



Jay L. Wile, Ph.D.

EXPERIENCE / ACHIEVEMENTS

Owner 1998 - Present

Apologia Educational Ministries

- * Published 8 courses in junior high school and high school science which are used by homechoolers in all 50 states and 10 other countries. This curriculum has been named the best junior high and high school science curriculum in the United States by the readers of *Practical Homeschooling Magazine*.
- * Published a book on Christian Apologetics which is now in its third printing
- * Delivered numerous invited lectures in conventions across the United States.

Senior Programmer/Analyst 1995 - 1998

Pathologists Associated Muncie, IN

- * Designed and built a client/server architecture on a legacy system that had an ROI of 250%.
- * Designed and programmed automation software system that eliminated 7 FTEs.
- * Designed and programmed an automated archival system that produced information in a unique way, attracting several new clients.

Assistant Professor of Chemistry 1992 - 1995

Ball State University Muncie, IN

- * Designed and implemented an environmental chemistry course that boosted the department's general studies enrollment by 30 percent.
- * Designed and built next generation subatomic particle detector that performed eight times more efficiently than any other detector in the same price range.
- * Administered \$200,000 research program and wrote seven major nuclear chemistry articles published in three prestigious international journals.

Instructor of Science 1990 - 1992

Indiana Academy of Science Muncie, IN

- * Designed and implemented high school physical science lecture and laboratory that increased student scores on standardized tests by 15 percent.
- * Directed and monitored student's research project that earned recognition as one of the top 40 in the nation by Westinghouse Science Talent Search.
- * Participated on three-person committee that wrote the faculty evaluation and promotion policy adopted and currently used by the Indiana Academy faculty.

Assistant Professor of Chemistry 1989 - 1990 (Part-Time)

Indiana University Department of Chemistry Bloomington, IN

- * Planned and implemented freshman-level chemistry course that received a 4.7 out of 5 rating by the 450 student participants.
- * Analyzed preequilibrium particle emission data and published scientific paper that determined the direction of all current research in the field.

OTHER EXPERIENCE

Consultant to Homeschoolers 1992 - Present

Self-Employed Anderson, IN

Graduate Research Assistant 1985 - 1989

University of Rochester Rochester, NY

Teaching Assistant 1982 - 1987 (Part-Time)

University of Rochester Rochester, NY

EDUCATION / TRAINING

Ph.D. in Nuclear Chemistry 1989

University of Rochester Rochester, NY

Bachelor of Science Magna Cum Laude 1985

Major: Chemistry Minor: Philosophy

University of Rochester Rochester, NY

Conducted or participated in numerous conferences, courses, seminars, workshops, and related professional activities pertaining to homeschooling, the creation / evolution debate, academic / industrial research, analysis, computer systems, development, electronics, nuclear chemistry, operations, presentations, publications, and training.

AFFILIATIONS / AWARDS

American Association for the Advancement of Science

American Chemical Society

Phi Beta Kappa

Bene Facta Scholar Ball State University

Excellence in Teaching Award Finalist Ball State University

Outstanding Teacher Award University of Chicago

W.D. Walters Award for Teach Excellence University of Rochester
Westinghouse Science Talent Search Certificate of Honor Science Service

