

1993 BEST STUDENT PAPER AWARDS**AERONAUTICAL AND AEROSPACE SCIENCES****J. K. Ahuja**

Department of Mechanical Engineering and Mechanics, Old Dominion University. Numerical Simulation of Shock-Induced Combustion in a Hydrogen-Air System and Parametric Studies

AGRICULTURE, FORESTRY, AND AQUACULTURE**Paul F. Doruska**

Department of Forestry, VPI & SU. Modeling the Diameter and Locational Distributions of Branches Within Crowns of Loblolly Pine Trees

ARCHAEOLOGY**Bernard K. Means**

Fortunes of Empire: The Spatial and Temporal Dimensions of Imperial Control in Medieval South India

ASTRONOMY, MATHEMATICS, AND PHYSICS**Richard Grant**

Department of Physics, Old Dominion University. Microstructural Properties of the Four Iron-Zinc Galvanneal Standards

EDUCATION**Richard T. Strauss**

A Comparison of the Effects of Animal Dissection and an Interactive Videodisc Simulation of Dissection on Students' Knowledge of Anatomy and Attitudes Toward Dissection

ENVIRONMENTAL SCIENCE**Thomas M. Hampton**

Department of Fisheries and Wildlife Sciences, VPI & SU. Effects of Seasonal Habitat Limitations on Distribution and Growth of Stocked Trout in Lake Moomaw, Virginia

GEOGRAPHY**Laura Culp**

Department of Geology and Geography, James Madison University. The Effects of the North American Free Trade Agreement (NAFTA) on Mexico

GEOLOGY**James R. Lawrence**

Applied Marine Research Laboratory, Old Dominion University. The Geomorphology and Hydrogeology of Green Pond, Augusta County, Virginia

MATERIALS SCIENCE

James F. Groves

Department of Materials Science, University of Virginia. Fiber Damage During the Consolidation of Metal Matrix Composites

MEDICAL SCIENCES - for presentation at 1992 Annual Meeting

George Pugh

Department of Pharmacology and Toxicology, Virginia Commonwealth University. Effects of the Interactions of Morphine and Cannabinoids on Second Messenger Systems in the Production of Antinociception in the Spinal Cord

MICROBIOLOGY AND MOLECULAR BIOLOGY

Catherine E. Monahan

Department of Biology, James Madison University. Detection of *Vibrio cholerae* in Water by the Polymerase Chain Reaction

PSYCHOLOGY

Stephen G. Cunningham

Department of Psychology, Old Dominion University. Analysis of Brain-Evoked Responses to Task-Irrelevant Auditory Stimuli

HONORABLE MENTIONS

AERONAUTICAL AND AEROSPACE SCIENCES

R. Chen

Department of Mechanical Engineering and Mechanics, Old Dominion University. Finite Element Nonlinear Random Response of Beams to Acoustic and Thermal Loads Applied Simultaneously

H. Fuhrmann

NASA Langley Research Center. Leading Edge Vortex Flaps on a Double Delta Wing

ARCHAEOLOGY

Kimberly N. Lowe

A Preliminary Investigation into Native American Burial Orientation and Seasonal Death Prediction in Southwest Virginia

ASTRONOMY, MATHEMATICS, AND PHYSICS

Uri Tsyganenko

Physics Department, James Madison University. Fine Features Caused by Lateral Interactions in the Infrared Spectrum of CO Adsorbed on ZnO, a Monte-Carlo Study

Charles Terrel

Department of Physics, Hampton University. Perfluorobutyl Iodide as Gain Media for High-power, Continuous Solar-pumped Iodine Laser

MATERIALS SCIENCE**Thomas B. Buchheit**

Department of Materials Science, University of Virginia. Constitutive Relationships for Shape Memory Alloys

David Kolman

Department of Materials Science, University of Virginia. Characterization of the Passivity of Titanium Alloys

MEDICAL SCIENCES - for presentations at 1992 Annual Meeting**Doreen Grech**

Department of Pharmacology and Toxicology, Virginia Commonwealth University. Discriminative Stimulus Effects of NMDA Antagonists and GABA Agonists

Tracey Spriggs

Department of Pharmacology and Toxicology, Virginia Commonwealth University. In Vitro and In Vivo Evaluation of 6-Hydroxydopamine and 5-Hydroxydopamine on the Primary Antibody Response in B6C3F1 Mice

MICROBIOLOGY AND MOLECULAR BIOLOGY**Jessica M. Jones**

Department of Biology, George Mason University. Homologous Sequence Elements in Two Maize Ubiquitin Promotors

Joan M. Zimmerman

Department of Biology, George Mason University. DNA-Binding of Putative Transcription Factors Derived from Etiolated Maize Seedlings

STATISTICS**Michael Fay**

Department of Biostatistics, VA Commonwealth University. A Scoring Method for Multinomial Distributions with Ordered Categories with Applications to Repeated Measures Data