

NOTRE DAME REPORT

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FACULTY NOTES

Honors

Capt. Alan R. Andrysiak, assistant professor of aerospace studies, was honored as the Outstanding Advisor (Region VI) for Air Force ROTC's Arnold Air Society (AAS) at the society's national convention in Phoenix, Ariz. AAS is the service oriented adjunct to the Air Force commissioning program. The local chapter, the Benjamin D. Foulois Squadron, has been active in many local projects; among the most successful are activities to support former POW/MIA's in Michiana and hosting Kid's Field Day to provide a day's outing for area 'at-risk' children.

Hafiz M. Atassi, professor of aerospace and mechanical engineering and director of the Center for Applied Mathematics, has been named "Chevalier dans l'Ordre des Palmes Academique" (Knight in the Order of Academic Palms) by the Prime Minister of the Republic of France. Decree of July 16, 1993, Official Journal of the Republic of France.

Mohamed Gad-el-Hak, professor of aerospace and mechanical engineering, has been appointed as Professeur Exceptionnel at the Université de Poitiers, France. He will be conducting research in the Laboratoire de Mécanique des Fluides at that university during the summer.

Scott Mainwaring, professor of government and international studies, was appointed to the editorial board of the *Latin American Research Review* for 1994-96.

Marvin J. Miller, professor of chemistry and biochemistry, has been awarded the 1994 Shilts/Leonard Teaching Award in the College of Science. A member of the Notre Dame faculty since 1977, Miller teaches organic chemistry for premedical undergraduates and supervises organic chemistry seminars as well as graduate research. The Shilts/Leonard award was instituted in 1983 to memorialize Rev. James L. Shilts, a longtime Notre Dame astronomer and astrophysics professor who died in 1982. The award was endowed by Eugene T. Leonard, a surgeon and 1940 alumnus of the University.

Rev. Joseph L. Walter, C.S.C., chairman of preprofessional studies and associate professor of chemistry, for his services to Alpha Epsilon Delta as its past president for 12 years, was unanimously elected honorary national president for life at the national convention of Alpha Epsilon Delta, the honorary premedical society, in Tampa, Fla., March 17-20.

Activities

Mark S. Alber, assistant professor of mathematics, gave a talk titled "Solitons and Billiard Solutions for an Integrable Shallow Water Equation" at the University of California in Berkeley, Calif., March 23.

J. Douglas Archer, associate librarian, gave the invited lecture "The Brethren Love Feast" at the Evangel Heights United Methodist Church in South Bend, Ind., March 23.

Supriyo Bandyopadhyay, associate professor of electrical engineering, presented the papers titled "Nonlinear Optics with Nanostructures" and "Selective Area Nano Deposition: A Novel Fabrication Technique for Extreme Quantum Confined Structures and Novel Computing Elements" at the second international conference and workshop on Nanophase Materials held in Davos, Switzerland, March 12-17.

Manju Basu, associate faculty fellow in chemistry and biochemistry, presented the paper "Characterization of Three Glycosyltransferases Involved in SA-Le^x Biosynthesis and their Cloning from Human Colon Carcinoma Cells" at the eighth Rinshoken international conference on Frontier in Glycobiology and Glycotechnology held in Tokyo, Japan, Sept. 28-30.

Subhash C. Basu, professor of chemistry and biochemistry, presented the invited talk "Biosynthesis of Le^x and SA-Le^x Glycolipids in Embryonic Chicken Brain-Purification and Cloning of CalT-4 and SAT-3" at the international symposium on New Development of Glycobiology held in Tokyo, Japan, Sept. 28-30. He presented the seminar "Enzymatic Characterization and Cloning of alpha2-sialyltransferase (SAT-3) Involved in SA-Le^x Biosynthesis" at the University of Tokyo Department of Pharmaceutical Sciences in Tokyo, Japan, Oct. 1. He chaired a session on "Modulation of Glycoconjugate Biosynthesis" and delivered a lecture on "Cloning of SAT-3 from Human Colon Carcinoma Colo-205 Cells and Its Role in the Biosynthesis of SA-Le^x Glycoconjugates" at the 22nd annual meeting of the Society for Glycoconjugates in San Juan, Puerto Rico, Nov. 17-20. Basu gave an invited seminar titled "Biosynthesis of Sialo-Le^x and Molecular Biology of the Glycosyltransferases" in the Department of Pediatrics and Human Genetics at the Children's Hospital Medical Center in Cincinnati, Ohio, March 10.

Joseph P. Bauer, professor of law, was a member of the joint American Bar Association/Association of American Law Schools Sabbatical Site Reinspection Team at the Hofstra Law School in Hempstead, Long Island, N.Y., March 6-9. He was also designated as summarian by the AALS for the team.