Publications

1. *Advanced Physics in Creation*, J.L. Wile, (Apologia Educational Ministries, pub.), 2002
2. *The Human Body: Fearfully and Wonderfully Made*, J. L. Wile and M. Shannon, (Apologia Educational Ministries, pub.) 2001
3. *Exploring Creation With General Science*, J. L. Wile, (Apologia Educational Ministries, pub.) 2000
4. *Advanced Chemistry in Creation*, J. L. Wile, (Apologia Educational Ministries, pub.) 1999
5. *Exploring Creation With Physical Science*, J. L. Wile, (Apologia Educational Ministries, pub.) 1999
6. *Exploring Creation With Biology*, J. L. Wile and M. Durnell, (Apologia Educational Ministries, pub.) 1998
7. *Exploring Creation With Physics*, J. L. Wile, (Apologia Educational Ministries, pub.) 1997
8. *Reasonable Faith: The Scientific Case For Christianity*, J. L. Wile, (Apologia Educational Ministries, pub.) 1997
9. *Exploring Creation With Chemistry*, J. L. Wile, (Apologia Educational Ministries, pub.), 1996
10. **A Time-Independent Measurement of the Speed of Light**, J. L. Wile, *Creation Ex Nihilo Technical Journal* **7**, 88 (1993)
11. **Beneficial Mutations'**, J. L. Wile, *Creation Ex Nihilo Technical Journal* **6**, 6 (1992)
12. **Decay Patterns of Dysprosium Nuclei Produced in $^{32}\text{S} + ^{118,124}\text{Sn}$ Fusion Reactions**, J. L. Wile, D. L. Coffing, E. T. Bauer, A. L. Michael, M. A. Doerner, S. P. Baldwin, B. M. Szabo, B. Lott, B. M. Quednau, J. Toke, W. U. Schroder, and R. T. de Souza, *Phys. Rev.* **C48**, 2897 (1993)
13. **Studies of Intermediate-Mass Fragment Emission in the $^3\text{He} + \text{natAg}$, ^{197}Au Reactions Between 0.48 and 3.6 GeV**, S. J. Yennello, K. Kwiatkowski, E. C. Pollacco, C. Volant, Y. Cassagnou, R. Dayras, D. E. Fields, S. Harar, E. Hourani, R. Legrain, E. Norbeck, R. Planeta, J. L. Wile, N. R. Yoder, and V. E. Viola, *Phys. Rev.* **C48**, 1092 (1993).
14. **Thermal Characteristics of Composite Systems Formed in the Fusion of ^{28}Si with ^{119}Sn and ^{124}Sn Nuclei**, J. L. Wile, S. S. Datta, W.U. Schroder, J. Toke, D. Pade, S. P. Baldwin, J. R. Huizenga, B. M. Quednau, R. T. desouza, and D. M. Szabo, *Phys. Rev.* **C47**, 2135 (1993).
15. **Neck Emission of Intermediate Mass Fragments in the Fission of Hot Heavy Nuclei**, D. E. Fields, K. Kwiatkowski, K. B. Morley, E. Renshaw, J. L. Wile, S. J. Yennello, and V. E. Viola, *Phys. Rev. Lett.* **26** 3713 (1992).
16. **Excitation Functions for Complex Fragment Emission in the $E/A = 20\text{-}100$ MeV $^{14}\text{N} + ^{107}\text{Ag}$ Reactions**, J. L. Wile, D. E. Fields, K. Kwiatkowski, S. J. Yennello, K. B. Morley, E. Renshaw, V. E. Viola, C. K. Gelbke, W. G. Lynch, N. Carlin, H. M. Xu, W. G. Gong, M. B. Tsang, R. T. de Souza, D. J. Fields, and Sam M. Austin, *Phys. Rev.* **C45**, 2300 (1992).
17. **Mechanisms of Intermediate Mass-Fragment Formation from Threshold to $E/A = 100$ MeV**, V. E. Viola, J. L. Wile, D. E. Fields, K. Kwiatkowski, S. J. Yennello, H. M. Xu, M. B. Tsang, R. T. de Souza, E. Renshaw, J. Pochodzalla, K. B. Morley, W. G. Lynch, W. G. Gong, C. K. Gelbke, D. J. Fields, and N. Carlin, *Nuclear Physics* **A528**, 291c, (1992).
18. **Multifragment Emission in Reactions Induced by 0.90 and 3.6 GeV ^3He Ions on ^{107}Ag** , S. J. Yennello, E. C. Pollacco, K. Kwiatkowski, C. Volant, R. Dayras, Y. Cassagnou, R. Legrain, E. Norbeck, V. E. Viola, J. L. Wile, and N. R. Yoder, *Phys. Rev. Lett.* **67**, 671 (1991).
19. **Complex Fragment Emission in the $E/A = 60 - 100$ MeV/u $^{14}\text{N} + \text{natAg}$, ^{197}Au Reactions**, J. L. Wile, D. E. Fields, K. Kwiatkowski, K. B. Morely, E. Renshaw, S. J. Yennello, V. E. Viola, N. Carlin, C. K. Gelbke, W. G. Gong, W. G. Lynch, R. T. desouza M. B. Tsang, and H. M. Xu, *Phys. Lett. B* **264**, 26 (1991).

