

CURRICULUM VITAE

PRAKASH BHARARA

Work Address Department of Biology and Chemistry, University of Montevallo, Montevallo AL 35115

E-Mail Address Bharara@Montevallo.edu

EDUCATION

Ph.D. 1975 Rajasthan University "ORGANIC DERIVATIVES OF TITANIUM AND ZIRCONIUM"

M.S. 1970 Rajasthan University Chemistry: Organic, Physical, Analytical and Inorganic as Special Paper

B.S. 1968 Rajasthan University Physics, Chemistry, and Mathematics

EXPERIENCE

2000-Pres Professor, University of Montevallo, Montevallo, AL 35115

1995-2000 Associate Professor, University of Montevallo, Montevallo, AL 35115

1986 - 1995 Assistant Professor, University of Montevallo, Montevallo, AL 35115

1983 - 1986 Research Associate, First Chemical Company, MSU, Mississippi State, MS 39762

1982 - 1983 Visiting Assistant Professor, University of Alabama, Tuscaloosa, Alabama 35486

1980 - 1982 Pool Officer, Scientists Pool, Delhi University

1977 - 1979 Alexander Von Humboldt Fellow, Institut Fur Anorganische Chemie, Munchen (West Germany)

1976 - 1977 Pool Officer, Scientists Pool, Delhi University

1974 - 1976 Post Doctoral Fellow, Rajasthan University

1970 - 1973 Junior Research Fellow, Rajasthan University

PROFESSIONAL ACTIVITIES AND DEVELOPMENT

13th NCUR Conference, Rochester, April, New York, 1999.

86th Indian Science Congress and International Symposium on Organometallic Chemistry, Chennai, India, January, 1999.

215th National Meeting of American Chemical Society, Dallas, Texas, March, 1998.

12th NCUR Conference, Salisbury, MD, April, 1998.

Council on Undergraduate Research with NSF, NIH, NASA, April Dialogue, at NIH Bethesda, MD, April, 1997.

211th National Meeting of American Chemical Society, New Orleans, LA, March, 1996.

201st American Chemical Society, National Meeting Chicago, IL, August, 1995.

International Science and Engineering Fair, Judge, Birmingham, AL, 1994.

46th Southeast Regional Meeting of American Chemical Society, Birmingham, AL, October, 1994.

81st Indian Science Congress and International Symposium on Metallo-Organic Chemistry, Jaipur(Raj.), INDIA, January, 1994.

45th Southeast Regional Meeting of American Chemical Society, Johnson City, Tennessee, October, 1993.

Alabama College Teachers Association Meeting, Alabama 4-H center, October, 1992.

69th Annual Meeting of the Alabama Academy of Science, Tuscaloosa, April, 1992.

44th Southeast Regional Meeting of American Chemical Society, Washington, D. C., December, 1992.

201st American Chemical Society National Meeting, Atlanta, GA, April, 1991.

Alabama College Teachers Association Meeting, Alabama 4-H Center, October, 1991.

NSF sponsored Workshop on Micro scale Organic Chemistry (Williamson), San Francisco State University, June 1991.

Workshop on FTIR, Mattson Instruments Inc., Madison, WI, Jan 1991.

NSF Undergraduate Faculty Enhancement Workshop on Computer Aided Spectroscopy (Mississippi State University), July 1990.

Southeast-Southwest Regional Meeting of American Chemical Society, New Orleans, La, 1990.

Alabama College Teachers Association Meeting, Dauphin Island, October, 1990.

Annual Reunion (Workshop on FTNMR Spectroscopy), Savannah State College, Savannah, GA, April, 1990.

NSF Undergraduate Faculty Enhancement Workshops on FTNMR Spectroscopy (Georgia State University), Dec 1989.

8th Annual Undergraduate Chemistry Conference, Memphis, Tennessee, February, 1988.

37th Southeast Regional Meeting of American Chemical Society, Memphis, Tennessee, 1985.