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Raymond M. Brach, associate professor of aerospace and mechanical engineering, presented a paper titled "Uncertainty in Accident Reconstruction Calculations" and participated in a panel discussion which debated the topic of "Qualifications to Practice Accident Reconstruction" in the 1994 international congress of the Society of Automotive Engineers in Detroit, Mich., Feb. 28–March 2. He delivered a lecture titled "Impact of Aerosol Particles — Theoretical and Experimental Results" to the Aerospace Engineering Department at the Technical University in Munich, Germany, March 8. He lectured on "Modelling of Impacts for Multibody Dynamics at the Institute for Mechanics of ETH-Zurich, the Swiss Federal Institute of Technology in Zurich, Switzerland, March 10.

Robert J. Brandt, professional specialist in architecture, delivered an invited lecture on past and current sculptural/furniture designs at the University of Southern Indiana's Department of Art in Evansville, Ind., March 4.

Joan F. Brennecke, assistant professor of chemical engineering, presented a plenary lecture titled "Influence of Local Solvation on Reactions in Supercritical Fluids" at the 49th Okazaki Conference "Clustering in Supercritical Fluids" at the Institute of Molecular Science in Okazaki, Japan, March 18.

Robert W. Clausen, guest assistant professor of biological sciences, presented an invited lecture titled "AIDS Here, AIDS There, AIDS Everywhere" as a part of the continuing Medical Education Program of Saint Joseph's Medical Center in South Bend, Ind., Feb. 16. He conducted a workshop titled "AIDS — We Do Not Stand Alone" as part of the fifth annual Young Adult Conference of the Office of Young Adults of the Archdiocese of Boston in Boston, Mass., March 20.

Roberto A. DaMatta, Joyce professor of anthropology, gave the Aula Magna, the inaugural lecture — the first class of the academic year, at the Federal Fluminense University in Niteroi, Rio de Janeiro, Brazil, March 18.

Fabio B. Dasilva, professor of sociology, organized, chaired the session and presented the leading paper titled "Her Voices: Hermeneutics of the Feminine" at the annual meeting of the Midwest Sociological Society in St. Louis, Mo., March 10–13. He organized and chaired a symposium on "Continental Feminist Theory" and was the discussant for the session "Comparative-Historical Sociology" at that meeting.

William G. Dwyer, professor of mathematics, gave the talk titled "Topological K-theory of Algebraic K-theory Spaces" at the West Coast Topology Conference held at Stanford University in Palo Alto, Calif., March 19–20.

Guillermo Ferraudi, professional specialist in the Radiation Laboratory, gave the invited lecture "Manipulation of Thermal and Photochemical Reactions with Double-Pulsed Irradiations of Reaction Intermediates and Excited States" at the University of LaPlata, Argentina, March 15. He presented "Reactions of Radical Coordinates to Transition Metal Ions" to the Department of Chemistry at the University of LaPlata, Argentina, March 18, to the Atomic Energy Commission in Argentina, March 22, and to the Department of Chemistry at the University of Santiago de Chile, Chile, April 16. He lectured on "Photochemical and Photophysical Reactions of Re(I) Complexes" to the Chemistry Department at the University of Buenos Aires, Argentina, March 28. He presented the invited plenary lecture "Magnetic Field Effects on the Rate of Reactions with Coordination Complexes" at the fourth Latin American meeting on Photochemistry and Photobiology in Valparaiso, Chile, April 12–15.

Paula Higgins, associate professor of music, delivered the invited paper "Love and Death in the Fifteenth-Century Motet: A Reading of Busnoys's *Anima mea liquefacta est/ Stirps Jesse*" at the conference Hearing the Motet: A Conference on the Motet in the Middle Ages and Renaissance held at Washington University in St. Louis, Mo., Feb. 13–14.

Gilbert Loescher, professor of government and international studies, addressed the 1994 North American Reunion of Oxford University alumni on Refugees and the Migration of Peoples at the Waldorf-Astoria Hotel in New York, N.Y., March 19.

John M. LoSecco, professor of physics, gave the invited talk "The Search for Exotic Mesons" at the Laboratory of Nuclear Studies Journal Club, Physics Department, at Cornell University in Ithaca, N.Y., March 25.

Scott Mainwaring, professor of government and international studies, gave a paper on "Presidentialism and Democracy in Latin America" and served as a discussant on a panel on "Argentina's Urban Poor: Strategies for Survival in a Neoliberal Age" at the XVIII international congress of the Latin American Studies Association in Atlanta, Ga., March 10–12.

