

Curriculum Vitae



Jack Rhoton

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Professional Preparation

B.S. - East Tennessee State University, 1966, biology, Johnson City, Tennessee

M.Ed. - University of Virginia, 1969, science education major, Charlottesville, Virginia

M.S. - Old Dominion University, 1974, biology major, Norfolk, Virginia

Ed.D. - University of Tennessee, 1984, science education, Knoxville, Tennessee

Major Advisor - Dr. A. Paul Wishart, Chairman

Dissertation Title - A Study of Science Education in Tennessee as Perceived by Science Teachers and Principals

Professional Membership

American Association for the Advancement of Science

Association for the Education of Teachers in Science

Association for Supervision and Curriculum Development

National Association of Biology Teachers

National Association of Science, Technology, Society

National Science Education Leadership Association

National Science Teachers Association

North Carolina Science Teachers Association

Science Association of Tennessee

School Science and Mathematics Association

Tennessee Academy of Science

Tennessee Conservation League

Tennessee Environmental Education Association

Teaching

Courses Taught:

- Wildlife Conservation
- Teaching Science in the Secondary Schools
- Nature Study
- Special Topics in Science

- History of Science

My special interest is in the teaching and learning of science in the public schools. I have been an active researcher in K-12 science, especially the restructuring of school science in science education as it relates to improving teaching practices in the K-12 science classroom.

Employment

Executive Director - Center of Excellence in Mathematics and Science Education, East Tennessee State University, 2006-Present

Director – ETSU Northeast Tennessee STEM Innovation Hub, 2012-Present

Director - Tennessee Governor's School for Scientific Models and Data Analysis - East Tennessee State University and the Tennessee Department of Education. 2008-present.

Assistant/Associate/Professor of Science Education - East Tennessee State University, 1987 - present.

Interim Chair, Department of Curriculum and Instruction, East Tennessee State University, Johnson City, TN (1996-1999). Provide leadership for the teaching, research, and service functions of approximately 17 faculty who serve several undergraduate and graduate programs in the College of Education. The department offers undergraduate K-8 and 1-8 interdisciplinary studies (concentrations in Arts and Humanities, Science and Mathematics, and Social Sciences), and several 7-12 programs leading to initial licensure. Graduate programs are offered (M.Ed., elementary teaching and secondary teaching); Masters of Arts in Teaching (MAT, elementary and secondary education); media services (M.Ed., concentrations in instructional technology and instructional media); and reading education and reading and storytelling MA and M.Ed., degrees offer in both concentrations).

Kingsport City School System, Kingsport, Tennessee. ***Supervisor of Science and Environmental Education***, system wide science program. Director of several external funded projects. Primary responsibilities were built around curriculum development, in-service training, staff management, assignments/transfers/work load, school building and equipment, school-community relations, and professional growth. 1974-1987.

Tennessee State Department of Education, Nashville, Tennessee. ***Career Ladder Evaluator for Principals and Supervisors***. Traveled from Mountain City to Memphis and visited more than 200 elementary, middle, and high school programs across the state. 1985-1986.

Kingsport City School System, Kingsport, Tennessee. Dobyms-Bennett High School. ***Teacher of biology and physical science***. 1972-1974.

Chesapeake Public Schools, Chesapeake, Virginia. Deep Creek High School. ***Teacher of biology and senior science.*** Served as interim science department chair. Primary responsibilities centered around curriculum development, equipment and supplies, scheduling, professional growth, school wide science fair director. 1969-1972.

Chesapeake Public Schools, Chesapeake, Virginia. Truitt Junior High School. ***Teacher of science.*** 1968-1969.

Burke County School System, Morganton, North Carolina. Oak Hill High School. ***Teacher of biology and physical science.*** 1966-1967.

Awards

Recipient of the 2006 Nation's Outstanding Leadership in Science Award, presented by the National Science Education Leadership Association (NSELA)

Recipient of the 2005 Distinguished Educator of the Year Award, presented by the Tennessee Science Teachers Association (2005)

Recipient of the National Science Teachers Association Distinguished Service in Science Education Award, 1999

Recipient of the Tennessee Academy of Science Fellow Award, 1998

Recipient of the ETSU Kappa Delta Pi William Fowler Award, 1997

Recipient of the ETSU Distinguished Faculty Award, 1995

Recipient of the Tennessee Science Teachers Association Outstanding Service Award, 1994

Recipient of the National Science Supervisors Association Distinguished Service Award, 1992

Recipient of the Tennessee Academy of Science Distinguished Teacher Award, 1990

National Science Foundation Scholarship, 1969

Member of Kappa Delta Pi Honorary Society

Grants Funded

Director of numerous projects totaling approximately \$10 million for the improvement of STEM education in the region's schools.

Many of these are listed below:

Eastman Scholars Mathletes Project. Funded by Eastman Chemical Company. This project is providing professional development for math teachers (grades 4-8) in seven school districts: Bristol City, Hawkins, Johnson City, Kingsport, Sullivan, Washington counties Scott County, VA

Funded amount: \$1,000,000.00 Years: 2007-2015

PCMI: Professional Community of Modeling Instruction (physics/chemistry); Funded by Tennessee Higher Education Commission. The goal of this project was to train chemistry and physics teachers in modeling instruction.

Funded amount: \$199,000 Years 2013-14

Northeast STEM Academy and ETSU TSIN STEM Innovation Hub; Funded by Battelle Memorial Institute. The primary goal of this project was to develop a STEM high school and STEM Innovation Hub.

Funded amount: \$1,500,000 Years 2012-2014

MICH: Modeling Instruction of Chemistry in High-schools; Funded by Tennessee Higher Education Commission. The primary of goal of this project was to train the region's chemistry teachers in Modeling Instruction.

Funded amount: \$186,000 Years 2011-2012

Governor's School for Scientific Models and Data Analysis, Tennessee Department of Education, \$120,000.00 each year Years 2007-2013

Scientific Models and Data Analysis for Rising High School Juniors and Seniors in Tennessee; Funded by the Tennessee Department of Education.

Funded amount: \$86,000 Years 2013

Reaching for Excellence in Elementary School Science Partnership, Tennessee Higher Education Commission

Funded amount: \$75,000.00 Years 2010-2011

Wal-Mart Foundation: For three years the Wal-Mart Foundation has made contributions to the Center via small grant proposals, \$5,000.00. These funds have been used to support professional development for math and science teachers.

Funded amount: \$5000 Years 2008-2011

Reaching for Excellence in Math Teaching Partnership. Funded by the Niswonger Foundation. The goal of this project to improve math teaching and learning (grades 4-8)

in Greeneville City and Greene County Schools. The project will reach out to other school districts in the region during the next cycle.

Funded amount: \$243,000.00

Years: 2008-2011

STEP Project with faculty in Biological Sciences and Mathematics, recruiting undergraduate students for majors in math and science. This program provides an inquiry, research-based curriculum for the students. National Science Foundation:
Funded amount: \$1,000,000.00 (co-pi) Years: 2006-2008

Reaching for Excellence in Middle and High School Science Partnership. Funded by the Tennessee State Department of Education. Wrote proposal and serving as project director. This grant will train seventy-five middle and high school science teachers in six school districts in Northeast Tennessee during the 2007-2010 school years. The primary goals of the project are to provide teachers opportunities to learn advanced science content, increase achievement and reduce the achievement gaps in middle and high school science for all 6-12 students in partner schools, and increase the number of middle and high school science teachers participating in content-based professional development and train all middle and high school science teachers in the targeted districts to become “highly qualified” as defined by the state.

Funded amount: \$623,000.00

Years: 2007-2010

Unicoi Math Project, Nuclear Fuels Services, Inc. Funded by Nuclear Fuels Services, Morrill Motors and NN Ball and Roller. The goal of this project was to improve the teaching of mathematics in the Unicoi School District.

Funded amount: \$40,000.00

Years: 2007-2008

ETSU GEAR-UP Tennessee High School Math Project. Funded by Tennessee State Department of Education. The goal of this project was to improve the teaching of high school mathematics in the following school districts: Cocke, Campbell, Johnson and Union counties.

Funded amount: \$147,000.00

Years: 2007-2008

Talent Expansion in Quantitative Biology. Funding source: National Science Foundation. I assisted in the writing of this grant and I’m serving as a Co-Pi. Anant Godbole is the PI and is responsible for the day-to-day operation of the grant. Other Co-Pi’s include: James Boland, Hugh Miller, and Lev Yampolsky. The broader impact of this project will do the following: create a pipeline to the many careers and graduate programs in computational sciences, informatics, and mathematical biology; aggressively seek to create an new breed of interdisciplinary student from the ground up; and bring this agenda to an underserved population of motivated students (with an unclear career plan) in an EPSCOR state.