34th Southeast Regional Meeting of American Chemical Society, Birmingham, AL, 1982.

Preceptor, Project Seed, 1995

Preceptor, Project SEED, 1994.

Preceptor, Project SEED, 1993.

Preceptor, Project SEED, 1992.

Preceptor, Project SEED, 1991.

Preceptor, Project SEED, 1990.

Preceptor, Project SEED, 1988.

RESEARCH INTERESTS

Synthesis of phosphorus-containing polymers, insertion compounds, and bimetallic compounds.

PUBLICATIONS

Cynthia P. Tidwell, Prakash Bharara, Gretchen Rudeseal*, Tiffany Rudeseal*, Frank H. Rudeseal, Jr. *, Christine A. Simmer*, Dugald McMillan*, Katherine Lanier*, L. Dalila Fondren*, LaTasha L. Folmar*, and Ken Belmore, "Synthesis and Characterization of 5,10,15,20-Tetra[3-(3-trifluoromethyl)phenoxy] Porphyrin" *Molecules* 2007, 12, 1389-1398.

C. P. Tidwell, P. Bharara, T. A. Rudeseal*, G. M. Rudeseal*, K. Belmore, M.J. Bailey*, J. T. Hubbard*, "Synthesis And Characterization Of 5,10,15,20- Tetrakis [3-(3,4-Dichlorophenoxy)] Porphyrin And Some Of Its Metal Complexes" *Heterocyclic Communication*, Vol 13, No. 6, 2007, 353-358.

Katherine L. Lanier, Dugald R. McMillan, Christine A. Simmer, Frank H. Rudeseal, Jr., Lillian D. Fondren, LaTasha L. Folmar, Ken Belmore, Prakash Bharara, and Cynthia P. Tidwell, Synthesis And Characterization of 5, 10, 15, 20-Tetra[3-(3-Trifluoromethyl)-Phenoxy] Porphyrin And Its Metal Complexes NCUR Proceedings 2005.

R. Dustan Myrex, Brandon Farmer, and Gary M. Gray, Young-Jin Wright, Jennifer Dee, Prakash C. Bharara and Houston Byrd, "³¹P and ¹H NMR Studies of the Transesterification Polymerization of Polyphosphonate Oligomers", *Europ. J. Poly. Chem.*, **2003**, **39**, **1105-1115**

Houston Byrd, Prakash C. Bharara, Tyler S. Sullens, Jeremiah Harden and Gary M. Gray, "Preparation of Dichloro(2,4,6-tribromophenoxy)(1,2 diphenoxy)phosphorane and Its Nonoxidative Chlorination Reactions with Alkyl and Aryl Phosphonates" *Inorganica Chimica Acta*, **2002**, **338C**, **249-253**.

Polycondensation of Dimethyl Phosphite with Diols: SEC and ^{31}P and ^{13}C NMR Spectroscopic Studies, Keith E. Branham, Jimmy W. Mays, Gary M. Gray, Prakash C. Bharara, Houston Byrd, Roger Bittinger, and Brandon Farmer, *Polymer*, **2000**, **41**, **3371-3379**.

^{31}P [^1H] NMR Studies of the preparation of Dichlorotris(2,4,6-tribromophenoxy)phosphorane, Trichlorobis(2,4,6-tribromophenoxy)phosphorane and Tetrachloro(2,4,6-tribromophenoxy)phosphorane, and their Nonoxidative Chlorination Reactions with Dimethyl Phosphonate, Keith E. Branham, Gary M. Gray, Prakash C. Bharara, and Houston Byrd, *Main Group Chemistry*, **2000**, **3**, **103**.

Synthesis of Poly(Alkylene Phosphonate)s: Polymers Via the Transesterification of Dimethyl Phosphite with Diols. Keith B. Branham, Jimmy W. Mays, and Gary M. Gray, Department of Chemistry, University of Alabama at Birmingham, Birmingham, AL 35294. Prakash C. Bharara, Houston Byrd, Brandon Farmer and Deborah Boroughs, University of Montevallo, Montevallo, AL 35115. *Polymer, Proceedings American Chemical Society*, **1999**, **40**, **78-79**.