Rev. Wilson D. Miscamble, C.S.C., chairperson and associate professor of history, presented "George F. Kennan and the Foreign Policy Making Process" at the Miller Center of Public Affairs at the University of Virginia in Charlottesville, Va., March 17. He presented "Foreign Policy as an Issue" at the 25th annual student symposium sponsored by the Center for the Study of the Presidency in Washington, D.C., March 19.

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G. Felicitas Munzel, assistant professor in the Program of Liberal Studies, presented the invited paper "Emile as the Aesthetic Idea of Humanity" at the 25th anniversary meeting of the American Society for Eighteenth Century Studies in Charleston, S.C., March 9-13. She was awarded a 1994 Research Support Summer Stipend by the Institute for Scholarship in the Liberal Arts, University of Notre Dame.

Clive R. Neal, assistant professor of civil engineering and geological sciences, co-chaired the session "Composition of the Mantle" at the American Geophysical Union fall meeting in San Francisco, Calif., Dec. 6-10. At that meeting he presented the papers: "Using Laser Probe ICP-MS to Analyse Petrographic Thin Sections for Trace Elements: A Preliminary Report," "Cr-poor Megacrysts: Cognate or Xenocrystal?" "Petrogenesis of Cr-poor and Cr-rich Megacrysts: Separate Parental Melts from a Single Source?" "Formation of an Oceanic Plateau: Speculation from Field and Geophysical Observations of the Ontong Java Plateau" and "Depth of Emplacement of Oceanic Plateau Basaltic Lavas, Ontong Java Plateau and Malaita, Solomon Islands. Implications for the Formation of Oceanic LIPs?" He presented an invited lecture titled "The Birth and Death of the Earth's Moon" at the University of Texas in Arlington, Texas, March 10. He presented the paper "Utilization of ICP-MS Analytical Techniques for Determination of Siderophile-Element Abundances: Potential Uses for the Planetary Geochemist" at the 25th Lunar and Planetary Science Conference at Johnson Space Center in Houston, Tex., March 14-18.

María Rosa Olivera-Williams, associate professor of Romance languages and literatures, read an invited paper titled "Alfonsina Storni: Otra lectura" at the panel titled "Fundadoras de la poesía hispanoamericana" during the Latin American Studies Association XVIII International Congress held in Atlanta, Ga., March 11.

Irwin Press, professor of anthropology, presented an invited address titled "Knowing Patient Culture is Knowing Your Market" to the annual meeting of the Academy for Health Services Marketing in San Diego, Calif., Feb. 22.

John E. Renaud, Clark Equipment assistant professor of aerospace and mechanical engineering, served on the National Science Foundation's Engineering Design Review Panel which reviewed the NSF Division of Design and Manufacturing System's Research Initiation and Research Equipment Grant Proposals held at the National Science Foundation in Arlington, Va., March 22.

Mark R. Schurr, visiting assistant professor of anthropology, participated in a round table discussion of the topic "Recent Research on the Connection Between Prehistoric Tribes and Today's Historic Tribes" as part of the winter council meeting of the Minnetrista Council for Great Lakes Native American Studies in Peoria, Ill., Feb. 27.

Thomas L. Shaffer, Short professor of law, gave one of two keynote addresses at the Conference of Religiously Affiliated Law Schools at Marquette University in Milwaukee, Wis., March 18.

J. Eric Smithburn, professor of law, served as a team leader and faculty member at the 1994 Indiana Trial Advocacy Program sponsored by the National Institute for Trial Advocacy and the Indiana Continuing Legal Education Forum at Indiana University School of Law in Indianapolis, Ind., March 13-19.

Billie F. Spencer Jr., associate professor of engineering and geological sciences, presented an invited lecture titled "Integration of the Backward and Forward Kolmogorov Equations and the Pontriagin-Vitt Equation by the Finite Element Method" and chaired a technical session and a panel session at the international workshop on Numerics for Perturbed Dynamical Systems in Ames, Iowa, March 6-10.

J. Kerry Thomas, Nieuwland professor of chemistry, presented the address, "Molecular Spying on the Grand Scale" upon receiving an award in Colloid and Surface Science at the American Chemical Society meeting in San Diego, Calif., March 12-18.

Jay Tidmarsh, associate professor of law, presented an invited lecture titled "The Civil Justice Reform Act in the Northern District of Indiana" at the Indiana Continuing Legal Education Forum in Indianapolis, Ind., March 25.

Kathleen Maas Weigert, associate professional specialist and concurrent associate professor of American studies and peace studies, conducted a workshop on "Involving Faculty: Teaching, Learning and the Community" at the conference on Mobilizing for Community Service and Learning at the University of Michigan in Ann Arbor, Mich., March 4.

