M. Harrison, eds., *Proceedings of Selected Sessions of the 1991 AACRAO Annual Meeting*. American Association of Collegiate Registrars and Admissions Officers, Washington, D.C.

Earth Sciences

Gutschick, Raymond C.

R.C. Gutschick and J. Rodriguez. 1990. By-the-Wind-Sailors from a Late Devonian Foreshore Environment in Western Montana. *Journal of Paleontology* 64(1):31-39.

R.C. Gutschick and J. Rodriguez. 1991. Comment on: "Medusoid" Salt Pseudomorphs. *Journal of Paleontology* 65(2):331.

R.C. Gutschick and C.A. Sandberg. 1991. Late Devonian History of Michigan Basin. Pages 181-202 in, P.A. Catacosinos and P.A. Daniels, Jr., eds., *Early Sedimentary Evolution of the Michigan Basin Special Paper 256*. The Geological Society of America, Inc., Boulder, Colorado.

R.C. Gutschick and C.A. Sandberg. 1991. Upper Devonian Biostratigraphy of Michigan Basin. Pages 155-179 in, P.A. Catacosinos and P.A. Daniels, Jr., eds., *Early Sedimentary Evolution of the Michigan Basin Special Paper 256*. The Geological Society of America, Inc., Boulder, Colorado.

C.A. Sandberg, R.C. Gutschick, M.S. Petersen, F.G. Poole and W. Ziegler. 1991. Comment on Delle Phosphatic Member: An Anomalous Phosphatic Interval in the Mississippian (Osagean-Meramecian) Shelf Sequence of Central Utah. *Geology (Geological Society of America)* 19(4):410-412.

J. Sprinkle and R.C. Gutschick. 1990. Early Mississippian Blastoids from Western Montana. *Bulletin of the Museum of Comparative Zoology, Harvard University* 152(3):89-166.

Mathematics

Shaw, Mei-Chi

M.-C. Shaw. 1991. Optimal Holder and L^p Estimates for $\bar{\partial}$ on the Boundaries of Real Ellipsoids in \mathbb{C}^n . *Transactions of the American Mathematical Society* 324:213-234.

Taylor, Laurence R.

R.C. Kirby and L.R. Taylor. 1990. A Calculation of Pin + Bordism Groups. *Commentarii Mathematici Helvetici* 65(3):434-447.

R.C. Kirby and L.R. Taylor. 1990. Pin Structures on Low-Dimensional Manifolds in "Geometry of Low-Dimensional Manifolds; 2 Symplectic Manifolds and Jones-Witten Theory." *London Mathematical Society Lecture Note Series 151*, Cambridge University Press, Pages 177-242.

Physics

Bishop, James M.

P.L. Frabetti et al., Notre Dame (J.M. Bishop, J.K. Busenitz, N.M. Cason, J.D. Cunningham, R.W. Gardner, C.J. Kennedy, E.J. Mannel, R.J. Mountain, D.L. Puseljic, R.C. Ruchti, W.D. Shepard and M.E. Zanabria) 1991. Fermilab Experiment E687: Recent Results on Charm. Pages 187-193 in, R. Baier and D. Wegener, eds., *Proceedings of the XX International Symposium on Multiparticle Dynamics 1990*. World Scientific, Singapore.

W.D. Walker, J. Whitmore, W.S. Toothacker, J.C. Hill, W.W. Neale, P. Lucas, L. Voyvodic, R. Ammar, J. Gress, J.M. Bishop, N.N. Biswas, N.M. Cason, M.C.K. Mattingly, R.C. Ruchti and W.D. Shepard. 1991. Vector Boson Production in Hadron Nuclear Collisions. *Physics Letters B* 255(1):155-158.

Biswas, Nripendra N.

See under Bishop, James M. 1991. *Physics Letters B* 255(1):155-158.

Blackstead, Howard A.

H.A. Blackstead, D.B. Pulling, P.J. McGinn and C.A. Clough. 1991. Flux-Flow in Sintered Polycrystalline $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$. *Physica C* 175:534-538.

Cason, Neal M.

See under Bishop, James M. 1991. Pages 187-193 in, R. Baier and D. Wegener, eds., *Proceedings of the XX International Symposium on Multiparticle Dynamics 1990*. World Scientific, Singapore.

See under Bishop, James M. 1991. *Physics Letters B* 255(1):155-158.