Funded Amount: \$1,000,000.00

Years: 2005-2009

Reaching for Excellence in Middle and High School Science Partnership. Funded by the Tennessee State Department of Education. Wrote proposal and serving as project director. This grant will train seventy-five middle and high school science teachers in six

school districts in Northeast Tennessee during the 2007-2010 school years. The primary goals of the project are to provide teachers opportunities to learn advanced science content, increase achievement and reduce the achievement gaps in middle and high school science for all 6-12 students in partner schools, and increase the number of middle and high school science teachers participating in content-based professional development and train all middle and high school science teachers in the targeted districts to become “highly qualified” as defined by the state.

Funded amount: \$623,000.00

Years: 2007-2010

Reaching for Excellence in Middle and High School Science Teaching Partnership.

Wrote proposal and serving as project director. This grant will train seventy-five middle and high school science teachers in six school districts in Northeast Tennessee during the 2004-2007 school years. The primary goals of the project are to provide teachers opportunities to learn advanced science content, increase achievement and reduce the achievement gaps in middle and high school science for all 6-12 students in partner schools, and increase the number of middle and high school science teachers participating in content-based professional development and train all middle and high school science teachers in the targeted districts to become “highly qualified” as defined by the state.

Funded Amount: \$600,000.00

Years: 2003-2007

Middle and High School Science Teacher Renewal and Retention in Four Rural School Districts in Northeast Tennessee.

Wrote proposal and serving as project director. Funding source: Tennessee Higher Education Commission. This grant will train twenty middle and high school science teachers during the summer of 2003. Through the science education leadership institute, teachers will learn advanced science content (changing their command of content and how to use it); learn standards-based instructional strategies, and engage students in standards-based learning that will translate into improved student achievement.

Funding amount: \$62,882.00

Year: 2003

Enhancing Undergraduate Education in Biological Sciences (A major component of this grant was for science pre-service and in-service science education.)

Co- wrote proposal with faculty in Biological Sciences. Funding Source: Howard Hughes Medical Institute. The three-year project will train 60 teachers (2001-2004) on how the science standards can be aligned with biology activities, but a more global purpose it to train teachers on how biology activities can be used in planning inquiry lessons. For example, the workshop will allow teachers to participate in a series of laboratory investigations they can model in their own classrooms.

Funded amount: \$700,000.00

Year: 2001-2004

Technology in the Science Classroom: Implementing the Vision of the Tennessee Science Standards.

Funding source: Tennessee Higher Education Commission. The project trained twenty middle and high school science teachers on how to more effectively use technology as a scientific tool for data acquisition, modeling, and improved student learning. Participants will work through a series of probes/sensors instruments as part of a computer interface technology system as being exemplary

resources for integrating technology into the existing science curriculum.

Funding amount: \$43,000.00

Year: 2000

Using State and National Science Standards as Pathways to Teach Botany. Co-wrote proposal with Dr. Foster Levy, Associate Professor of Biological Sciences, and serving as project director. Funding source: Tennessee Higher Education Commission. The workshop will specifically train twenty high school science teachers on how design and implement inquiry-based science activities with an emphasis on botany. Exercises and experiments will include identification, proceed to monitoring, and conclude with experimental manipulations. Each experiment will allow participant involvement with experimental design. Data will be collected and analyzed, and follow-up discussions will focus on methods to adapt the experiments to individual classroom needs.

Funding Amount: \$22,000.00

1998-99 school year

Moving the Vision of the Tennessee State Science Framework and the National Science Education Standards into Classroom Practice.

Wrote proposal and serving as project director. Funding source: Tennessee Higher Education Commission. The workshop will specifically train teachers on how the Science Standards might be taught in elementary and middle school, but a more global purpose is to train teachers to become more expert at facilitating science learning; engaging in ongoing assessment of student learning; designing and managing science learning environments; and participating actively in the ongoing planning and development of their school science program.

Funded Amount: \$25,499.00

1997-1998 school year

Ecological Concepts: Complementary Field and Laboratory Approaches. Co-wrote proposal with Dr. Foster Levy, Department of Biological Sciences. Funding source: Tennessee Higher Education Commission. The aim of this project is to provide high school teachers with the tools necessary for successful ecological investigations. Topics will emphasize the process of experimental science aimed at the interfaces between genetics, animal behavior and physiology with ecology. An emphasis will be given to designing efficient and practical experiments that are amenable to rigorous, but basic, statistical analysis. Ecological questions for study have been chosen to demonstrate how an intermixing of field and laboratory experiments can complement each other.

Funded Amount: \$25,572.00

1997 school year

Molecular Biology: Basic Principles of Biotechnology. Wrote proposal and serving as project director. Funding source: Tennessee Higher Education Commission. The aim of this project is to train high school biology teachers on how to effectively implement the AP labs that have a molecular biotechnology theme. These labs require that biology teachers have a sound understanding of protein structure-biochemistry, genetics, DNA-mediated protein synthesis, cellular biology and cellular differentiation.

Funded Amount: \$31,600.00

1995 - 1996 school year

Reaching for Excellence in Secondary School Science. Wrote proposal and serving as project director. Funding source: National Science Foundation. The aim of this project is

to reshape secondary school science based on the reform efforts of NSTA'S Scope, Sequence, and Coordination Project and AAAS'S Project 2061. The project will focus on the interdependence of the sciences and how they fit together as part of a larger body of knowledge and the importance of coordinating themes.

Funded Amount - \$650,000.00 1992 - 1996 school years

Tennessee Science Curriculum Study Group. Wrote proposal and serving as project director. Funding source: Tennessee Department of Education. The purpose of this project is to develop a science framework. This is being accomplished through a committee of K-12 science teachers and higher education science educators. (No direct cost in this project.)

Funded Amount: \$55,000.00 1994 - 1995

Tennessee Science Curriculum Framework. Wrote proposal and serving as project director. Funding source: Appalachian Educational Laboratory. The aim of this project is to develop a K-12 science framework for the state. This is being accomplished through a committee which is made up of pre-college and higher education science educators. (NO indirect cost in this project)

Funded Amount - \$7,900.00 1993 - 1994

Reaching for Excellence in Elementary School Science. Wrote proposal and serving as project director. Funding source: National Science Foundation. The aim of this project is to provide critically needed leadership in elementary school science in Northeast Tennessee. The project will initiate summer institutes which will provide intensive study of science content for 40 teachers and 20 principals. The institute will be conducted by outstanding visiting science educators who will be assisted by educators from East Tennessee State University.

Funded amount - \$408,405.00 1989 - 1992 school years

National Science Leadership Institute. Wrote proposal and directed project. Funding sources: Westinghouse Foundation; National Science Supervisors Association; University of Tennessee at Martin (Center of Excellence in Science and Mathematics); Holt, Rinehart and Winston, Inc.; Sargent-Welch Scientific Company; Carolina Biological Supply Company and participant fees. The institute provided a leadership training program on practical skills and information to help practicing and future science supervisors become more effective in their jobs.

Funded amount - \$10,000.00 Summer of 1988

Program for the Enrichment of Technology Education in the Middle and High School Science Curriculum. Wrote proposal and directed project. Funding source: Tennessee Higher Education Commission. The aim of the project was to develop improved knowledge and understanding of technological-related concepts among middle and high school science teachers, and to develop resources whereby the teachers can effectively incorporate technology education into the existing science curriculum.

Funded amount - \$35,817.00 1987 - 1988 school year

Pre-College Teacher Development in Science Program for Middle and High School Science Teachers. Wrote proposal and directed project. Funded source: National Science Foundation. The project was designed to extend teaching competencies of science teachers, increase knowledge of physical science concepts and improved methods of incorporating science and technology in the classroom.

Funded amount - \$17,000.00 1987 - 1985 school year

Activity-Centered Discovery-Oriented Science Enrichment Program. Wrote proposal and directed project. Funding source: Title IV-C. The project was designed to provide students an opportunity to pursue science in greater depth; to assist teachers in the (Grants Cont'd) development of laboratory skills and techniques; and to aid teachers in guiding students in successful problem solving.

Funded amount - \$28,000.00 1982 - 1983 school year

Energy Activities with Related Multimedia Resources. Wrote proposal and directed project. Funding source: Title IV-C. The project was designed to develop and implement into existing curriculum an energy education program with related multimedia resource materials for grades K-12. As an outgrowth of the project, twelve interdisciplinary energy booklets were produced.