ADMINISTRATORS' NOTES

Activities

Alan S. Bigger, director of Building Services, had an article titled "A Blueprint for Construction: Building Buildings that Are Maintainable" published in the February 1994 issue of *Executive Housekeeping Today*, a trade journal distributed to professionals in the fields of building services and housekeeping at universities, schools, motels, hospitals, etc. He was invited by the Association of Higher Education Facilities Officers to be part of a Facilities Management Evaluation team to conduct a physical facilities evaluation of the National Gallery of Art in Washington, D.C., March 6-10. The evaluation included a four-day assessment of facilities issues involving the interior and exterior structures of the gallery.

Mike W. Miller, consultant/analyst, Office of University Computing, was co-presenter of a session titled "Connecting to Students Where They Live: Residence Computing Programs" at the 21st ACM SIGUCCS Computer Services Management Symposium held in St. Louis, Mo. March 16-18.

Shiree S. Moreland, assistant director for information services, Office of University Computing, chaired a panel titled "The Expertise Connection; Developing Support Partnerships" with representatives from Ohio State University and Clemson University at the Special Interest Group — University and College Computer Services Management Symposium in St. Louis, Mo., March 15-18. She introduced Notre Dame's Departmental Computer Consultant Program to technology leaders from various colleges and universities throughout the country.

Rev. Peter D. Rocca, C.S.C., assistant vice president for student services, made a presentation on the Liturgy of the Hours to the Holy Cross religious of Notre Dame High School in Niles, Ill., March 10. As guest lecturer, he addressed the topic "Liturgical Theology Revisited" for the Gary Regional Area Catholic Educational System at Marquette High School in Michigan City, Ind., March 14. He gave presentations on "Liturgy: Back to the Basics" to participants of the Institute for Catechetical Formation at Marian High School in Mishawaka, Ind., March 18, and at Bishop Dwenger High School in Fort Wayne, Ind., March 25. Rocca made a presentation on "Inclusive Language in Liturgical Celebrations" to the staff and students of Old College, Notre Dame, Ind., March 22.

Timothy Truesdell, director of development research, served on the faculty of the winter institute for Advancement Services Professionals of the Council for Advancement and Support of Education in Corpus Christi, Tex., March 24-27.

University Committee on Libraries January 10, 1994

The meeting was called to order at 3 p.m. in the office of the director of libraries by the chairman, W. Robert Scheidt. Also in attendance were Thomas Fehlner, John Halloran, Robert Miller, Marsha Stevenson and secretary Melodie Eiteljorge.

The minutes of the meeting of November 2 were approved with a correction.

Because the full committee was not present, it was not possible to set meeting dates for the semester. However, the next meeting was set for Monday, February 21, 3 p.m. in the director's office.

Robert Miller asked if the committee would have any objections to eliminating the subject card catalog on the first floor of the Hesburgh Library in order to free some reading space. Nothing has been added to the catalog in approximately four years, although it does contain some records that have not been converted. No objections were stated.

The post-Colloquy Ad Hoc Committee on University Libraries has set up a steering committee and four subcommittees on: books; journals and other current information sources; the library of the future; and other. A report is due to the Academic Council by the first of April. There is a separate committee on the Law Library. Thomas Fehlner, who is serving on the ad hoc committee and co-chairing one of its subcommittees, observed that the best way to prepare for the future is to provide sufficient size and flexibility of library faculty to address whatever issues arise in the course libraries follow.

Marsha Stevenson has been serving as chair of the Libraries' Space Planning Task Force, which will submit its final report and recommendations in the near future. She noted that libraries basically divide space among collections, readers and staff. Notre Dame's libraries are at capacity for collections. The task force will recommend regaining space in the basement of the Hesburgh Library and installing compact shelving in approximately half of that area. It will be necessary to determine what kinds of material should be moved to compact shelving.

John Halloran asked if the library has a policy on weeding material from the collections. Stevenson replied that research libraries generally do very little weeding.

There being no further business, the meeting adjourned at 4:05 p.m.

Respectfully submitted,

Melodie G. Eiteljorge
Secretary

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Current Publications and Other Scholarly Works

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

COLLEGE OF ARTS AND LETTERS

American Studies

Schmuhl, Robert P.

- R.P. Schmuhl. 1994. 1993: Clinton's Roller-Coaster Year. *Chicago Tribune* 147(20):11, Section 1.
R.P. Schmuhl. 1994. Future Shock: In 1996, 'March Madness' Turns to Political Insanity. *Chicago Tribune* 147(74):13, Section 1.
R.P. Schmuhl. 1994. In Year Two, Clinton Needs a Smoother Ride. *The Philadelphia Inquirer* 329(17):15, Section A.

