Dr. Christina McCartha Department of Chemistry Appointed: 2002

1. Academic Degrees:

Ph.D.	Emory University	1992	Inorganic and Organic Chemistry
B.S	University of South Carolina	1984	Chemistry

2. Professional Experience:

2008-Present	Newberry College	Associate Professor of Chemistry
2003-2007	Newberry College	Assistant Professor of Chemistry
2002 (Fall)	Newberry College	Adjunct Professor of Chemistry
2002 (Spring)	Midlands Technical College	Adjunct Instructor of Chemistry
2002	Chapin Baptist Church	Children's Minister
1997-1998	Avondale Pattillo Christian School	Interim Director
1996-2001	Homemaker	Professional Mom
1992-1996	Emory University	Postdoctoral Fellow

3. Publications:

- Crull, G. B.; Garber, A. R.; Kennington, J. W.; Prosser, C. M.; Stone, P. W.; Fant, J. W.; Dawson, J. H. Magn. Reson. Chem. 1986, 24, 737-9.
- Prosser-McCartha, C. M.; Kadkhodayan, M.; Williamson, M. M.; Bouchard, D. A.; Hill, C. L. J. Chem. Soc. Chem. Comm. 1986, 1747.
- Hill, C. L.; Faraj, M.; Prosser-McCartha, C. "Direct Nitrogenation of Cage Compounds," Report: Synthesis of High Density Energetic Materials, Alster, J.; Iyer, S. Marchand, A. Eds., 1988, pp 134-138.
- Williamson, M. M.; Prosser-McCartha, C. M.; Mukundan, Jr., S.; Hill, C. L. Inorg. Chem. 1988, 27, 1061.
- Prosser-McCartha, C. M.; Hill, C. L. "The First Direct High Conversion Selective Functionalization of Caged Hydrocarbons," Report: Eighth Annual Working Group Institution: Synthesis of High Density Energetic Materials, Alster, J.; Iyer, S.; Semal, S., Eds. 1989, pp 176-186.
- Hill, C. L.; Hartnup, M.; Faraj, M.; Weeks, M.; Prosser-McCartha, C. M.; Brown, Jr., R. B.; Kadkhodayan, M.; Sommadossi, J.-P.; Schinazi, R. F. "Polyoxometalates as Inorganic Anti-HIV-1 Compounds. Structure-Activity Relationships" In Advances in Chemotherapy of AIDS, Pharmacology and Therapeutics Diasio, R.; Sommadossi, J.-P., Eds., Pergamon Press, New York, 1990.
- Prosser-McCartha, C. M.; Hill, C. L. J. Am. Chem. Soc. 1990, 112, 3671.
- Hill, C. L.; Kozik, M.; Winkler, J.; Hou, Y.; Prosser-McCartha, C. M. Adv. Chem. Ser. 1993, 238, 243-59.
- Hill, C. L.; Kim, G.-S.; Prosser-McCartha, C. M.; Judd, D. Mol. Eng. 1993, 3, 263-75.
- Hill, C. L.; Prosser-McCartha, C. M. Coord. Chem. Rev. 1995, 143, 407-55.

4. Presentations:

- McCartha, C. M. "U-Teach Replication", Committee for Increasing Math and Science Teaching Force in South Carolina, Columbia, SC, October 7, 2009.
- McCartha, C. M. "Application and integration of gas chromatography/mass spectrometry in the undergraduate chemistry laboratory: Chemistry major with forensic science concentration", NSF Catalyzed Innovations in the Undergraduate Curriculum, National American Chemical Society Meeting, Washington, August 14-20, 2009.
- McCartha, C.M. "Application And Integration of Gas Chromatograph/Mass Spectrometer In The Undergraduate Chemistry Laboratory: Chemistry Major With Forensic Science Concetration", National Science Foundation CCLI Principal Investigator Conference, Washington, DC, August 13-15, 2008.
- McCartha, C. M., "Integration of Center for Workshops in the Chemical Sciences (CWCS) workshop material into the chemistry curriculum at Newberry College", CWCS Symposium, 20th Biennial Conference on Chemical Education, Bloomington, Illinois, July 26-July 31, 2008.
- McCartha, C. M. "Wet Your Whistle!" Health Occupations Student Association (HOSA) State Leadership Conference, Charleston, SC, March 12-14, 2008.