Poly(Alkylene Phosphates): Synthetic Strategies, G.M. Gray, K.E. Branham, P.C. Bharara, A. Hadjipetrou, and J.M. Beal, *Inorganic and Organometallic Oligomers and Polymers*, J. F. Harrod and R. M. Laine, Eds., **249-262**, **1991** Kluwer Academic Publishers, Netherlands.

Über Darstellung und Struktur eines Tetraborylierten Hydrazins (Synthesis, NMR SPECTRA, X-Ray and Molecular Structure of Tetrakis (1,3-Dimethyl 1-1,3,2-Diazaborolidinyl) Hydrazines. P.C. Bharara, and H. Noth, *Z. Naturforsch.*, **1979**, **34b**, **1352**.

Cyclopentadienyl Ti (IV) Complexes with Phenyl Isocyanates, G.K. Parasher, P.C. Bharara and R.C. Mehrotra, *Z. Naturforsch.*, **1979**, **34b**, **109**.

Cyclopentadienyl metal Complexes with Simple Ligands. P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, *Organometal. Chem. Reviews (Library)*, **1977**, **5**, **259**.

Nickel (II) Aminalkoxides, B.P. Baranwal, P.C. Bharara, and R.C. Mehrotra, *Trans. Metal Chem.*, **1977**, **2**, **204**.

Insertion Reactions of Nickel Alkoxides with Phenyl and Naphthyl Isocyanates, B.P. Baranwal, P.C. Bharara, and R.C. Mehrotra, *Indian J. Chem.*, **1977**, **15A**, **458**.

Insertion Across Chromium-Oxygen Bond, K.N. Mahendra, P.C. Bharara, and R.C. Mehrotra, *Inorg. Chem. Acta*, **1977**, **25**, **L5**.

Alcoholate Complexes of Chromium (III) Chloride, R.C. Mehrotra, P.C. Bharara, and K.N. Mahendra, *Trans. Metal Chem.*, **1977**, **2**, **161**.

N-methylaminoalkoxides of Zirconium, P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, *Syn. React. Inorg. Metal-Org. Chem.*, **1977**, **7**, **537**.

Titanocene and Zirconocene Dichloride Derivatives with Hydroxylic Reagents. P.C. Bharara, *J. Organometal Chem.*, **1976**, **121**, **196**.

Insertion Reactions of Zirconium Alkoxides with Phenyl and Naphthyl Isocyanates, R.C. Mehrotra, V.D. Gupta, and P.C. Bharara, *Indian J. Chem.*, **1975**, **13**, **156**.

Fluoro-B Diketone Derivatives of Zirconium, P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, *Indian J. Chem.*, **1975**, **13**, **725**.

Fluoro-B-Diketone Derivatives of Titanium. P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, Syn. React. Inorg. Metal-Org. Chem., **1975**, 5, **59**.

Reactions of Titanium Alkoxides with N-methylaminoalcohols, P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, Z. Anorg. Allg. Chem., **1974**, 403, **337**.

Reactions of Titanium Alkoxides with N-ethylaminoalcohols, P.C. Bharara, V.D. Gupta, and R.C. Mehrotra, J. Indian Chem. Soc., **1974**, 11, **859**.

Reactions of Titanium and Zirconium Alkoxides with Salicylaldehyde, R.C. Mehrotra, V.D. Gupta, and P.C. Bharara, Indian J. Chem., **1973**, 11, **814**.