Anthropology

Schurr, Mark R.

- M.J. Schoeninger and M.R. Schurr. 1994. Interpreting Carbon Stable Isotope Ratios. Pages 54-66 in, S. Johannessen and C.A. Hastorf, eds., *Corn and Culture in the Prehistoric New World*. Westview Press, Boulder, Colorado.

Core Course

Neiman, Alven M.

- A.M. Neiman. 1994. Engaging Newman on the Contemporary University. Review of *The Idea of the University: A Reexamination*, by J. Pelikan. *The Review of Politics* 56(Winter):180-182.
A.M. Neiman. 1993. Rorty, Irony, Education. *Studies in Philosophy and Education* 12:205-209.

Economics

Wolfson, Martin H.

- M.H. Wolfson. 1993. Corporate Restructuring and the Budget Deficit Debate. *Eastern Economic Journal* 19(4):495-519.

Government and International Studies

Väyrynen, Raimo

- R. Väyrynen. 1994. Crisis Management and Preventive Diplomacy after the Cold War. Pages 71-103 in, D. Kim, S.-E. Moon and C.M. Lee, eds., *The New World Order and Korea. Challenges and Prospects towards the Year 2000*. The Korean Association of International Studies, Seoul, Korea.

Philosophy

Loux, Michael J.

- M.J. Loux. 1994. Aristotle and Parmenides: An Interpretation of Physics A.8. Pages 281-319 in, *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, Volume VIII.

McInerny, Ralph M.

- R.M. McInerny. 1994. *Mom and Dead*. Atheneum, New York, New York. 214 pp.

Program of Liberal Studies

Crowe, Michael J.

- M.J. Crowe. 1994. *A History of Vector Analysis: The Evolution of the Idea of a Vectorial System*. Dover Publications, Inc., New York, New York. xviii + 270 pp. Reprint of the 1985 edition with Publisher's Note on the book being awarded a Jean Scott Prize.
M.J. Crowe. 1994. *Modern Theories of the Universe from Herschel to Hubble*. Dover Publications, Inc., New York, New York. xii + 435 pp.

Romance Languages and Literatures

Anadón, José.

- J. Anadón. 1993. Colonialismo lingüístico y defensa del indígena: El concepto *bárbaro*. Pages 173-209 in, *Ruptura de la conciencia hispanoamericana*. Fondo de Cultura Económica, Madrid, Spain.
J. Anadón, ed. 1993. *Ruptura de la conciencia hispanoamericana*. Fondo de Cultura Económica, Madrid, Spain. 214 pp.

Olivera-Williams, María R.

- M.R. Olivera-Williams. 1994. *Los caminos de Paxil: mito e historia*. Pages 85-94 in, A. Mondragón, ed., *Cambios Estéticos y Nuevos Proyectos Culturales en Centroamérica: Testimonios, entrevistas y ensayos*. Literal Books, Washington, DC.
M.R. Olivera-Williams. 1994. *Reseña: Abril Trigo. Caudillo, estado, nación. Literatura, historia e ideología en el Uruguay*. Pages 87-88 in, G. Rojo, ed., *Hispanic Culture on the Pacific Coast of the Americas: From Chilenos to Chicanos*. The University Press of California State University, Long Beach, California.
M.R. Olivera-Williams. 1993. "El derrumbamiento" de Armonía Somers y "El ángel caído" de Cristina Peri-Rossi: dos manifestaciones de la narrativa imaginaria." *Revista Chilena de Literatura* 42:173-181.

Sociology

Welch, Michael R.

- T.A. Petee, T.F. Milner and M.R. Welch. 1994. Levels of Social Integration in Group Contexts and the Effects of Informal Sanction Threat on Deviance. *Criminology* 32(1):85-106.

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Theology

- Yoder, John H.
J.H. Yoder. 1993. Three Unfinished Pilgrimages (Barth, King, Merton). *Faith and Freedom* 2(4):14-18.

COLLEGE OF SCIENCE

Biological Sciences

- Esch, Harald E.
B. Heinrich and H.E. Esch. 1994. Thermoregulation in Bees. *American Scientist* 82:164-170.
Kulpa, Charles F., Jr.
R. Boopathy, J. Manning, C. Montemagno and C.F. Kulpa, Jr. 1994. Metabolism of 2,4,6-Trinitrotoluene by a *Pseudomonas* Consortium under Aerobic Conditions. *Current Microbiology* 28:131-137.
Lamberti, Gary A.
G.A. Lamberti. 1993. Grazing Experiments in Artificial Streams. *Journal of the North American Benthological Society* 12(4):337-342.
G.A. Lamberti and A.D. Steinman, eds. 1993. Research in Artificial Streams: Applications, Uses and Abuses. *Journal of the North American Benthological Society* 12(4):313-384.

