

Ann M. Wright
Curriculum Vitae (short version)
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Education

- *Rensselaer Polytechnic Institute*, Troy, NY. PhD in Physics, December, 1996. Thesis: Multipion Decay of Baryons Excited in Kp Scattering and a High Magnetic field Cerenkov Detector.
- *Massachusetts Institute of Technology*, Cambridge, MA. BS in Physics, June 1991. Humanities concentration in Psychology. Thesis: Analysis of $^{12}\text{C}(\gamma, p \pi)$ Cross-section Data.

Work Experience

- 9/1998 to present. Hendrix College, Conway, AR. Department of Physics. Research in the fields of measurement techniques as applied to fuel studies on a hybrid rocket, and robotics.
- 10/1996 -8/1998. *University of Arkansas at Little Rock*, Little Rock, AR. Department of Applied Science. Research Associate. Research in the field of Hybrid Rockets. Studied combustion instability, fuel additives, detector instrumentation, and measurement techniques.
- Summer, 1989: *Hoechst Celanese Corporation*, Branchburg, NJ. Worked in the department of Environmental Health and Safety Affairs.
- Summer, 1990: *Bellcore, Inc.*, Piscataway, NJ. Worked in the library organizing a database for pre-divestiture technical documents.

Publications

- "Instrumentation of UALR lab-scale hybrid rocket motor", A.B. Wright, W. Teague, A.M. Wright, E. Wilson, Defense and Security Symposium, International Society for Optical Engineering, Orlando, FL, April 2006.
- "A Thrust and Impulse Study of Guanidinium Azo-Tetrazolate as a Fuel Additive for Hybrid Rocket Motor", A. M. Wright et al, Journal of Pyrotechnics, Issue 22, Winter 2005.
- "Optical Studies of Combustion Chamber Flame in a Hybrid Rocket Motor", A.B. Wright, A.M. Wright, et al, Journal of Pyrotechnics, Issue 19, Summer 2004.
- "Guanidinium Azo-Tetrazolate as a High Performance Hybrid Rocket Fuel Additive", M.K. Hudson, A.M. Wright, et al., Journal of Pyrotechnics, Issue 19, Summer 2004.
- "A Liberal Arts Approach to Teaching Robotics", A.M. Wright and G. Ferrer, ASEE Annual Conference Proceedings, 2003-1236.
- "FIRST in Engineering: Elements of Mechanical Design", A. B. Wright and A. M. Wright, ASEE Annual Conference Proceedings, 2003-1604.
- "Multi-wavelength Laser Opacity Study of a Hybrid Rocket Plume", A. Chouinard, A. Adams, A.M. Wright, M.K. Hudson, Issue 15, summer 2002, Journal of Pyrotechnics.
- "FIRST in Engineering: a Service-Learning Approach to Mechanical Design", A.B. Wright and A.M. Wright, ASEE Annual Conference Proceedings, 2002.
- "The Effect of High Concentration Guanidinium Azo-Tetrazolate on Thrust and Specific Impulse of a Hybrid Rocket", A.M. Wright et al., AIAA-2000-3885.
- "A Study of the Amplitude of Pressure and Thrust Oscillations in a Lab-Scale Hybrid Rocket", A.M. Wright et al., Arkansas Academy of Sciences Journal, vol. 54.

- "A Thrust and Impulse Study of Guanidinium Azo-Tetrazolate as an Additive for Hybrid Rocket Fuel", A.M. Wright et al., AIAA-99-2538.
- "Pressure Measurement in the Post-Combustion Section of a Hybrid Rocket Motor", A.M. Wright et al., AIAA-99-2536.
- "Effect of Energetic Fuel Additives on the Temperature of Hybrid Rocket", M. W. Teague et al., AIAA-99-2138.
- "Charged Particle Detection in Rocket Plumes for Health Monitoring", R. Dunn et al, International Journal of Turbo and Jet Engines. Vol 16,255-262, 1999.
- "A Hybrid Rocket Regression Rate Study of Guanidinium Azo-Tetrazolate", A.M. Wright et al, AIAA-98-3186.
- "A Hybrid Rocket Regression Rate Study of AminoGuanidinium Azo-Tetrazolate", A.M. Wright et al, AIAA-98-3187.
- "Charged Particle Detection in Rocket Plumes for Health Monitoring", R. Dunn et al, AIAA-98-3993.
- "A Test of the OZI Rule in Hadroproduction of $\phi\phi$ and ϕK^+K^- ", C. Landberg et al, Physical Review D, 53, pp2839-2842(1996).
- "Non-strange Baryon Excitation and Decay in the $p(K,K')p \pi^+ \pi^-$ System", A.M. Wright et al, Baryons '95 Conference on the Structure of Baryons and Related Mesons (Sante Fe, NM 10/95). Presented and published in the conference proceedings.
- "N* Electroproduction and Propagation in Nuclei", L. Weinstein et al, Physical Review C, 47, pp225-230, Jan 1993.
- "N* Electroproduction and Propagation in Nuclei", L. Weinstein et al, Baryons '92 International Conference on the Structure of Baryons and Related Mesons (6/92).

Professional Organizations

- American Institute of Aeronautics and Astronautics (AIAA)
- American Physical Society (APS)
- American Society of Engineering Education (ASEE)
- Sigma Xi
- Society of Physics Students
- Sigma Pi Sigma

Proposals Submitted and Awarded, 1999-2006

- 2006 \$1000 from ASGC to pay for travel to San Jose, CA with student Ryan Strickland for Odyssey project "Planetquest".
- 2005 \$2500 from ASGC to pay for travel and expenses for Ryan Swindle to attend a summer robotics program at NASA Goddard.
- 2004 \$15,000 for machine shop equipment, part of \$200K proposal to Research Corporation from Physics and Chemistry Depts.
- 2003 \$800 Hendrix College Travel Grant
- 2002 NASA EPSCoR Grant. \$287.5K per year for 5 years. Title: "Instrumentation for Diagnosis of Chemical Rocket Motors"
- 2002 \$800 Hendrix College Travel Grant
- 2001 ASGC grant for \$3000 to fund Patrick Foley's summer salary.
- 2001 NASA Grant for FIRST Robotics Team #356, \$7,000 for 1 year.

- 2000 NASA Grant for FIRST Robotics Team #356, \$6,000 for 1 year.
- NASA EPSCoR Grant: \$10,000 summer salary for research consultant Summer 99.
- NASA EPSCoR Preparation Grant: \$102,500 renewable for 3 years. Title: Instrumentation for Diagnosis of a Hybrid Rocket Motor.
- Arkansas Space Grant Consortium: \$3,800 awarded February, 1999. \$800 for travel to NASA Stennis during the summer of 1999, \$3000 for purchase of a lap-top computer for use in hybrid rocket fuel studies.
- Arkansas Space Grant Consortium: \$3140 awarded January 1999. \$140 for student travel to NASA Stennis in Summer 1999. \$3000 summer stipend for Lawrence Dunn, Hendrix College freshman.
- Arkansas Space Grant Consortium: \$3000 awarded January 1999. \$3000 summer stipend for Brian Alford, Hendrix College freshman.
- Hendrix College Project Grant: \$400 for travel to a conference, Women in Technology, held at Rensselaer Polytechnic Institute March 1999. Also discussed Nuclear physics research opportunities with Dr. Jim Napolitano while in Troy, NY.
- 1999 Hendrix College Faculty Travel Grant: \$725