PRESENTATIONS

Prakash C. Bharara, Cynthia P. Tidwell, Lillian D. Mathews, Alexia Carter, Katherine Savell, Will McKinney, Ting Yu Su, Trever Tidwell, Kevin Jarrett, Ken A Belmore, "Synthesis and spectroscopic investigations of 5,10,15,20-tetra[3,4-dibenzoyloxy]porphyrin and some of its metal complexes." 66th Southeastern Regional Meeting of the American Chemical Society, October 2014 Nashville, TN

Houston Byrd, Caroline Karanja, Alston Whiten, Prakash Bharara, Cynthia Tidwell "Synthesis of acetals using aldehydes and alcohols" 247th ACS National Meeting in Dallas, Texas, March 16-20, 2014.

William McKinney, Cynthia P. Tidwell, Prakash Bharara, "Synthesis and characterization of a novel porphyrin" 245th ACS National Meeting in New Orleans, Louisiana, April 7-11, 2013.

William McKinney, Cynthia P. Tidwell, Prakash Bharara, "Synthesis and characterization of a novel porphyrin" 90th Annual Meeting of the Alabama Academy of Science, Inc. Samford University, March 20-22, 2013.

Anny Su, Cynthia P. Tidwell, Prakash C. Bharara, and Ken Belmore "Synthesis and Characterization of a Novel Porphyrin" Council of Public Liberal Arts Colleges 2012 Regional Undergraduate Research Conference at Georgia College and State University, Milledgeville, Georgia. April 13-14, 2012.

Anny Su, Cindy Tidwell, Prakash Bharara, and Ken Belmore "Synthesis and characterization of a novel porphyrin" 89th Annual Meeting of the Alabama Academy of Science, Inc. Tuskegee, Alabama, February 22-24, 2012.

Alston Whiten, Cindy Tidwell, Prakash Bharara, "Investigating acetal formation using GC-MS" 89th Annual Meeting of the Alabama Academy of Science, Inc. Tuskegee, Alabama, February 22-24, 2012.

]Synthesis and Spectroscopic Investigations of 5,10,15,20-Tetra[3-(3-trifluoromethyl)phenoxy] Porphyrin

Cynthia P. Tidwell^{1,*}, Prakash Bharara^{1,†}, Gretchen Rudeseal¹, Tiffany Rudeseal¹, Frank H. Rudeseal, Jr.¹, Christine A. Simmer¹, Dugald McMillan¹, Katherine Lanier¹, L. Dalila Fondren¹, LaTasha L. Folmar¹ and Ken Belmore²

¹ Department of Biology, Chemistry, and Mathematics, University of Montevallo, Station 6480

Montevallo, Alabama 35115, U.S.A.; † E-mail: bharara@montevallo.edu

² Department of Chemistry, University of Alabama, Box 870336 Tuscaloosa, Alabama 35487, U.S.A.; DST, ICMR, and CSIR Sponsored Seminar BRMCR, Kanpur, INDIA, 2011.

Synthesis and Characterization of 5,10,15,20-Tetra[3-(3-trifluoromethyl)phenoxy] Porphyrin

Cynthia P. Tidwell, Prakash Bharara, Gretchen Rudeseal, Tiffany Rudeseal, Frank H. Rudeseal, Christine A. Summer, Dugald McMillan, Katherine Lanier, L. Dalila Fondren, LaTasha L. Folmer and Ken Belmore, Zing Conference, Heavier Heterocyclic and Heteroatoms, Grand Oasis Resort, Cancun, 25-28 February 2008.

Synthesis And Characterization Of 5, 10, 15, 20-Tetra[3-(3-Trifluoromethyl)-Phenoxy] Porphyrin And Its Metal Complexes Katherine L. Lanier, Dugald R. McMillan, Christine A. Simmer, Frank H. Rudeseal, Jr., Lillian D. Fondren, LaTasha L. Folmar, Ken Belmore, Prakash Bharara, and Cynthia P. Tidwell, 19th National Conference on Undergraduate Research, Lexington, Virginia 2005.