Chemistry and Biochemistry

- Basu, Manju
M. Basu, S.S. Basu, T. Li, H. Tang and S.C. Basu. 1993. Biosynthesis and Regulation of Le^x and SA-Le^x Glycolipids in Metastatic Human Colon Carcinoma Cells. *Indian Journal of Biochemistry and Biophysics* 30:324-332.
See under Basu, Subhash C. 1993. *Glycobiology* 3:531.
See under Basu, Subhash C. 1993. *Indian Journal of Biochemistry and Biophysics* 30:315-323.
Basu, Subhash C.
S.C. Basu, S.S. Basu, M. Basu and Z. Li. 1993. Cloning of SAT-3 from Human Colon Carcinoma Colo-205 Cells and Its Role in the Biosynthesis of SA-Le^x Glycoconjugates. *Glycobiology* 3:531.
T.J. Kelley, S. Moghaddas, R. Bose and S.C. Basu. 1993. Inhibition of Immunopurified DNA Polymerase-Alpha from PA-3 Prostate Cells by Platinum (II) Anti-Tumor Drugs. *Cancer Biochemistry and Biophysics* 13:135-146
S.C. Basu, S. Ghosh, S.S. Basu, J.W. Kyle, T. Li and M. Basu. 1993. Regulation of Expression of Cell Surface Neo-Lactoglycolipids and Cloning of Embryonic Chicken Brain GalT-4. *Indian Journal of Biochemistry and Biophysics* 30:315-323.
See under Basu, Manju. 1993. *Indian Journal of Biochemistry and Biophysics* 30:324-332.

Castellino, Francis J.

- V.S. De Serrano and F.J. Castellino. 1994. Role of the Strictly Conserved Tryptophan-25 Residue in the Stabilization of the Structure and in the Ligand Binding Properties of the Kringle 2 Domain of Tissue-Type Plasminogen Activator. *Biochemistry* 33:1340-1344.
A. Jhingan, L. Zhang, W.T. Christiansen and F.J. Castellino. 1994. The Activities of Recombinant γ -Carboxy-glutamic-Acid-Deficient Mutants of Activated Human Protein C toward Human Coagulation Factor Va and Factor VIII in Purified Systems and in Plasma. *Biochemistry* 33:1869-1875.
L. Zhang and F.J. Castellino. 1994. The Binding Energy of Human Coagulation Protein C to Acidic Phospholipid Vesicles Contains a Major Contribution from Leucine 5 in the γ -Carboxyglutamic Acid Domain. *Journal of Biological Chemistry* 269(02/04/94):3590-3595.
Fehlner, Thomas P.
T.P. Fehlner, V. Calvo-Perez and W. Cen. 1993. On the Role of PES Data in the Identification of Metal-Metal Charge Transfer Bands in Clusters of Clusters. *Journal of Electron Spectroscopy and Related Phenomena* 66:29-36.
Freeman, Jeremiah P.
S.V. D'Andrea, S. Zhao, S.A. Mizzak, J.P. Freeman and J. Szmuszkovicz. 1994. A cis 1,2-Diamine from the Stereoselective Reduction of an α -Amino Enamine. *Organic Preparations and Procedures International Briefs* 26(1):114-118.
Szmuszkovicz, Jacob
See under Freeman, Jeremiah P. 1994. *Organic Preparations and Procedures International Briefs* 26(1):114-118.

Mathematics

- Kang, Seok-Jin
S.-J. Kang. 1994. Generalized Kac-Moody Algebras and the Modular Function j. *Mathematische Annalen* 298:373-384.
Rosenthal, Joachim J.
J. Rosenthal. 1994. On Dynamic Feedback Compensation and Compactification of Systems. *SIAM J. Control Optim* 32(1):279-296.
J.J. Rosenthal, M.K. Sain and X. Wang. 1994. Topological Considerations for Autoregressive Systems with Fixed Kronecker Indices. *Circuits, Systems and Signal Processing* 13(2-3):295-308.
Sommese, Andrew J.
M.C. Beltrametti and A.J. Sommese. 1993. Special Results in Adjunction Theory in Dimension Four and Five. *Arkiv for Matematik* 31:197-208.
Wong, Warren J.
W.J. Wong. 1994. Bilinear and Quadratic Maps, and Sone p-Groups of Class 2. *Journal of Algebra* 163(2):516-537.