The Graduate School Research Division

Awards Received and Proposals Submitted

AWARDS RECEIVED

In the period from May 1, 1991, through May 31, 1991

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	11	519,692	13	390,991	24	910,683
Facilities and Equipment	0	0	2	848,138	2	848,138
Instructional Programs	0	0	2	15,000	2	15,000
Service Programs	1	30,000	0	0	1	30,000
Other Programs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	12	549,692	17	1,254,129	29	1,803,821

PROPOSALS SUBMITTED

In the period from May 1, 1991, through May 31, 1991

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	10	3,083,405	19	3,074,248	29	6,157,653
Facilities and Equipment	0	0	1	30,000	1	30,000
Instructional Programs	0	0	0	0	0	0
Service Programs	1	40,555	0	0	1	40,555
Other Programs	<u>0</u>	<u>0</u>	<u>1</u>	<u>968,525</u>	<u>1</u>	<u>968,525</u>
Total	11	3,123,960	21	4,072,773	32	7,196,733

The Graduate School Research Division

Awards Received

In the period From May 1, 1991, through May 31, 1991

Department or Office	Principal	Short Title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Aerospace and Mechanical Eng.	Stanisic	Development of a Manipulator Arm	South Bend Police Department	2,500 12
Aerospace and Mechanical Eng.	Batill	Flow About Cables and Cylinders with Surface Irregularities	Department of the Navy	29,941 33
Aerospace and Mechanical Eng.	Mueller	Fluid Dynamic and Acoustic Experiments on Turbomachine Rotors	Department of the Navy	50,000 33
Biological Sciences	Craig	Experimental Products Mosquito Eggs	Eli Lilly Company	10,000 12
Biological Sciences	Bumpus	Biodegradation of Pesticides	Argonne National Lab.	10,000 12
Biological Sciences	Cully, Craig	Amplification of LAC Virus	National Institute of Health	19,717 7
Civil Engineering	Ketchum	Elkhart Environmental Center	City of Elkhart	27,000 47
Chemical Engineering	Leighton	Shear-Induced Migration in Polydisperse Suspensions	Lockheed Comp.	22,294 12
Chemistry and Biochemistry	Castellino, Colpitts	Indent. of Structure-function Relationship of the Gla domain	American Heart Association-Ind.	10,000 12
Chemistry and Biochemistry	Velardo, Castellino	Tissue Type Plasminogen Activator Variants and Chimeras	American Heart Association-Ind.	11,000 12
Chemistry and Biochemistry	Thomas	Spectroscopic Methods	International Business Machines	29,000 12
Chemistry and Biochemistry	Thomas	Photochemistry	National Science Foundation	125,000 36
Chemistry and Biochemistry	Huber	Protein Building Sites on 5S rRNA	National Institute of Health	99,587 12
Chemistry and Biochemistry	Boutaud, Castellino	Urokinase Variants	American Heart Association-Ind.	11,000 12
Electrical Engineering	Berry	Disposition of Government Property	NASA - Lewis Research Center	3,210 2

The Graduate School Research Division

Mathematics	Taylor, Dwyer	Algebraic and Geometric Topology	National Science Foundation	102,000 36
Mathematics	Hu	Nonlinear Partial Differential Equations	National Science Foundation	40,197 24
Philosophy	McInerny	Politics and the Common Good In the Thought of M. Oakeshott	Lynde & Harry Bradley Foundation	30,000 8
Physics	Ruchti	Scintillating Fiber Tracking for the SSC	Purdue University	80,000 17
Physics	Marshalek	Theoretical Studies of Nuclear Structure	Department of Energy	50,000 12
Physics	Livingston	Precision Lifetime Measurements	Research Corp.	25,000 24
Physics	Aprahamian	Nuclear Structure Research	National Science Foundation	55,000 24
Psychology	Anderson	Behavior-Based Approach to Increased Sales	KitchenAid, Inc.	34,134 12
Psychology	Anderson	Development of a Model of "World Class" Service	Whirlpool Corp.	34,103 12

AWARDS FOR FACILITIES AND EQUIPMENT

Chemistry and Biochemistry	Scheidt	Rotating Anode X-Ray Diffractometer	National Institute of Health	202,000 12
Electrical Engineering	Bernstein	IBM Technical Gifts Program	International Business Machines	646,138 12

AWARDS FOR INSTRUCTIONAL PROGRAMS

Biological Sciences	Lodge	REU Supplement: Predation Herbivory and Disturbance	National Science Foundation	5,000 12
Electrical Engineering	Costello	REU Supplement in Sequential Decoding	National Science Foundation	10,000 12

AWARDS FOR SERVICE PROGRAMS

Biological Sciences	Craig	St. Joseph County Vector Surveillance Program	St. Joseph County Health Department	30,000 8
------------------------	-------	--	--	-------------