Funded amount - \$23,046.41 1978 - 1979

Science Education Data System and Communications. Co-author of proposal and directed project. Funded source: Title IV-C. The project was designed to use the medium of microcomputers to enhance the instructional area of science with special emphasis on developing microcomputer software; to foster better computer skills; to develop specific computer aided lessons for students; and to reduce computer anxiety by increasing general knowledge among students.

Funded amount - \$94,184.00 1980 - 1981 school year

Priority One: Environment. Wrote proposal and directed project. Funded source: Title IV-C. The project provided for the purchase of environmental education materials for grades K-12.

Funded amount - \$6,198.00 1974 - 1975 school year

Professional Activities

National Focus

Affiliate representative of the National Science Education Leadership Association (NSELA) with the American Association for the Advancement of Science (AAAS), 2009-2011.

Member, Board of Examiners, National Council for Accreditation of Teacher Education (NCATE) 2002-present (on-going).

Member, Board of Directors, National Science Education Leadership Association (rotated off 2011).

Editor, *Science Educator Journal*, a nationally refereed science education journal (ongoing...founded the journal in 1992). (Rotated off 2011).

Called on by the new administration (Obama team) to provide input on STEM education issues for the education transition team (November 24, 2008) per a phone conversation with Jeanne Century.

Board Member, National Science Education Leadership Association (NSELA), 2008

Chair Elect, Tennessee STEM Council (2008)

Member, Science Curriculum Standards, Tennessee State Department of Ed. (2007-2008)

Director, Tennessee Junior Academy of Science (TJAS), 2003-Present

President, National Science Education Leadership Association (2003-2004)

Chairperson, National Science Education Leadership Association (NSELA) Mini-Conference, Atlanta, GA, 2004

Program Chair, National Science Teachers Association Area Conference, Nashville, TN, 2005

Board of Examiners, National Council for Accreditation of Teacher Education (NCATE) (2002-2005)

Board Member, National Science Teachers Association (NSTA) 2002-2005

Co-Chair, Association of Educators of Teacher of Science (AETS) Roan Mountain, TN (2004)

Member, National Judging Panel for ExploraVision Award. National Science Teachers Association, Washington, D.C. (March, 2004).

Proposal Reviewer: National Science Foundation (NSF) 2004

Member, Task Force on Conventions, National Science Teachers Association (2003-2005)

Editor, Science Educator Journal (1992-present). This journal is a publication of the National Science Supervisors Association. The journal serves as a forum for presentation and discussion of issues pertaining to science supervision.

Editor, Issues in Science Education Series, National Science Teachers Association, 1996-present.

Member, Board of Directors, Association of Educators for the Teaching of Science, 1999-2000.

Chairperson, Association for the Education of Teachers of Science (AETS) Conference, Kingsport, Tennessee. Convention held in September of 1999.

Convention Chairperson, National Science Teachers Association Regional Convention (NSTA). Convention to be held in Nashville during December of 1997.

Chair, Nomination Committee, National Science Teachers Association, 1995-97.

Member, Advisory Committee, Global Change Instruction Program, University Corporation for Atmospheric Research, Boulder, Co. (1994-present)

Editor, Fifth Sourcebook for Science Leaders. (1996-Present).

Chair, Awards Committee for the National Science Supervisors Association. (1990-1996).

Member, Task Force to Select a New Executive Director for the National Science Teachers Association. (1994-95).

Steering Committee member, Appalachia Educational Laboratory-Eisenhower Math/Science Consortium. (1995-96).

Reviewer of National Science Education Standards for the National Research Council. (1995).

Proposal reviewer, American Association of Colleges for Teacher Education, for annual meeting. (1995).

Director, College Division (1992 - 94), National Science Teachers Association. NSTA is the largest science teacher association in the world dedicated to the improvement of science education at all levels K - College.

Member, National Judging Panel for Presidential Awards for Excellence in Science and Mathematics Teaching. National Science Foundation, Washington, D.C. (June, 1994).

Member, Science Advisory Panel for McGraw-Hill, Monterey, CA. (July, 1994).

Member, Committee on Nominations, National Science Teachers Association. (1994-96).

Member, Task Force on Re-Districting, National Science Teachers Association. (1994).

World Book Consultant - I analyzed World Books coverage of the sciences from the perspective of current and emerging curriculum trends. I wrote a task paper that dealt with how World Book articles meet the needs of students and teachers. (Met in Chicago, Ill. on March 17-19, 1993).

Serving as Editor of the Fifth Sourcebook for the National Science Teachers Association and the National Science Supervisors Association. (1993-1995).

Board Member, National Science Supervisors Association. (1993-1995).

A workshop leader in an NSF sponsored meeting: "Workshop on the Role of Professional Societies in Two-Year College Science, Mathematics, and Engineering Education." This meeting was held in Washington, DC. (October 29-30, 1992).

Member, Advisory Committee. National Center for Atmospheric Research. Boulder, Colorado. (1993-97).

Member, Planning Committee for the 1993 National Science Teachers Association Conference. Louisville, KY. (November, 1993).

Member, Planning Committee for the 1992 National Science Teachers Association Conference. Charlotte, NC. (December, 1992).

Participant in ASCD National Curriculum Study Institute of the Association for Supervision and Curriculum Development. "Rethinking the Curriculum for the Next Decade: A Mini Conference." Washington, DC. (May 16-18, 1990).

Participant in the National Science Foundation Director's Meeting. This conference addressed the priorities and goals of NSF. Washington, DC. (June 1-3, 1990).

Participant in the National Alliance for Environmental Education.

The alliance is an affiliation of professional, business, health, labor, education and environmental organizations representing more than 20 million members. Nashville, TN. (October 26-27, 1990).

Selected to be one of two candidates for the president of the National Science Supervisors Association for 1990-91.

Met with National Science Foundation officials to discuss funding possibilities for a future NSF proposal dealing with Middle and High school science curriculum and in-service training. Washington, DC. (February, 1990).

Serving as member of the National Science Supervisors Association/National Science Teachers Association Editorial Board for the Fourth Sourcebook for Science

Supervisors: Science Supervision Toward the 21st Century. This publication is aimed at science supervisors and leaders in the field of science education. (1990-91).

Appointed by National Science Teacher Association to serve as a "reader" of papers presented for possible presentations at the 1990 NSTA Convention in Atlanta, Georgia.

Serving as advisor/consultant to the Oak Ridge National Laboratory Component of the Department of Energy Multi-laboratory Teacher Training Program. (1989-present).

Serving as a member of the National Science Teachers Task Force on Conditions for Professional Development and Curriculum Implementation. The committee held its first meeting in Phoenix, Arizona in November, 1989, in conjunction with the NSTA area convention.

Serving as chairperson of the National Science Supervisors Association's (NSSA) Outstanding Supervisor Award Committee for 1990-1995. One supervisor from across the nation is selected for his/her outstanding contribution to science supervision. This individual is presented a plaque and \$1,000 at the NSTA National Convention. The program is sponsored by Prentice Hall Publishers. (1989-96).

Appointed by NSSA (1989) to serve as representative to Alliance of Environmental Education. The Alliance is a National Network aimed at promoting environmental education.

Participant in the Teacher Preparation and Enhancement of the National Science Foundation (Principals Investigators Meeting). Washington, DC. (February, 1989).

Director, National Science Leadership Institute, East Tennessee State University. This institute was composed of 60 science supervisors representing twenty-five states. (Summer of 1988).

Participant in the Teacher Preparation and Enhancement of the National Science Foundation (Principal Investigators Meeting) Atlanta, GA. (February, 1986).

Member of Planning Committee for regional meeting of National Science Teachers Association. Charlotte, NC. (November 1983).

State and Local Focus

Director, Center of Excellence in Mathematics and Science Education, ETSU (2006-present)

Director, ETSU Northeast Tennessee STEM Innovation Hub, (2012-present)

Director, Tennessee Junior Academy of Science, (1992-present)

Director, ETSU Governor's School for Scientific Models and Data Analysis, (2007-present)

Member, Tennessee STEM Education Caucus (2011-present)

Chair, Tennessee STEM Education Leadership Council, (2009-2010).

Chair, Annual Statewide STEM Conference at ETSU (2006-present).

Workshop partnership with Jet Propulsion Laboratory, International Storytelling Center, and ETSU Center of Excellence in Math and Science, Jonesborough, TN (2009-present).

Member, Executive Committee, Tennessee Academy of Science (1989-present)

Principal investigator of numerous funded projects (on-going), including local support from Eastman Chemical Company, Niswonger Foundation, Nuclear Fuel Services and Wal-Mart Foundation and numerous external funding agencies.