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Physics

- Chagnon, Paul R.
P.R. Chagnon. 1994. Optics for People Stuck in Traffic: Stress Patterns. *The Physics Teacher* 32:166-167.
P.R. Chagnon. 1993. Animated Displays III: Mechanical Puzzles. *The Physics Teacher* 31:32-37.
P.R. Chagnon. 1993. Animated Displays IV: Linear Polarization. *The Physics Teacher* 31:489-499.
Cushing, James T.
J.T. Cushing. 1994. Review of Niels Bohr: His Heritage and Legacy, by J. Faye. *Philosophy of Science* 61:149-150.

COLLEGE OF ENGINEERING

Aerospace and Mechanical Engineering

- Atassi, Hafiz M.
H.M. Atassi, J. Fang and S. Patrick. 1993. Direct Calculation of Sound Radiated From Bodies in Nonuniform Flows. *Journal of Fluids and Engineering* 115:573-580.
Corona, Edmundo
S. Kyriakides, E. Corona and F.J. Fischer. 1994. On the Effect of the U-O-E Manufacturing Process on the Collapse Pressure of Long Tubes. *Journal of Engineering for Industry* 116:93-100.
Renaud, John E.
J.E. Renaud. 1993. Multidisciplinary Technology Development: A Comparative Investigation of Integrated Aerospace Vehicle Design Tools. D.P. Schrage, ed., Proceedings of the Workshop on High Speed Civil Transport Challenges and Opportunities for Multidisciplinary Design Optimization. Aerospace Systems Design Laboratory, School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, Georgia.
Stanisic, Michael M.
S.J. Remis and M.M. Stanisic. 1993. Design of a Singularity-Free Articulated Arm Subassembly. *IEEE Transactions on Robotics and Automation* 9(6):816-824.

Chemical Engineering

- Chang, Hsueh-Chia
See under Wolf, Eduardo E. 1994. *Physical Review Letters* 72:1459-1462.
Wolf, Eduardo E.
F. Qin, E.E. Wolf and H.-C. Chang. 1994. Controlling Spatio-Temporal Patterns on a Catalytic Converter. *Physical Review Letters* 72:1459-1462.

Civil Engineering and Geological Sciences

- Gaillard, Jean-Francois
J.-C. Relexans, C. Rabouille, P. Treguer, M.-A. Vincendeau and J.-F. Gaillard. 1994. Early Diagenesis of Organic Matter in Deep Sea Sediments of the Indian Sector of the Southern Ocean. *EOS, Transaction, American Geophysical Union* 75(3):219.
R. Schader and J.-F. Gaillard. 1994. Modelling Iron Cycling in Eutrophic Lake. *EOS, Transactions, American Geophysical Union* 75(3):110.
J.-F. Gaillard, P. Treguer and the ANTARES I Cruise Party. 1994. Preliminary Results from the ANTARES I Cruise: The French Contribution to Southern-JGOFS. *EOS, Transaction, American Geophysical Union* 75(3):199.
C. Rabouille, P. Treguer, M.-A. Vincendeau and J.-F. Gaillard. 1994. Silica Recycling and Burial in Deep Sea Sediments from the Southern Indian Ocean. *EOS, Transaction, American Geophysical Union* 75(3):200.
J.-F. Gaillard and P. Treguer. 1993. JGOFS-France Launches Southern Ocean Program with ANTARES I Cruise. *U.S. JGOFS News (JGOFS-Joint Global Ocean Flux Study)* 5(2):11-12.
Gray, Kimberly A.
K.A. Gray, P.V. Kamat, U. Stafford and M.S. Dieckmann. 1994. Mechanistic Studies of Chloro- and Nitrophenolic Degradation of Semiconductor Surfaces. Pages 399-408 in, G.R. Helz, R.G. Zepp and D.G. Crosby, eds., Aquatic and Surface Photochemistry. Lewis, Boca Raton, Florida.
D.C. Schmelling and K.A. Gray. 1993. Feasibility of Photocatalytic Degradation of TNT as a Single or Integrated Treatment Process. Pages 625-632 in, D. Ollis and H. Al-Ekabi, eds., Photocatalytic Purification and Treatment of Water and Air. Elsevier, Amsterdam, The Netherlands.
K.A. Gray, U. Stafford, M.S. Dieckmann and P.V. Kamat. 1993. Mechanistic Studies in TiO₂ Systems: Photocatalytic Degradation of Chloro- and Nitrophenols. Pages 455-472 in, D. Ollis and H. Al-Ekabi, eds., Photocatalytic Purification and Treatment of Water and Air. Elsevier, Amsterdam, The Netherlands.
Kirkner, David J.
See under Electrical Engineering; Porod, Wolfgang. 1994. *Journal of Applied Physics* 75(5):2545-2554.
Makris, Nicos
N. Makris. 1994. Generalized Differentiation and the Complex Memory of Structures. *Fractals* 2(6):277-282.
Neal, Clive R.
L.A. Taylor and C.R. Neal. 1993. Comment on Trace-Element Crystal Chemistry of Mantle Eclogites, by F.A. Caporuscio and J.R. Smyth. *Contributions to Mineralogy and Petrology* 113:280-284.