The Graduate School Research Division

Proposals Submitted

In the period May 1, 1991, through May 31, 1991

Department or Office	Principal	Short Title	Sponsor	Dollars Months
PROPOSALS FOR RESEARCH				
Aerospace and Mechanical Eng.	Batill	Digital Data Processing for Flight Flutter Testing	NASA - Ames Research Center	37,163 12
Aerospace and Mechanical Eng.	Gad-el-Hak Paolucci, et al.	Control of Bursting Events	NASA - Langley Research Center	278,405 36
Aerospace and Mechanical Eng.	Gad-el-Hak, Paolucci, et al.	Control of Bursting Events	Department of the Air Force	278,405 36
Aerospace and Mechanical Eng.	Atassi, Jumper, et. al.	Unsteady Forced Response in Turbomachines	Purdue University	170,327 12
Aerospace and Mechanical Eng.	Gad-el-Hak Paolucci, et al.	Control of Bursting Events	National Science Foundation	293,058 36
Aerospace and Mechanical Eng.	Huang	Simulation of Waterflood- induced Fracturing	Amoco Prod. Co.	78,624 24
Aerospace and Mechanical Eng.	Nelson, Arena	Control of Forebody/Wing Vortical Flows	NASA - Ames Research Center	96,719 24
Aerospace and Mechanical Eng.	Gad-el-Hak, Paolucci, et al.	Control of Bursting Events	Department of Energy	278,405 36
Aerospace and Mechanical Eng.	Huang	Simulation of Waterflood- induced Fracturing	Shell Development Co.	78,624 24
Aerospace and Mechanical Eng.	Bergle	Singular Stress Fields in Laminated Composites	National Institute Stds. & Tech.	9,936 2
Aerospace and Mechanical Eng.	Sen	U.S. Japan Cooperative Research	National Science Foundation	22,742 24
Biological Sciences	Bumpus	Biodegradation of Pesticides	Argonne National Lab	20,000 12
Biological Sciences	Bender	Human Genetics Program	Indiana State Board of Health	67,743 12
Biological Sciences	Duman, Castellino	Antifreeze Proteins	National Science Foundation	532,832 36
Chemical Engineering	Leighton	Presidential Young Investigator Award	National Science Foundation	88,423 12
Chemistry and Biochemistry	Scheidt	X-Ray and Chemical Studies of Metalloporphyrins	National Institute of Health	363,104 12

The Graduate School Research Division

Earth Sciences	Neal	Cr-Poor & Cr-Rich Megacryst Petrogenesis	National Science Foundation	133,089 24
Earth Sciences	Halfman	Suspended Solids in Lake Malawi East Africa	American Chemical Society	20,000 32
Electrical Engineering	Alcock	Development of Oxygen and pH Sensors for Aqueous Systems	Electric Power Research Institute	90,707 12
Electrical Engineering	Herro	Error-Control Coding for the Multiple Access Channel	National Science Foundation	181,573 24
Chemical Engineering	Chang	Wave Dynamics on Falling Films	Department of Energy	250,691 36
English	Vanden Bossche	Development of the Literary in the Nineteenth Century	National Endowment for the Humanities	44,610 12
Government and Intl. Studies	Arnold	The Roots of the Modern Presidency	National Endowment for the Humanities	44,610 9
Physics	Furdyna	Strain and Ordering in II-IV Semiconductors	Department of the Navy	493,426 36
Physics	Furdyna	Pseudomorphic Growth and Ordering of Semiconductors	Department of the Navy	15,000 3
Physics	Furdyna, Dobrowolska	Blue-Green Optoelectronic Devices (Brown/DARPA/URI)	Brown University	1,703,322 60
Physics	Livingston	Atomic Physics of Rydberg States in Highly-Ionized Atoms	Department of Energy	256,439 36
Physics	Furdyna	II-VI Semiconductors (NSF-MRG)	Purdue University	158,696 12
Psychology	Bergeman	Serotonin and Impulsive Aggression: Familial Correlates	Medical College of Pennsylvania	71,700 47

PROPOSALS FOR FACILITIES AND EQUIPMENT

Physics	Tanner	Absolute Calibration of Atomic PNC Measurements	National Institute Stds. & Tech.	30,000 12
---------	--------	---	----------------------------------	--------------

PROPOSALS FOR SERVICE PROGRAMS

Biological Sciences	Craig	St. Joseph County Vector Surveillance Program	St. Joseph County Health Department	40,555 8
---------------------	-------	---	-------------------------------------	-------------

PROPOSALS FOR OTHER PROGRAMS

College of Engineering	Gray, McComas, et al.	GEE of Notre Dame	National Science Foundation	968,525 60
------------------------	-----------------------	-------------------	-----------------------------	---------------

Notre Dame

R E P O R T

Volume 20, Number 19

July 12, 1991

Notre Dame Report (USPS 7070-8000) is an official publication published fortnightly during the school year, monthly in the summer, by the University of Notre Dame, Office of the Provost. Second-class postage paid at Notre Dame, Indiana.
Postmaster: Please send address corrections to: Records Clerk, Department of Human Resources, Brownson Hall, University of Notre Dame, Notre Dame, IN 46556.

Linda M. Diltz, Editor
Marten Schalm, Designer
Willa Murphy, Layout
Publications and Graphic Services
415 Main Building
Notre Dame, IN 46556
(219) 239-5337

© 1991 by the University of Notre Dame, Notre Dame, IN 46556. All rights reserved.