Member, Board of Directors, Tennessee Science Teachers Association (2000-Present) as liaison with TAS Board (on-going)

Served on a member of Boards at the state and national levels, all of which pertain to science and science education (1980-Present)

Chair, Project Management Team (PMT), meeting quarterly with the region's curriculum supervisors (on-going)

Serving on a variety of state math and science education committees (on-going)

Member, Task Force on Honorary Degree for Tennessee Higher Education Commission, (2004-Present)

President, Tennessee Academy of Science (2002-2003)

Member, Joint Planning Committee, Tennessee Academy of Science and Tennessee Science Teachers Association (2002-2003).

President, Tennessee Science Teachers Association

Board of Directors, Cedar Creek Learning Center, Greeneville, TN (1990-present)

President, Upper East Tennessee Science Fair, Inc. (1999-2004)

Director, Tennessee Junior Academy of Science. (1994-present).

Project Director for numerous science projects (1989-present)

Chairperson, Tennessee Science Framework Committee. The purpose of this committee was to develop a K-12 science framework, incorporating current teaching practices and recently developed national science standards. (1993-96).

Variety of workshops and science in-service programs for area schools. (1987-present).

Project director for THEC Project to improve AP biology teaching in the region's school. Workshop held on ETSU campus. (1995-96).

Project director for Major NSF Project to improve secondary science teaching in the region's schools. More than 225 teachers and principals directly or indirectly involved in the program. (1992-96).

Project director for Major NSF Project to improve elementary science teaching in the region's schools. More than 300 elementary teachers and principals directly or indirectly involved in the project. (1989-92).

Workshop for 30 middle school teachers on how to make effective use of microscopes in science teaching, April 7th on ETSU campus.

Member, Executive Committee, Tennessee Academy of Science. (1992 - Present).

Editor of Sciencing Quarterly. The Sciencing Quarterly is a newsletter of the Science Association of Tennessee. The newsletter is read by more than 4,000 science educators in Tennessee. It is published during the months of September, December, February, and May. (1986 to 1996).

Member, Tennessee Systemic Initiative Advisory Committee. (1992-1993).

Served as evaluation team member for the Southern Association of Colleges and Schools at Happy Valley High School in Carter County. (April, 1994).

Member, Board of Directors, Tennessee science Teachers Association. (1993).

Member, Southern Association of Colleges and Schools Visitation at Tennessee High School, Bristol, TN. (March, 1992).

Served as evaluation team member for the Southern Association of Colleges and Schools at Liberty Bell Middle School in Johnson City, TN. (April, 1993).

Member of the Tennessee Science Teachers Association planning committee. This committee met in Nashville on June 23, 1990 to plan for the TSTA Annual Conference held in Nashville on November 1-3, 1993.

Keynote speaker for American Chemical Society: "Current Trends in Pre-College Science Education." April 21, 1993 in Kingsport, TN.

Served as consultant for Family Science Project on the campus of ETSU during the summer of 1990. The Family Science Project is a THEC funded project with the purpose of improving science content knowledge among teachers, students, and parents. Participant in the "Partners in Education" conference held on the campus of Tusculum College on January 19, 1990. This one day conference was sponsored by Tennessee Valley Authority.

Member, Membership Committee, Tennessee Academy of Science. (1989-90). Serving as member of the selection committee for the Presidential Award for Excellence in Science Teaching in Tennessee. (1989-90).

Served as evaluation team member for the Southern Association of Colleges and Schools at Farragut High School. Knoxville, TN. (October, 1989).

Member, Planning Committee, Science Association of Tennessee Conference. Nashville, TN. (1989).

Served as evaluation team member for the Southern Association of Colleges and Schools at Bluff City Middle School. Sullivan County, TN. (April, 1989).

Served as chairperson for the Southern Association of Colleges and Schools visitation at Thomas Jefferson Elementary School. Kingsport, TN. (November, 1988).

Obtained Career Ladder III Status as a Science Supervisor in the Kingsport City School System. (1987).

Participated in a five day Science Leadership Institute for Science Supervisors. Dingmans Ferry, PA. (1987).

Program chairman, Science Association of Tennessee. SAT is an organization made up of elementary, secondary, and higher education personnel interested in the improvement of science education in Tennessee. (1987).

Serving as member, Board of Directors, Pine Mountain Settlement School, Pine Mountain, Kentucky. PMSC is a science and environmental education program for students, K-12. Area school systems participate in the program. (1986-present).

Administrator/Supervisor Evaluator for the Tennessee Career Ladder Program, Tennessee State Department of Education, 1985-86 school year. (Comprehensive Education Reform Act of 1984).

Program Chairman, Science Association of Tennessee. (1984).

Serving as member, Board of Directors, Cedar Creek Learning Center, Greeneville, Tennessee. CCLC is an environmental education program (K-12) supported by UETEC and TVA. (1984-present).

Steering Committee Member, Tennessee Science Framework. (1982-84). The responsibility of the steering committee was to develop a science framework for Tennessee with teacher input from throughout the state. The framework was adopted by the Tennessee State Board of Education in June of 1984.

Served as member of the Self-Study Committee for the Southern Association of Colleges and Schools visitation at the University High School. Johnson City, TN. (1983). President, Tennessee Science Teachers Association. (1983-84).

Member, Gifted Education Curriculum Development, Kingsport City Schools. As an outgrowth of this project, a series of interdisciplinary curriculum packets were developed for each grade level. (1982-1983).

Served as a member of the Self-Study for the Southern Association of Colleges and Schools visitation at Holston Middle School. Blountville, TN. (1982).

Serving as member, Board of Directors, Science Association of Tennessee. SAT is an organization made up of elementary, secondary, and higher education personnel interested in improvement of science education in Tennessee. (1982-present).

Chairman, Tennessee Academy of Science, Science-Mathematics Teacher Section. The academy represents science educators, scientists, and some secondary science teachers in the state. (1981).

Program Chairman, Science Association of Tennessee. (1981).

Member, Task Force Committee of Toxic Wastes, Tennessee Environmental Council. The purpose of the task force was to identify ways of reducing the spread of toxic waste in Tennessee. (1980).

Member, Task Force for Educational Change, sponsored by State Department of Education, Fall Creek Falls. (1979).

Chairman, Education Committee, Tennessee Environmental Education Association. This Association represents public school science teachers and educators in the state. (1978).

Member, Title I Energy Education Task Force, Knoxville, TN. As an outgrowth of this project, a statewide energy education guide was developed and disseminated throughout the state. (1976).

Consultant, Energy Education/Conservation Conference sponsored by Tennessee State Department of Education, Knoxville, TN. (1976).

Conducted a variety of science related workshops for public schools throughout Tennessee. (1975-present).

Special science consultant to Greeneville City Schools; assisted teachers in complete revision of high school science curriculum. (1974).

Member of Executive Committee, Science Association of Tennessee. The Executive Committee is the policy-making body of SAT.

System science in-service for Carter County science teachers at Happy Valley High School on Tuesday, August 21, 1991.

Two day workshop for teachers in Wise, Dickenson, and Russell Counties, VA. This project is being funded by the Virginia Council of Higher Education through Clinch Valley College in Wise, VA. The name of the project is "Science for Every Student: Enhancing the Teaching of Science in Elementary and Middle Schools of Southwest, Virginia."

System Science In-service for Sullivan County high school science teachers at Holston Middle School. (February 16, 1991).

System Science In-service Program for Sullivan County elementary teachers at Holston Middle School. (February 9, 1991).

Judge for Science Fair, St. Dominics. Kingsport, TN. (1990).

Judge for Science Fair, Robinson Middle School. Kingsport, TN. (1990).

Judge for Science Fair, Rogersville Elementary School. Rogersville, TN. (1990).

Taught science classes in the following elementary schools:

Valley Forge Elementary, Cloudland Elementary, Lincoln

Elementary, and Baileyton Elementary. (1990).

Made two or more visits to all schools participating in the NSF "Reaching for Excellence in Elementary School Project." (1989-90).

Science In-service program for Newport City School teachers. (1989).

Science In-service program for science teachers in Cocke County, Newport, TN. (1989).

Judge for Science Fair, Johnson County Middle School. Mountain City, TN. (1988).

Judge for system Science Fair, Bristol City Schools. (1988).

Science In-service Program for science teachers in the Scott County School System. Gate City, VA. (1987).

Science In-service program for science teachers in the Bristol City Schools. Bristol, TN. (1985).

Science In-service program for middle school teachers in Sullivan County, TN. (1981).