Synthesis and Characterization of Metal Complexes of Tetra[3-(3-Trifluoromethyl)-Phenoxy] Porphyrin Christine A. Simmer, Frank H. Rudeseal, Jr., Lillian D. Fondren, LaTasha L. Folmar, Ken Belmore, Prakash Bharara, and Cynthia P. Tidwell, 18th National Conference on Undergraduate Research, Indianapolis, Indiana, 2004.

Synthesis and Characterization of Metal Complexes of Tetra[3-(3-Trifluoromethyl)-Phenoxy] Porphyrin Christine A. Simmer, Frank H. Rudeseal, Jr., Lillian D. Fondren, LaTasha L. Folmar, Ken Belmore, Prakash Bharara, and Cynthia P. Tidwell, Eighty-First Annual Meeting of the Alabama Academy of Science, Montevallo, Alabama, 2004.

Synthesis and Characterization of Tetra [3-(3-trifluoromethyl)-phenoxy] Porphyrin and the Manganese, Cobalt, Nickel, Copper and Zinc Complexes Frank H. Rudeseal, Jr., Christine A. Simmer, L. Dalila Fondren, LaTasha L. Folmar, Cynthia P. Tidwell, Ken Belmore, and Prakash Bharara, University of Montevallo Undergraduate Research Day 2004.

Synthesis and Characterization of Tetra [3-(3-trifluoromethyl)-phenoxy] Porphyrin Frank H. Rudeseal, Jr., Christine A. Simmer, L. Dalila Fondren, LaTasha L. Folmar, Cynthia P. Tidwell, Ken Belmore, Prakash Bharara, 55th Southeastern Regional Meeting of the American Chemical Society in Atlanta, Georgia Nov. 16-19, 2003, page 168.

Karl Schroeder, Houston Byrd And Prakash Bharara “Assembly of Polar A Manganese Coordination Polymer” 17th National Conference On Undergraduate Research, The University of Utah, March 13-15, 2003.

Frank H. Rudeseal Jr., Christine A. Summer, L. Dalila Fondren, LaTasha L. Folmer, Cynthia P. Tidwell, Ken Belmore And Prakash Bharara, “ Synthesis and Characterization of Tetra [3-(3-trifluoromethyl)-phenoxy] Porphyrin” 55th Southeastern Regional Meeting of The American Chemical Society, Atlanta GA, November 16, 2003.

Jeremiah Harden, Houston Byrd, Prakash Bharara and Gary Gray “Synthesis and Characterization of Molybdenum Phosphite Complexes” Poster Presentation, 16th National Conference on Undergraduate Research, Whitewater, Wisconsin, 2002.

Assembly of Polar Metal Coordination Polymers, Undergraduate Research Day, Scott Buff, Prakash Bharara and Houston Byrd, University of Montevallo, February, 2001.

Synthesis of A Nonoxidative Monochlorinating Agent for Secondary Phosphonates, Undergraduate Research Day, Tyler A. Sullens, P.C.Bharara, H. Byrd and G.M.Gray, University of Montevallo, February, 2001

Synthesis of Poly(Alkylene Phosphonate)s Polymers Via the Transesterification of Dimethyl Phosphite with Diols, Undergraduate Research, Day, Young J.Wright, P.C.Bharara, H.Byrd and G.M.Gray, University of Montevallo, February, 2001.

Assembly of Polar Metal Coordination Polymers, 15th National Council of Undergraduate Research, Scott Buff, Prakash Bharara and Houston Byrd, Lexington Kentucky, March 2001 ,

Synthesis of A Nonoxidative Monochlorinating Agent for Secondary Phosphonates, 15th National Council of Undergraduate Research, Tyler A. Sullens, P.C.Bharara, H. Byrd and G.M.Gray, Lexington Kentucky, March 2001.

Synthesis of Poly(Alkylene Phosphonate)s Polymers Via the Transesterification of Dimethyl Phosphite with Diols, 15th National Council of Undergraduate Research, Young J.Wright, P.C.Bharara, H.Byrd and G.M.Gray, Lexington Kentucky, March 2001.

