1997 BEST STUDENT PAPER AWARDS

AERONAUTICAL AND AEROSPACE SCIENCES:
Mohamed A. Elseifi
Dept. of Aerospace and Ocean Engineering, Virginia Tech
Optimum Design of Stiffened Composite Panels with Realistic Imperfections

AGRICULTURE, FORESTRY, AND AQUACULTURE:
Carla E. Hegeman
Dept. of Plant Pathology, Physiology, and Weed Science, Virginia Tech
Purification and Characterization of Soybean Phytase

ASTRONOMY, MATHEMATICS AND PHYSICS:
Amanda McDaniel
Dept. of Physics, University of Virginia
Near-Field Scanning Optical Microscopy Studies of Cu(In,Ga)Se2 Solar Cells

BIOLOGY:
I. E. Burbulis
Dept. of Biology, Virginia Tech
Analysis of Flavonoid Biosynthesis in Arabidopsis

BOTANY:
Rhonda Edwards
Dept. of Biology, Virginia Tech
The Reproductive Biology of Addison’s Leatherflower

CHEMISTRY:
V. Tersol
Dept. of Chemistry and Biochemistry, Old Dominion University
Use of Solid Phase Microextraction Techniques in the Detection of Contraband Drugs

COMPUTER SCIENCE:
Daniel Werner
Dept. of Computer Science, Randolph-Macon College
Empirical Results from a Sonar Transducer Hardware Interface

EDUCATION:
Brenda Brand
Dept. of Teaching and Learning, Virginia Tech
Pre-Service Science Teachers’ Beliefs About Diversity
ENVIRONMENTAL SCIENCE:

Matt A. Patterson
Depts. of Biology and Fisheries and Wildlife, Virginia Tech
Use of Glycogen Levels to Assess the General Health of Unionids from the Zebra Mussel Infested Ohio River and from Quarantine

GEOLOGY:

Ginger Vaughn
Dept. of Geological Sciences, Virginia Tech
Orientations and Magnitudes of Paleostress Recorded in Lower Paleozoic Carbonates from the Appalachian Valley and Ridge Province, Northern Virginia

MATERIALS SCIENCE:

Christopher Robertson
Dept. of Chemical Engineering, Virginia Tech
Segmental Cooperativity in Glass-Forming Miscible Polymer Blends and the Influence on Structural Relaxation

MEDICAL SCIENCES:

Kim Gerecke
Dept. of Psychology, University of Richmond
Are Some of the Sexual, Behavioral and Physiological Effects of Prenatal Stress Due to Alterations of Neuronal Morphology in Medial Preoptic Area (mPOA) Neurons?

MICROBIOLOGY AND MOLECULAR BIOLOGY:

M. V. Thorsteinsson
Dept. of Biochemistry, Virginia Tech
Ligand Binding Studies of the Cytoplasmic Hemoglobin of Nostoc commune, UTEX 584 (Cyanobacteria)

NATURAL HISTORY AND BIODIVERSITY:

Stephen Sumithran
Dept. of Fisheries and Wildlife Sciences, Virginia Tech
Status of Conservation of the Nilgiri Tahr, Hemitragus hylocrius, in the Mukurthi National Park, South India (Bovidae)

PSYCHOLOGY:

Emily L. Fergus
Dept. of Psychology, James Madison University
Touch During Mother-Infant Interactions: The Effects of Parenting Stress, Depression and Anxiety
BEST STUDENT PAPER AWARDS

STATISTICS (VAS Chapter, American Statistical Association):
Kiho Kim
Dept. of Statistics, Virginia Tech
Linear Trend-Free Factorial Designs

HONORABLE MENTION

AERONAUTICAL AND AEROSPACE SCIENCES:
Christian Wenger
Dept. of Aerospace and Ocean Engineering, Virginia Tech
Wave Number Frequency Spectra of Turbulent Flows

AGRICULTURE, FORESTRY, AND AQUACULTURE:
Doug N. Harpole
Dept. of Fisheries and Wildlife Sciences, Virginia Tech
Effects of 7 Silvicultural Treatments on Terrestrial Salamanders in a Southern Appalachian Hardwood Forest

G. Tasissa
Dept. of Forestry, Virginia Tech
Modeling Thinning Effects on Ring Specific Gravity of Loblolly Pine (*Pinus taeda* L.)