Science In-service program for science teachers in Hawkins County School System. Rogersville, TN. (1980).

Science In-service program for science teachers in the Morristown School System. Morristown, TN. (1978).

Series of workshops presented through Science and Environmental Education Program in Kingsport City School System:

"Activities for Science and Environmental Education" (1973-87).

"Science Olympiad" (1985).

"Project Wild and Class Project" (1983-84).

"Project Wild" (1985).

"Class Project" (1985).

"Science Conference for Students" (1986).

Luncheon speaker for the Rotary Club of Kingsport on the "Status of Science Education in the United States." (Fall, 1988).

Luncheon speaker for the East Tennessee Engineering Society on the Status of Science Education in the United States." (Spring, 1988).

Assisted with Summer Science Challenge Program, Kingsport City Schools (1989).

Presentation Made

International:

Rhoton, J. (1993). Using discrepant events as a vehicle for improving science teaching. Paper presented at the Mexico Science Conference. Oaxtepec, Mexico. (July 22-25, 1993).

National:

Rhoton, J. et al. (2012). Professional Development: Capturing the Trends, Practices, and Issues to Strengthen Science Teaching and Learning, Paper presented at the National Science Teachers Association Conference, March 31, 2012, Indianapolis, IN.

Rhoton, J. (2011). ETSU STEM Conference. *STEM Education and the Future of our State and Nation*. Johnson City, TN, May 25, 2011.

Rhoton, J. et al., (2011). National Science Teachers Association Conference. *Capturing the Trends, Practices and Research to Strengthen Science Teaching and Learning*. San Francisco, CA, March 12, 2011.

Rhoton, J. (2011). National Science Teachers Association. *Building Successful Partnerships with Business and Industry and Local School Districts to Support Quality, Sustained Professional Development for K-12 Science and Math Teachers*: San Francisco, CA, March 12, 2011.

Rhoton, J. & Shane, P. (2011). National Science Teachers Association Conference. *Spotlighting Books Co-Published by NSTA and NSELA*, San Francisco, CA, March 11, 2011.

Rhoton, J. & Shane, P. (2011). National Science Teachers Association Regional Conference. *Spotlighting Books Co-Published by NSTA and NSELA*, Nashville, TN, December 3, 2010.

Rhoton, J. & at al. (2005). Sustaining Professional Development Programs, Paper presented to the National Science Teachers Association, Dallas, TX (April, 2005)

Rhoton, J. (2005). The Role of Partnerships in Science Teaching and Learning. NSELA Mini-Conference, Dallas, TX (March, 2005)

Rhoton, J. , Motz, L., Madrazo, G. & Walton, E. (2004). Professional Development and Leadership—Defining, Developing, and Designing Innovative Science Teaching and Learning Programs. Paper presented at the NSTA Conference in Atlanta, GA, (April, 2004)

Rhoton, J. & Shane, P. (2004). Teacher Shortage: Fact or Fiction? Paper presented at the NSTA Conference in Atlanta, GA. (April 2004)

Rhoton, J. & Shane, P. (2004). What is NSELA? A Forum for Science Leaders. Presented at the NSELA and NSTA Conference in Atlanta, GA (April 2004)

Rhoton J. & Shane, P. (2003). Retention and Renewal of Science Teachers, paper presented at the NSTA Conference in Philadelphia, PA (March 2003)

Rhoton, J. & Shane, P. (2003). Teacher Shortage: Fact or Fiction? Presented at the NSTA Area Conference in Minneapolis, Minnesota (November, 2003)

Rhoton, J. & Shane, P. (2003). What is NSELA? A Forum for Science Leaders. Paper presented at the NSTA Area Conference in Reno, NV, (December 2003)

Rhoton, J., Motz, L., Madrazo, G. & Walton, E. (2002). Professional Development in Teaching and Learning. Paper presented at the NSTA conference in San Diego, CA. (March 2002)

Rhoton, J. , Motz, L., Madrazo, G. & Walton, E (2002). Professional Development-Defining, Developing, and Designing Innovative Science Teaching and Learning, St. Louis, March.

Rhoton, J. & Bowers, P. (2001) Professional Development for Science Teaching and Learning, Memphis, December.

Rhoton, J. , Loucks-Horsley, S. & Bowers, P. (2000). Professional Development: A Major Component in Science Teaching and Learning. Paper presented at the National Science Teachers Conference. Orlando, Florida. (April 2000).

Rhoton, J. , Motz, L. & Madrazo, G. (2000). Maximizing the impact of professional development programs: A perspective from three science education leaders. Paper presented at the National Science Teachers Conference. Orlando, Florida. (April 2000).

Rhoton, J. & et al. (2000). What does the science supervisor expect us to teach pre-service teachers before they enter the science classroom? AETS Conference, Akron, Ohio. (January, 2000).

Rhoton, J. & et al. (1999). Maximizing the impact of professional development programs: Connecting science standards to classroom practice, National Science Education Leadership Association, Detroit, MI. (December, 1999).

Rhoton, J. & et al. (1999). Working Models and Ideas for Changing Science Teaching and Learning: Perspectives from Science Education Leaders. Paper presented at the National Science Teachers Convention, Boston. (March 25-28, 1999).

Rhoton, J. & et al. (1998). Working Models and Ideas for Changing Science Teaching and Learning: Perspectives from four science education leaders. Paper presented at the National Science Teachers Convention, Las Vegas. (April 16-19, 1998).

Rhoton, J. & et al. (1998). What is NSELA and how can it assist me? Paper presented at the National Science Teachers Convention, Las Vegas. (April 16-19, 1998).

Rhoton, J. & et al. (1997). And they said, we just want to help out. Session presented at the regional National Science Teachers Association Convention. Nashville, TN.(December 5, 1997).

Rhoton, J. et al. (1997). Delivering changes in science education reform: proactive and reactive initiatives by science leaders. Session presented at the National Science Teachers Association, New Orleans, LA (April 3-6, 1997).

Rhoton, Jack et al. (1997). What is NSELA and how can it assist you? A session presented at the National Science Teachers Association, New Orleans, LA (April 3-6, 1997)

Rhoton, Jack & et al. (1997). How can you lead the way for NSTA? A session presented at the National Science Teachers Association. New Orleans, LA (April 3-6, 1997)

Rhoton, J. & et al. (1996). How you can lead the way for NSTA? Session presented at the regional National Science Teacher Association. Atlanta, GA (November, 1996)

Rhoton, J. (1996). What changes must be made to Effect Improvement at both community and four-year colleges? Panel leader at the Community College and University Connection Conference. Sponsored by the National Science Foundation: Atlanta, GA (April 22-23, 1996)

Rhoton, J. et al. (1996). NSELA Leadership Assistance. Paper presented at the National Science Teachers Association. St. Louis, MO March 28-31, 1996).

Rhoton, J. (1996). Science, Technology and Societal Issues in the Classroom. Paper presented at the Technological Literacy Conference. Arlington, VA (February 8 - 11, 1996).

Rhoton, J. et al. (1996). Delivering Change in Science Education Reform: Proactive and Reactive Initiatives by Science Teachers. Paper presented at the National Science Teachers Association. St. Louis, MO (March 28 - 31, 1996).

Rhoton, J. & et al. (1995). A dialogue in mathematics, science and technology education. Sharing session presented at a conference on science education jointly sponsored by the National Science Foundation and the U.S. Department of Education. Washington, DC. (February 23-25, 1995).

Rhoton, J. & et al. (1995). A paradigm shift for delivering science education form: A view from science leaders. Paper presented at the National Science Teachers Conference, Philadelphia. (March 24, 1995).

Rhoton, J. & et al. (1994). Science education reform: A view from higher education. Paper presented at the National Science Teachers Conference. Anaheim, CA.

Rhoton, J. & et al. (1993). Restructuring school science. American Association of Colleges for Teacher Education Conference (AACTE). San Diego, Ca. (Feb. 24-27, 1993).

Rhoton, J. (1993). Introductory science courses for the non-science major. National Science Teachers Association. Kansas City, Mo. (April 1-4, 1993).

Rhoton, J. & et al. (1992) Reshaping school science: Perspectives from science supervisors. National Science Teachers Association. Charlotte, N.C. (December 10-12, 1992).

Rhoton, J. & et al. (1992, March). Reshaping school science: Perspective from science supervisors. Paper presented at the National Science Teachers Convention (NSTA). Boston, MA.

Rhoton, J. (1991, November). Reshaping elementary and middle school science education for improved teaching and learning. Paper presented at the National Association of Biology Teachers Convention. Nashville, TN.