Synthesis of a Nonoxidative Monochlorinating Agent for Secondary Phosphonates, SE/SW Regional meeting of American Chemical Society, T.A. Sullens, P.C.Bharara, H.Byrd and G.M.Gray, New Orleans, Dec. 2000.

Synthesis of Poly (Alkylene Phosphonate)s: Polymers Via The Transesterification of Dimethyl Phosphite with Diols, SE/SW Regional Meeting of American Chemical Society, Y.J.Wright, P.C.Bharara, H.Byrd and G.M.Gray, New Orleans, Dec. 2000.

Catalyzed Synthesis of Poly (Alkylene Phosphonate)s Polymers, Jennifer Dees, Prakash Bharara, Houston Byrd and Gary M. Gray, National Council of Undergraduate Research, Montana, April 2000.

A New Approach for the Synthesis of Poly (Alkylene Phosphonate)s: Polymers Via the Transesterification of Dimethyl Phosphite with Diols, Brian Powell, Aashish Bharara, Prakash Bharara, Houston Byrd and G.M.Gray, 13th National Council of Undergraduate Research, Rochester, NY, April 1999.

Synthesis of Poly (Alkylene Phosphonate)s: Polymers Via the Transesterification of Dimethyl Phosphite with

Diols, B. Farmer, D. Burroughs, P.C.Bharara, H.Byrd and G.M.Gray, 217th National Meeting Of American Chemical Society, Anaheim, CA, March 1999.

Synthesis of Poly (Alkylene Phosphonate): Polymers Via The Transesterification of Dimethyl Phosphite with Diols, Brian Powell, Prakash Bharara and G.M.Gray, Undergraduate Research Day, University of Montevallo, March 1999.

Synthesis of Poly (Alkylene Phosphonate): Polymers Via The Transesterification of Dimethyl Phosphite with Diols, Brandon S. Farmer, Deborah B. Burroughs, Prakash Bharara and G.M.Gray, NCUR, Salisbury, MD, and April 1998 .

(Polyalkylene Phosphonate)s: Synthetic Strategies, B. Farmer, D.Burroughs, P.C.Bharara, H.Byrd and G.M.Gray, Montevallo Research Day, University of Montevallo. March 1998

Poly(Organophosphonate)s: Unique Inorganic Organic Materials. Prakash Bharara, Keith Branham, Gary M. Gray and Jimmy Mays, 72nd Annual Meeting of The Alabama Academy of Sciences, The University of Alabama at Birmingham, Birmingham, AL, March 15-18, 1995.

NMR Studies on the Polycondensation of Dimethyl Phosphonate with Diols, Keith E. Branham, Gary M. Gray, Jimmy W. Mays and Prakash C. Bharara, Symposium and Workshop: Advances in Modern Nuclear Magnetic Resonance Techniques. Mississippi State University, Starkville, MS, June 8-11, 1994.

Poly(Alkylene Phosphates): Synthesis and Applications, Prakash Bharara, James B. Beal, Eric Slovensky, Jeff Ryan, Gary M. Gray, Jimmy W. Mays and Keith Branham, 81st Indian Science Congress and International Symposium on Metallo-organic Chemistry, Abstr. 235, 1994.

Poly(Alkylene Phosphates): Synthesis and Characterization, Prakash Bharara, Gary Gray, Keith Branham, James Beal and Jimmy Mays, 69th Annual Meeting of Alabama Academy of Science, The University of Alabama at Tuscaloosa, AL, April, 17, 1992.

Poly(Alkylene Phosphates): Synthetic Strategies, G. M. Gray, K.E. Branham, L-H Ho, P. C. Bharara, A. Hadjipetrou, and J. B. Beal, MACRO 90--33rd IUPAC Symposium on Macromolecules, Symposium on Inorganic Polymers and Oligomers, Montreal, July 90.

Novel Synthesis of Heterocyclic Compounds. 8th Annual Undergraduate Chemistry conference, Abstr. (1988).