ASTRONOMY, MATHEMATICS AND PHYSICS:
Justin Voshell
Dept. of Physics, James Madison University
Development of a Remote Computer Control Calibration System for Photomultipliers in the Hall B CLAS Detector at the Jefferson National Laboratory

BIOLOGY:

C. M. Wilson
Dept. of Biology, Hampden-Sydney College
and Dept. of Biology, Virginia Tech
Thyroid Hormones in Avian Eggs: Presence, Manipulation, and Influence on Embryonic Development

M. B. Lovern
Dept. of Biology, Virginia Tech
A Behavioral Profile of Free-Ranging Juvenile Male and Female Green Anoles, *Anolis carolinensis*
CHEMISTRY:

R. C. Watson
Dept. of Chemistry, Virginia Tech
Time of Flight Mass Spectrometry of Inorganic Complexes

EDUCATION:

Starlin D. Weaver
Dept. of Teaching and Learning, Virginia Tech
Using Portfolios to Assess Learning in Chemistry: One School’s Story of Evolving Assessment Practices

ENVIRONMENTAL SCIENCE:

Kimberly S. Barnes
Dept. of Biology, George Mason University
Phenotypic Characterization of an Extremely Halophilic Archaebacterium

M. J. Cyterski
Dept. of Fisheries and Wildlife Sciences, Virginia Tech
Factors Affecting the Utilization of Gizzard Shad by Sportfishes in Two Virginia Reservoirs

GEOLOGY:

Rachael C. Davis
Dept. of Geology and Environmental Studies, James Madison University
Textural Analysis of a Periclglacial (?) Surficial Deposit at Graves Mill, Madison County, Virginia

Andrew M. Bush
Dept. of Geological Sciences, Virginia Tech
A Test of Evolutionary Stasis in Time-Averaged Assemblages of Mercenaria Clams

MATERIALS SCIENCE:

Karen S. Lewis
Dept. of Material Science and Engineering, University of Virginia
Determination of the Corrosive Solution Formed Within Aircraft Lap-Splice Joints

C. A. Mahieux
Dept. of Material Science and Engineering, Virginia Tech
Microbuckling in Unidirectional Fiber Reinforced Polymer Composites in End-loaded Bending
BEST STUDENT PAPER AWARDS

MEDICAL SCIENCES:

David W. Mullins
Dept. of Biology, Microbiology and Immunology Section, Virginia Tech
Taxol Administration Modulates Nitric Oxide but Enhances Interleukin 12 Production by Tumor Distal Macrophages In Vivo

Asimah Rafi
Dept. of Biology, Virginia Tech
CD44-Hyaluronic Acid Interactions Can Induce Murine B Cell Activation

NATURAL HISTORY AND BIODIVERSITY:

James Berkelman
Dept. of Fisheries and Wildlife Sciences, Virginia Tech
Foraging Ecology of the Madagascar Fish-Eagle, Haliaeetus vociferoides

Sean L. Carter
Dept. of Fisheries and Wildlife Sciences, Virginia Tech
Movement and Activity Patterns of Bog Turtles, Clemmys mahunbergii, in Southwest Virginia

PSYCHOLOGY:

Julie M. Stark
Dept. of Psychology, Old Dominion University
Attachment Style and its Relationship to Stress, Anxiety, Coping and Relationship Satisfaction as a Function of Sexual Orientation

Janice E. Halecki
Dept. of Psychology, Old Dominion University
Dysphoria and the Emotional Stroop Task: An Investigation of the Significance of Errors