Rhoton, J. & et al. (1991, March). Reshaping school science to promote student learning. Paper presented at the Association for Supervision and Curriculum Development (ASCD). San Francisco, CA.

Rhoton, J. & et al. (1991, March). Teaching elementary school science: A model for improving teacher and principal training. Paper presented at the National Science Teachers Association Conference. Houston, TX.

Rhoton, J. (1991, February). Restructuring elementary school science in-service education for improved teaching and learning. Paper presented at the National Association of Science, Technology and Society Conference. Washington, DC.

Rhoton, J. (1990, October). Science in-service training for elementary teachers and principals. Paper presented at the Association for the Education of Teachers in Science (AETS). Cumberland Falls State Park, KY.

Rhoton, J. (1990, February). Program for the enrichment of science-technology-society education in the elementary and secondary science curriculum. Paper presented at the National Association for Science, Technology, and Society. Washington, DC.

Rhoton, J., Madrazo, G., Motz, L. and Walton, E. (1990, March). Restructuring science education: Designing responsive schools for a changing world. Paper presented at the forty-fifth annual conference of the Association of Supervision and Curriculum Development. San Antonio, TX.

Rhoton, J. (1990, April). Elementary school science: A model for improving teacher and principal in-service training. Paper presented at the National Science Teachers Association. Atlanta, GA.

Rhoton, J. (1989, April). A study of science-technology-society education as perceived by science teachers. Paper presented at the National Science Teachers Association. Seattle, WA.

Rhoton, J. (1989, February). Teaching science-technology-society education: Views of secondary science teachers. Paper presented at the fourth annual conference of the National Association of Science, Technology, and Society. Washington, DC.

Rhoton, J., & et al. (1988, April). Third sourcebook for science supervisors: Resources and research in science supervision. Paper presented at the National Science Teachers Association. St. Louis, MO.

Rhoton, J., Madrazo, G., and Motz, L. (1987, April). Science supervision: What can we do to improve our profession, science teaching and the science programs in our schools? Paper presented at the National Science Teachers Association. Washington, DC.

Rhoton, J., Madrazo, G., and Motz, L. (1985, April). Excellence in supervision: What the science educator needs to know for effective leadership. Paper presented at the National Science Teachers Association. Cincinnati, OH.

Rhoton, J. (1977, November). Assisted Merrill biology publishers in their innovative biology program presentation. National Science Teachers Conference. Birmingham, AL.

Presentations Made

Local Level:

Rhoton, J. (2012). ETSU STEM Conference. ETSU Math and Science Education Program, Johnson City, TN. May 25, 2012.

Rhoton, J. (2008, 2009, 2010). STEM Education at ETSU. Presented at the TEM Conference held at the Millennium Centre, May 29, 2008, 2009, 2010)

Rhoton, J. (2008). Current Initiatives of the ETSU Center of Excellence in Mathematics and Science Education. A presentation to the ETSU Retired Faculty group at the Culp Center, November 1, 2008.

Rhoton, J. (1987-present). Numerous science workshops and presentations to local school groups and teachers in Northeast Tennessee.

Rhoton, J. (1980-present). Numerous presentations made at the Tennessee Science Teachers Conference.

Rhoton, J. (1980-present) Numerous presentations made at the Tennessee Academy of Science Conference.

Rhoton, J. (1998). Moving the vision of the national science education standards and the state framework into classroom practice. A two-week workshop for middle school teachers in the region's schools (June 8-19, 1998).

Rhoton, Jack (1996). Elementary science unit kits. All day session for Washington County elementary science teachers. Johnson City, TN (October, 1996)

State Level:

Rhoton, J. (2012). A Brief History of the Tennessee Junior Academy of Science, Session presented at the Tennessee Academy of Science Annual Meeting, Vanderbilt University, Nov. 16, 2012.

Rhoton, J (2007-2012). A variety of sessions presented in the following forums: Tennessee Science Teachers Association, Tennessee Academy of Science, Tennessee STEM Education Leadership Council.

Rhoton, J. & et al. (2006). Organizing a state science leadership association. Session at the NSTA Area Conference, Nashville, TN (December)

Rhoton, J. (2004) Involving your students in the Tennessee Junior Academy of Science, TAS meeting, Nashville, TN

Rhoton, J. (2002). Planning for joint meeting between the Tennessee Academy of Science and the Tennessee Science Teachers Association for 2003. Nashville, TN.

Rhoton, J. (2001). How to involve your students in the Tennessee Junior Academy of Science Program, Tennessee Science Teachers Association, Nashville Tennessee.

Rhoton, J. & Prather, P. (2000). University perspectives on reform of undergraduate science and mathematics curriculum and teaching. Tennessee Science Teachers Association (Nashville, TN).

Rhoton, J. (1998). Involve Your Students in the Tennessee Junior Academy of Science. Session presented at the Tennessee Academy of Science. Cookeville, TN

Rhoton, J. (1998). TSTA to Affiliate with NSELA. Session presented at the Tennessee Science Teachers Association. Nashville, TN (October 30, 1998).

Rhoton, J. (1997). Involve Your Students in the Tennessee Junior Academy of Science. Session presented at the Tennessee Academy of Science. Nashville, TN

- Rhoton, J. (1995). The Tennessee Junior Academy of Science as a Teaching Tool. Session presented at the Tennessee Science Teachers Association. Nashville, TN (November 16 - 18, 1995).
- Rhoton, J. (1995). Involve Your Students in the Tennessee Junior Academy of Science. Session presented at the Tennessee Academy of Science. Nashville, TN (November 16 - 18, 1995).
- Rhoton, J. (1994). The development of a Tennessee science framework. Paper presented at the Tennessee Academy of Science Conference, Nashville, TN. (November 18, 1994).
- Rhoton, J. (1994). Revision of the Tennessee science framework. Paper presented at the Tennessee Science Teachers Association Conference. Nashville, TN. (December 9, 1994).
- Rhoton, Jack (1996). The Tennessee Academy of Science: How to involve your students. Tennessee Science Teachers Association, Nashville, TN (November, 1996)
- Rhoton, Jack (1996). The Tennessee Academy of Science: A vehicle to accelerate pre-college students in science. A session presented at the Tennessee Academy of Science, Sewanee, TN (November 22, 1996)
- Rhoton, J.(1993). A new paradigm for science in-service education. Tennessee Academy of Science Conference. Memphis, TN. (November 19, 1993).
- Rhoton, J., et al. (1993). Science reform in Tennessee. Tennessee Science Teachers Association Conference. Nashville, TN. (November 11-13, 1993).
- Rhoton, J. (1993). Be a winner: Enter NSTA's award program. Tennessee Science Teachers Association Conference. Nashville, TN. (Nov. 11-13, 1993).
- Rhoton, J. (1992). Elementary school science can and should be fun. Science, Math and Technology Conference. Oak Ridge, TN. (October 2-3, 1992).
- Rhoton, J. (1992). Be a winner: Enter NSTA's award program. Tennessee Science Teachers Association Conference. Nashville, TN. (November 5-7, 1992).
- Rhoton, J. and Oppewal, T. (1992). Authentic assessment in science: Moving beyond paper and pencil test. Tennessee Science Teachers Conference. Nashville, TN. (November 5-7, 1992).
- Rhoton, J. (1992, October). Hands-on science can (and should)be fun. Celebrating Science, Math and Technology Conference. Oak Ridge, TN.

- Rhoton, J. and Oppewal, T. (1992, November). Authentic assessment in science: Moving beyond paper and pencil tests. Paper presented at the Tennessee Science Teachers Association Conference. Nashville, TN.
- Rhoton, J. (1991, November). Opportunities for science teachers to participate in a national science foundation funded budget. Tennessee Science Teachers Association Conference. Nashville, TN.
- Rhoton, J. (1990, November). A model for improving science education in Tennessee. A paper presented at the Tennessee Science Teachers Association Conference. Nashville, TN.
- Rhoton, J. (1990, November). A model for improving teacher and principal inservice training. North Carolina Science Teachers Association. High Point, North Carolina.
- Rhoton, J. (1989, November). Opportunities for principals and teachers to participate in NSF funded elementary science project. Program presented at the Science Association of Tennessee Conference. Nashville, TN.
- Rhoton, J. (1989, November). A comparison of Japanese and American education. A paper presented to the Seminar on Appalachian Studies. Johnson City, TN.
- Rhoton, J. (1988, November). Technology education in the middle and high school science curriculum. Paper presented at the Science Association of Tennessee Conference. Cookeville, TN.
- Rhoton, J. (1987, November). Ideas for innovative science programs. Program presented at the Science Association of Tennessee Conference. Chattanooga, TN.
- Rhoton, J. (1986). Tennessee career ladder information. A series of presentations were made across the state to explain to principals and supervisors the objectives of the Tennessee State Department of Education Career Ladder Program. These presentations were made in conjunction with my role as state evaluator.
- Rhoton, J. (1984, October). Science program in the Kingsport city school system. Program presented at the Science Section of the Tennessee Education Association. Knoxville, TN.
- Rhoton, J. (1984, April). The flora and fauna of the Appalachian region. Program presented for the Elder Hostel at King College. Bristol, TN.
- Rhoton, J. (1980, November). Content reading in the sciences: reality and potential. Paper presented at the Science Association of Tennessee. Nashville, TN.
- Rhoton, J. (1979, November). A science teacher's professional library. A paper presented at the Science Association of Tennessee. Cookeville, TN.