Chlorine Monoxide as Chlorinating Agent. Thirty-seventh Southeast Regional Meeting (American Chemical Society), Abstr. 241, p. 72, (1985).

Synthesis and Characterization of Some Dialkoxybis(cyclopentadienyl) Titanium (IV) Compounds. Thirty-fourth Southeast Regional Meeting (American Chemical Society), Abstr. 274, p. 80, (1982).

The Reactions of the Fluorenyl Anion with Lanthanide Chloride, Thirty-fourth Southeast Regional Meeting (American Chemical Society), Abst. 279, p. 81, (1982).

Editor for a special issue brought out of Journal of Organometallic Chemistry in honor of Prof. R.C. Mehrotra, Vol. 239 (1982).

Editor for a special issue brought out by Journal of Indian Chemical Society in honor of Prof. R. C. Mehrotra, Feb. Issue, 1982.

Reactions of Chromium Alkoxides with Phenyl and Naphthyl Isocyanates. Proceeding Golden Jubilee Celebrations of Indian Chemical Society, 1976.

Reactions of Nickel Alkoxides with Phenyl and Naphthyl Isocyanates. Proceeding Indian Science Congress, 1976.

Reactions of Cyclopentadienyl Titanium and Zirconium Dichlorides with Hydroxy Reagents. VII International Conference on Organometallic Chemistry, Venice, Italy, 1975.

RESEARCH GRANTS

Synthesis and Characterization of Gallium chloride 5, 10, 15, 20-Tetra (N-ethyl-3-carbazoyl) porphyrin and Gallium hydride 5, 10, 15, 20-Tetra (N-ethyl-3-carbazoyl) porphyrin, Prakash Bharara, Stephen O'Donnell and Cynthia Tidwell, \$905, Funded, 2006.

Funding for student (Tyler Sullens and Scott Buff) research for summer, CASCUR, University of Montevallo, \$2200, Summer 2000.

Funding for student (Brian Powel) research for summer, CASCUR, University of Montevallo, \$2200, Summer, 1999.

Research Experiences for Undergraduates at the University of Alabama at Birmingham, NSF, REU Site, \$177,000, Funded, Dec. 1998.

Funding For Student (Deborah Burroughs) Research for Summer, CASCUR, University of Montevallo, \$2200., Summer, 1997.

Research\Travel to Study Properties of Polymers., University of Montevallo, \$700, 97-98.

Released Time Grant Proposal, BACHE, \$2000, 1997 (Not Funded).

Synthesis and Properties of Poly (alkylene) Phosphates, University of Montevallo, \$700, 94-95.

A C-RUI Collaborative Group for Research in Hybrid Organic-Inorganic Polymers, National Science Foundation, \$395,444.00, 1994. (not funded).

Novel Synthesis of Insertion Compounds using Isothiocyanates, University of Montevallo, \$700, 93-94.

Novel Synthesis of Insertion Compounds, University of Montevallo, \$400, 91-92.

EPSCOR-RDS Grant, \$4000, 91-92.

Improvement in Instruction in Principles and Applications of FT-NMR Spectrometry, National Science Foundation, \$195,138.00, 1990. (not funded).

Insertion Compounds: Synthesis and Properties, University of Montevallo, \$700, 88-89.

COMMITTEE

Faculty Senate 2012-2015

FDAC 2014-2017

TEP 2013- 2016

Grievance Committee, 2009-2016 chair 2014-2016..

Appointed by president to serve on the Academic Development, Research and Special Project committee, 1994-1997, 1997-2000, 2000-2003, 2003-2006, 2006-2009.

Decanal Search Committee Member for the College of Arts and Sciences, 2006

Faculty Council, 1997-1999.

SACS Committee, 1999

MEMBER

American Chemical Society.

National Council of Undergraduate Research.

WHO'S WHO AMONG AMERICA TEACHERS

1998 ,1999, 2004, 2012, 2015