THE GRADUATE SCHOOL OFFICE OF RESEARCH

C.R. Neal and L.A. Taylor. 1993. Catalog J Apollo 17 Rocks, Volume 2 - Central Valley, Part I. NASA/Johnson Space Center, JSC Publication #26088, Houston, Texas.

Computer Science and Engineering

Chen, Ziyi Danny

M.J. Atallah and D.Z. Chen. 1993. On Parallel Rectilinear Obstacle - Avoiding Paths. *Computational Geometry: Theory and Applications* 3:307-313.

Z.D. Chen. 1993. Optimally Computing the Shortest Weakly Visible Subedge of a Simple Polygon. Pages 323-332 in, Lecture Notes in Computer Science, Volume 762: Proceedings of the Fourth International Symposium on Algorithms and Computation. Springer-Verlag.

Electrical Engineering

Porod, Wolfgang

M. Chen, W. Porod and D.J. Kirkner. 1994. Couple Finite Element/Boundary Element Method for Semiconductor Quantum Devices with Exposed Surfaces. *Journal of Applied Physics* 75(5):2545-2554.

Sain, Michael K.

See under College of Science, Mathematics; Rosenthal, Joachim J. 1994. *Circuits, Systems and Signal Processing* 13(2-3):295-308.

COLLEGE OF BUSINESS ADMINISTRATION

Finance and Business Economics

Bergstrand, Jeffrey H.

J.H. Bergstrand, T.F. Cosimano, J.W. Houck and R.G. Sheehan. 1994. The Changing Distribution of Income in an Open U.S. Economy. North-Holland, New York, New York. 385 pp.

Cosimano, Thomas F.

See under Bergstrand, Jeffrey H. 1994. The Changing Distribution of Income in an Open U.S. Economy.

Sheehan, Richard G.

See under Bergstrand, Jeffrey H. 1994. The Changing Distribution of Income in an Open U.S. Economy.

Management

Houck, John W.

See under Finance and Business Economics; Bergstrand, Jeffrey H. 1994. The Changing Distribution of Income in an Open U.S. Economy.

Marketing Management

Gaski, John F.

J.F. Gaski. 1994. A Three-Dimensional Conceptualization of Interorganizational Power. *International Journal of Management* 11(1):539-549.

HELEN KELLOGG INSTITUTE FOR INTERNATIONAL STUDIES

Pelton, Robert S., CSC

R.S. Pelton, CSC. 1994. From Power to Communion. University of Notre Dame Press, Notre Dame, Indiana. 112 pp.

R.S. Pelton, CSC. 1993. Report of Joint Convocation on Small Faith Communities. *International Papers in Pastoral Ministry* 4(3):1-5.

RADIATION LABORATORY

Hug, Gordon L.

B. Marciniak and G.L. Hug. 1994. Energy Transfer Processes in the Quenching of Triplet States of Organic Compounds by 1,3-diketones of Lanthanides(III) and Magnesium(II) in Acetonitrile Solution. Laser Flash Photolysis Studies. *Journal of Photochemistry and Photobiology A: Chemistry* 78:7-13.

Kamat, Prashant V.

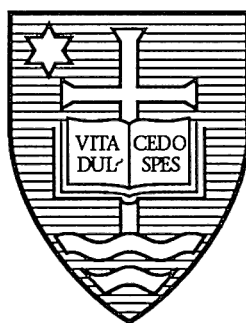
See under College of Engineering, Civil Engineering and Geological Sciences; Gray, Kimberly A. 1994. Pages 399-408 in, Aquatic and Surface Photochemistry.

See under College of Engineering, Civil Engineering and Geological Sciences; Gray, Kimberly A. 1993. Pages 455-472 in, Photocatalytic Purification and Treatment of Water and Air.

UNIVERSITY LIBRARIES

Bessler, Joanne M.

J.M. Bessler. 1994. Putting Service into Library Staff Training. American Library Association, Chicago, Illinois. vi + 72 pp.



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