Rhoton, J. (1978, November). The advantages associated with the development of a science room in the elementary school. Paper presented at the Tennessee Academy of Science. Lambirth College. Jackson, TN.

Rhoton, J. (1978, November). Teaching creative writing through science activities. Paper presented at the Science Association of Tennessee. Knoxville, TN.

Rhoton, J. (1974, November). Environmental education: An experimental community problem focused approach for high school students. Paper presented at the Tennessee Academy of Science. University of Tennessee at Martin. Martin, TN.

Editorial

National Level:

Editorial Board, NSTA publications, meeting the science standards.

Co-Editor, Professional Development for Improved Teaching and Learning. A publication of the National Science Teachers Association and the National Science Education Leadership Association.

Editorial Board, Exciting Plant Activities. (Published by the American Association of Biology Teachers.) Dr. Gerry Madrazo, Editor.

Reviewing manuscripts for: Journal of Teacher Education. American Association of Colleges for Teacher Education.

Editor, *The Science Educator*. A National referred publication that is published by the National Science Education Leadership Association. (Rotated off 2011)

Past member of the Editorial Review Board, *Journal of College Science Teaching*. National Science Teachers Association.

Have reviewed manuscripts for: *The Science Teacher*, *Science Scope*, *Science and Children*.

State Level:

Editor, *Handbook and Transactions of the Tennessee Junior Academy of Science*. A publication of the Tennessee Academy of Science (1992-present).

Publications

Books:

Rhoton, J. (2010). *Science Education Leadership: Best Practices for the New Century* (Ed). Published by the National Science Teachers Association. NSTA Press: Arlington, VA.

Rhoton, J & Shane P. (2005). *Teaching Science in the 21st Century* (Eds). Co-published by the National Science Teachers Association and the National Science Education Leadership Association. NSTA Press: Arlington, VA.

Rhoton, J & Bowers, P. (2003) *Science Teacher Retention: Mentoring and Renewal*. Co-published by National Science Teachers Associations and the National Science Leadership Association, NSTA Press: Arlington, VA.

Rhoton, J. & Bowers, P. (2001) *Professional Development Planning and Design*. Co-published by National Science Teachers Association and National Science Education Leadership Association, NSTA Press: Arlington, VA.

Rhoton, J. & Bowers, P. (2001). *Professional Development Leadership and the Diverse Learner*. Co-published by the National Science Teachers Association and National Science Education Leadership Association, NSTA Press: Arlington, VA.

Rhoton, J. & Bower, P. (1998). *Issues in Science Education*. Co-published by the National Science Teachers Association and the National Science Education Leadership Association, NSTA Press: Arlington, VA.

Other Publications:

Rhoton, J. (2012). *Handbook and Proceedings of the Tennessee Junior Academy of Science, Tennessee Academy of Science*, ed. Rhoton, J.: ETSU: Johnson City.

Rhoton, J. (2011). *Handbook and Proceedings of the Tennessee Junior Academy of Science, Tennessee Academy of Science*, ed. Rhoton, J.: ETSU: Johnson City.

Rhoton J. & Wohnowski, B. (2005) Building on going and sustained professional development. In *Teaching Science in the 21st Century*, eds. J. Rhoton, and P. Shane, National Science Teachers Association and National Science Education Leadership Association: NSTA Press.

Rhoton, J. (2005) *Tennessee Junior Academy of Science Proceedings and Handbook*, ed. Tennessee Academy of Science.

Rhoton, J. (2004). Some Thoughts on the No Child Left Behind Act, NSELA Navigator, Vol. 41, No. 1.

Rhoton, J. (2004) *Tennessee Junior Academy of Science Proceedings and Handbook*, ed. Tennessee Academy of Science.

Rhoton, J. (2003). The Third Wave of Science Education Reform, *NSELA Navigator*, Vol. 40, No. 2, Fall 2003.

Rhoton, J. (2003). Who are We and What Do We Do Best, *NSELA Navigator*, Vol. 40, No. 3.

Rhoton, J. (2003) *Tennessee Junior Academy of Science Proceedings and Handbook*, ed. Tennessee Academy of Science.

Rhoton, J. (2002) *Tennessee Junior Academy of Science Proceedings and Handbook*, ed. Tennessee Academy of Science.

Rhoton, J. & Stiles, S.E. (2002). Exploring the Professional Design Process: Bringing an Abstract Framework into Practice. *Science Educator*, 11 (1), 1-8.

Rhoton, J. & et-al. (2001). Professional Development: A Major Component in Science Teaching and Learning. *Science Educator*, 8 (1), 1-8.

Rhoton, J. (2001) School Science Reform: An Overview and Implications for the Secondary School Principal. *National Association of Secondary School Principals Bulletin*, 85 (623), 10-23.

Rhoton, J. (2004). Some Thoughts on the No Child Left Behind Act, *NSELA Navigator*, Vol. 41, No. 1.

Rhoton, J. (2003). The Third Wave of Science Education Reform, *NSELA Navigator*, Vol. 40, No. 2, Fall 2003.

Rhoton, J. (2003). Who are We and What Do We Do Best, *NSELA Navigator*, Vol. 40, No. 3.

Rhoton, J. & Stiles, S.E. (2002). Exploring the Professional Design Process: Bringing an Abstract Framework into Practice. *Science Educator*, 11 (1), 1-8.

Rhoton, J. (2002) *Tennessee Junior Academy of Science Proceedings and Handbook*. Tennessee Academy of Science.

Rhoton, J. & etal. (2001). Professional Development: A Major Component in Science Teaching and Learning. *Science Educator*, 8 (1), 1-8.

Rhoton, J. (2001) School Science Reform: An Overview and Implications for the Secondary School Principal. *National Association of Secondary School Principals Bulletin*, 85 (623), 10-23.

Madrazo, G. & Rhoton, J. (1998). Classroom Meets World. Multicultural Strategies for the Middle School. *Science Scope*, National Science Teachers Association.

Rhoton, J. (2000). Tennessee Junior Academy of Science Proceedings and Handbook. Tennessee Academy of Science: Nashville, TN.

Madrazo, G. & Rhoton, J. The diverse learner. In Rhoton, J. & Bowers, P. (Ed.), *Issues in Professional Development: Science Leadership and the Diverse Learner*. National Science Teachers Association and the National Science Education Leadership Association: Washington, DC.

Rhoton, J, et al. (1999). Professional development: a major component in science teaching and learning. *Science Educator*. 8(1), 1-8.

Rhoton, J., et al. (1998). The role of professional development in science education reform: An ETSU model. *Tennessee Educational Leadership Journal*, 25 (1), 25-29.

Madrazo, M. Jr., & Rhoton, J. (1998). Classroom meets world: Multicultural strategies for the middle level. *Science Scope*. January, 1999.

Rhoton, J. (1997). Tennessee Academy of Science Handbook. Published by the Tennessee Academy of Science: Nashville, TN.

Rhoton, J. (1996). Tennessee Academy of Science Handbook. Published by the Tennessee Academy of Science: Nashville, TN.

Rhoton, J. (1995). Science Education in Northeast Tennessee: Where Have We Been and Where are We Going? East Tennessee State University: Johnson City, TN. (In-house publication)

Rhoton, J. (1994). The Role of Higher Education in Pre-college Science Education Reform. *Journal of College Science Teaching*. 23(5), 260-263. National, referred journal.

Rhoton, J. (1994). A Paradigm Shift in the Way Science In-service Education is Delivered. *Science Educator*. 3(1), 18-24. National, referred journal.

Rhoton, J. (1994). Tennessee to Develop a K-12 Framework. Ellipse. University of Tennessee at Martin. Non-referred publication.