McCartha, C. M. "A Hands-On Look at Environmental Health Issues" SC HSTE Professional Development Conference, Myrtle Beach, SC, January 23-26, 2008.

McCartha C.M.; Parrish, S. "Forensic Chemistry" Educator Workshop, Southeastern Regional American Chemical Society (SERMACS) Meeting, Greenville, SC, October 27, 20007.

5. Service:

National/State/Regional:

October 2009 Chemistry Education Reviewer for the SC Dept of Education

January 2010 Improving Teacher Quality Review 2003- Present SC Science Olympiad Volunteer

1995-Present Girl Scouts of the Congaree Area: Science trainer for the council. Assembled 12 science

kits for troops to check out and do science activities to earn insignia. Trained Girl Scout leaders at yearly events (3 events ~80 adults). Girl Scout Leader (1995-present). New Zealand (2007). Awards received Outstanding Leader, Outstanding Volunteer, Girl Scout

Appreciation Pin, and Honor Pin.

2005-2007 Newberry College- Advisor to Blue Key Honor Society

July 2007 National Science Foundation Reviewer

Summer 2004- SC Governor's School for Science and Mathematics: Lead week long summer science camp for gifted students entitled "Chemistry" to rising eighth and ninth graders

2007 camp for gifted students entitled "Chemistry" to rising eighth and ninth graders
2003-Present Newberry College American Chemical Society Student Affiliates Faculty Advisor

2003, 2004, 2007 Middle and Elementary School Academy of Science Workshop Leader

2002-Present Girl Scout Master Trainer with NASA: One of 40 Girl Scout Master Trainers in the US

that consult with NASA on integration of STEM into the Girl Scout program. First pilot event using the NASA "Community Night Kit" to promote STEM in rural areas (2003). Attended three weeklong workshops held by NASA "Exploring the Solar System" (2002), "Exploring the Universe" (2003), "GSUSA NASA Experiences: A Vision for Girls in Earth and Space Science" (2004). Organized events that reached ~680 girls ages 6-16.

Chapin Baptist Church, Chapin , SC. Missions Committee (2006-2009), Director Vacation

Bible School (1999-2004), Children's Sunday School Teacher (2000-2007), Egg Hunt and Trunk or Treat Volunteer, Mission Trip Team to Brazil (2001, 2004), Clothe a Child

volunteer (2007, 2008)

1989-1998 Avondale Pattillo United Methodist Church (1989-1998): Decatur, GA. Chairperson

Worship (2 yr.), Director Children's Ministries (2 yr.), Nursery Coordinator (3 yr.), Day Camp Director (1 yr.), Sunday School Teacher (3 yr.), Coordinator Children's Clothing Sale (3 yr.), Preschool Committee (3 yr.), Administrative Board Member (5 yr.), Council

on Ministries (5 yr.), Member United Methodist Women (8 yrs)

6. Awards/ Recognition

1998-Present

2007 South Carolina Independent Colleges and Universities. Excellence in Teaching Award

2004-2006 Who's Who Among America's Teachers

1989 Emory University Women's Club Research Award

1984 American Institute of Chemists, Outstanding Chemistry Undergraduate

7. Professional Memberships

18 years- American Chemical Society

Present

2006- Present South Carolina Academy of Science
2005- Present Society for College Science Teachers
2004- Present National Science Teachers Association

8. Grants

- 2009-2014 C. Johnson-Taylor, C. McCartha, National Science Foundation Robert C. Noyce Awardee, \$900,000.
- 2009-2013 C. Johnson-Taylor, C. McCartha, Improving Teacher Quality Grant, Inquiring to Engage in Chemistry (ITEC), Awardee, \$332,000.
- 2008 SCICU Student (Adam Frick)/Faculty (Dr. McCartha) Research Program Awardee, \$3300.
- 2007-2008 The Dorothy and Moses Passer Education Fund Awardee, \$1534, Dr. McCartha.
- 2007-2011 National Science Foundation Course, Curriculum, and Laboratory Improvement Awardee, \$140,701.
- 2007 SCICU Student (Jonathan Dailey)/Faculty (Dr. McCartha) Research Program Awardee, \$3100.
- 2007 Pittsburg Conference Memorial National College Grant Awardee, \$10,000.
- 2006 South Carolina Independent Colleges and Universities (SCICU) Student (Bryan Linn)/Faculty (Dr. McCartha) Research Program Awardee, \$3100.