Pafford, W. & Rhoton, J. (1993). That's My Inheritance. *Science and Children*. 31(1), 38-40. National, referred journal.

Rhoton, J. (1993). Integrating State of the Art Technology into the Science Curriculum. In L. Motz and G. Madrazo Eds.)*Fourth Sourcebook for Science Supervisors*. Washington, DC: National Science Teachers Association. National, referred book.

Rhoton, J. (1993). The Role of Two-Year College Science Faculty in Improving Science, Mathematics and Engineering Education. *Journal of College Science Teaching*. 22(3), 236-238. National, referred journal.

Rhoton, J. (1993). The Role of Professional Organization Ellipse. University of Tennessee at Martin. Non-referred publication.

Rhoton, J. (1992). Some Thoughts on School Science and the Science Supervisors. *Science Educator*. 1(1), 1 - 2. National, referred journal.

Rhoton, J., Fields, M., Prather, J. (1992). An Alternative to the Elementary School Science Specialist. *Journal of Elementary Science Education*. 4(1), 14 - 25. National, referred journal.

Rhoton, J. (1991). Restructuring Elementary School Science In-Service Education for Improved Teaching and Learning. *Education*. National, refereed journal. 112(2), 253-259.

Rhoton, J. and Pafford, W. N. (1991). Training In-service Teachers for Improved Skills in Science and Technology Education. *Bulletin of Science, Technology and Society*. 10(5), 305-309. National, refereed journal.

Rhoton, J., Harmsen, P. and Weinholtz, D. (1991). What Research Says to the Science Teacher: Implications for the Science Supervisor and Principal. *Reaching for Excellence in Elementary School Science Project: NSF Report*. Johnson City, Tennessee: University Press. (In-house publication).

Rhoton, J. (1986-91). Several articles published in Sciencing Quarterly. The Official Newsletter of the Tennessee Science Teachers Association.

Rhoton, J. and Pafford, W. N. (1990). Training In-service Teachers For Improved Skills In Science and Technology Education. In D. Cleek (Ed.), *Proceedings of the Fifth Technological Literacy Conference*. Washington, DC: ERIC.

Rhoton, J. (1989). A Study of Science Technology Society Education Perceptions of Secondary Science Teachers in Tennessee. In D. Cleek (Ed.), *Proceedings of the Fourth Technological Literacy Conference*. Washington, DC: ERIC.

Rhoton, J. (1989). The Leadership Institute as a Vehicle for Improving Science Leadership Skills and Behaviors Among Science Supervisors. *Journal of the National Science Supervisors Association*. 1, 2-5. National, refereed journal.

Rhoton, J. (1990). An Investigation of Science-Technology-Society Education of Secondary Science Teachers in Tennessee. *School Science and Mathematics*. 90(5), 383-395. National, refereed journal.

Rhoton, J. (1989). Promoting Elementary School Science Through a Science Partners Program. *Journal of Elementary Science Education*. 1, 10-13. National, refereed journal.

Rhoton, J. (1989). A Different Partnership. *Science and Children*. 26(8), 37. (In the School Column) National, refereed journal.

Rhoton, J., Metcalf, J. and Redmond, A. (1988). A Summer Science Challenge Program for Elementary and Middle School Students. *Tennessee Educational Leadership*. 15(2), 27-31. State, refereed journal.

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Rhoton, J. (1984). Teacher Guidelines for Resident Science Education, Kingsport City School System. 1-44.

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Rhoton, J. (1979). Science and Environmental Education: A Resource Guide, K-12. Kingsport City School System. 1-59.

Rhoton, J. (1978). Solar Energy Activities and Projects for Elementary and Secondary Students. Kingsport City Schools. 1-78.

Rhoton, J. (1978). Guidelines for Safety in the Science Classroom and Laboratory. Kingsport City School System. 1-87.

Rhoton, J. (1978). Energy Activities (A series of 12 energy books representing all grade levels.) Kingsport City School System.

Rhoton, J. (1978). Science Program in the Kingsport City Schools. Tennessee Environmental Education Newsletter. (Spring).

Childress, R. and Rhoton, J. (1977). A Preliminary Investigation of Energy Education/Conservation Attitudes of a Selected Group of East Tennessee Educators. *Journal of the Tennessee Academy of Science*. 52(4), 127-130. State, refereed journal.

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Rhoton, J. (1975). Environmental Education Directory for Tennessee. Tennessee Environmental Education Association. 1-32.

Fletcher, R. K. and Rhoton, J. (1978). Status of Environmental Education in Tennessee. ERIC Clearinghouse for Science/Mathematics, and Environmental Education. (ED 195 415).

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Rhoton, J. and Childress, R. (1975). Environmental Education: An Experimental Problem-Focused Approach for High School Students. *Journal of the Tennessee Academy of Science*. 50, 77-79. State, refereed journal.

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In Progress

Rhoton, J. (Tennessee Junior Academy of Science Award Recipients: Where are they now and what are they doing?)

Rhoton, J. (The effect of a teacher enhancement program on attitudes of in-service teachers.)

Rhoton, J. (Messing around with gases and air.)

Rhoton, J. (The influence of attitude on science teaching and learning.)

University Activities

Member, Early Childhood Education Advisory Committee, Early Childhood Center (2013)

Member, University Silent Committee, 2012

Chair, Search Committee to find a new Director, Early Childhood Center of Excellence Learning and Development, 2011.

Member, University Silent Committee, 2011

Chair, University Silent Committee, 2009

Member, University Honors Council (2005-present)

Member, Search Committee to find a new Chair for the Department of Biological Science (2005-2006)

Member, Search Committee to find a new Dean for the College of Arts and Sciences (2004)

Member, Search Committee to find a new Chair for the Department of Biological Sciences (2004-2005)

Director, Teacher Education Honors Program (2002- present)

President, Upper East Tennessee Science Fair, Inc. (2000-present)

Member, College of Education, Recognition Committee, 1996-present).

Member, Advisory Committee for several MAT students (1987-present)

Member, COE, Tenure and Promotion Committee (2000-2004)

Chair, Committee to Develop Tenure and Promotion Guidelines for the Department of Curriculum and Instructions (2002).

Member, Off-campus Student Support Continuous Improvement Committee, 1999-2000).

Member, Dean's Advisory Committee, College of Education, (1995-2000).

Member, Screening Committee for MAT Program, (1995 to Present).

Program Coordinator, Master of Education Degree Program, (1995-2000).

Member, Board of Directors, Upper East Tennessee Science Fair. (1991-present).

Member, Executive Committee, Upper East Tennessee Science Fair. (1991-present).

Member, Graduate Review Committee, (1995).

Chair, Search Committee to find a library or library media assistant/associate professor in the Department of Curriculum and Instruction. (1994-95).

Chair, Search Committee to find a new Chair for the Department of Human Development and Learning. (1994-95).

Chair, M.Ed. graduate program for NCATE. (1994-95).

Co-Chair, NCATE Committee for Secondary Education. (1994-95).

Member, NCATE Committee for Professional Community. (1995).

Member, NCATE Committee on Portfolio Assessment. (1995).

Member, Search Committee for Dean in College of Education. (1993).

Member, Screening Committee for MAT program. (1993).

Member, Search Committee for two C & I faculty members. (1993).

Member, Search Committee for Department Chair in Curriculum and Instruction. (1992-93).

Member, Planning Committee for the Professional Development School between the College of Education and the Johnson City School System.

Member, SACS Committee on Externally Funded Grants and Contracts, ETSU. (1991-92).

A committee member for three doctoral students in the Department of Educational Leadership and Policy Analysis. (1995-96).

Served on the committee of several master degree students. (1990-91).

Member, Orientation Advisement. (July 27, 1990).

Member, Departmental Committee for Evaluation of Graduate Program in Secondary Education. (1989-90).

Team member for Teacher Education Admission Board. (1990).

Member, Doctoral Program Committee, to study the feasibility of creating a doctoral program in the Department of Curriculum and Instruction. (1989-present).

Chairperson, Grade Appeals Committee, for the College of Education. (1989-90).

Member, Screening Committee, for the MAT program. (1989-91).

Member, University Search Committee for Director of Research and Sponsored Programs. (1988-89).

Member, Faculty Search Committee, Department of Curriculum and Instruction. (1988-89) and (1989-90).

Member, Faculty Search Committee, Department of Curriculum and Instruction. (1987-88).

Academic advisor and Master's Committee chairperson.

Made presentations to other faculty members' classes (Dr. Fowler, Mr. Armentrout, Dr. Jack Higgs, and Ms. Weinholtz).