20. **Trends in Fragment Heating in the Damped Reaction $165\text{Ho} + 56\text{Fe}$ at 7.2 MeV/u**, D. Pade, W. U. Schroder, J. Toke, J. L. Wile, and R. T. desouza, *Phys. Rev.* **C43**, 1288 (1991)
21. **A Logarithmic, Large-Solid-Angle Detector Telescope for Nuclear Fragmentation**, K. Kwiatkowski, K. Komisarckik, J. L. Wile, S. J. Yennello, D. E. Fields, and V. E. Viola, *Nucl. Instr. Meth.* **A299** (1990).
22. **Search for the Onset of Multifragmentation in the Reaction $3\text{He} + {}^{107}\text{Ag}$** , E. C. Pollacco. C. Volant, R. Dayras, Y. Cassagnou, S. Harar, R. Legrain, C. Mazur, S. J. Yennello. K. Kwiatkowski, N. R. Yoder, V. E. Viola, R. Planeta, J. L. Wile, D. E. Fields, E. Hourani, E. Norbeck, *Nuclear Physics* **A519**, 197 (1990).
23. **Excitation Functions for Complex Fragments emitted in 14N -induced Reactions from $E/A = 20$ -100 MeV**, D. E. Fields, J. L. Wile, K. Kwiatkowski, S. J. Yennello, E. Renshaw, K. B. Morely, V. E. Viola, N. Carlin, R. T. desouza, C. K. Gelbke, W. G. Lynch, M.B. Tsang, H. M. Xu, and W. Gong, *Proc. Winter Workshop on Nuclear Dynamics VI*, (1990).
24. **Multifragmentation Threshold in the $3\text{He} + \text{natAg}$ System**, S. J. Yennello, K. Kwiatkowski, V. E. Viola, R. Planeta, J. L. Wile, D. E. Fields, E. C. Pollacca, C. Volant, R. Dayra, Y. Cassagnou, S. Harar, R. Lengrain, E. Hourani, and E. Norbeck, *Proc. Int. Workshop on Gross Properties of Nuclei and Nuclear Excitation XVIII*, Hirschegg, Austria, (1990).
25. **Evidence for Radial-Energy Scaling of Non-Equilibrium Neutron Yield in Damped $139\text{La} + 40\text{Ar}$ Reactions**, J. L. Wile, S. S. Datta, R. T. desouza, J. R. Huizenga, D. Pade, W. U. Schroder, and J. Toke, *Phys. Rev. Lett.* **63**, 2551 (1989).
26. **Excitation Energy Equilibration in Damped $139\text{La} + 40\text{Ar}$ Collisions at 15 MeV per Nucleon**, J. L. Wile, S. S. Datta, W. U. Schroder, J. R. Huizenga, R. T. desouza, and D. Pade, *Phys. Rev.* **C40**, 1700 (1989).
27. **Nonequilibrium Effects in the $139\text{La} + 40\text{Ar}$ Reaction at 10 MeV per Nucleon Observed in a Study of Neutron Emission**, J. L. Wile, S. S. Datta, W. U. Schroder, J. R. Huizenga, J. Toke, and R. T. desouza, *Phys. Rev.* **C39**, 1845 (1989).
28. **Nucleon Exchange in the Absence of Strong Driving Forces: The Reaction $238\text{U} + 48\text{Ca}$ at $E_{\text{lab}} = 425$ MeV**, R. T. desouza, W. U. Schroder, J.R. Huizenga, J. Toke, S. S. Datta, and J. L. Wile, *Phys. Rev.* **C39**, 114 (1989).
29. **Non-Equilibrium Energy Transport in Damped Reactions**, W. U. Schroder, J. L. Wile, D. Pade, S. S. Datta, J. Toke, J. R. Huizenga, and R. T. desouza, *Proc. International Conf. on Nuclear Reaction Mechanisms*, Calcutta, India, Ed. S. Mukherjee, (Saha Inst. Nuclear Phys), p. 72 (1989).
30. **Study of Fusion-Evaporation Reactions using a 4- π Neutron Multiplicity Meter**, S. S. Datta, W. U. Schroder, J. L. Wile, R. T. desouza, J. Toke, and J. R. Huizenga, *Proc. Symp. on Nuclear Physics*, Bombay, India, Invited Papers Vol **31A**, 200 (1989).
31. **Mass and Energy Flow in Damped Reactions**, W. U. Schroder, J. L. Wile, D. Pade, S. S. Datta, J. Toke, J. R. Huizenga, and R. T. desouza, *Proc. Symp. on Nuclear Physics*, Bombay, India, Invited Papers Vol **31A**, 231 (1989).
32. **Apparent Inhibition of Neutron Emission near the $N=82$ Closed Shell**, J. L. Wile, S. S. Datta, W. U. Schroder, J. R. Huizenga, and J. Toke, *Proc. Winter Workshop on Nuclear Dynamics V*, Ed. G. Westfall, 1988.
33. **Energy Relaxation in Damped Reactions**, W. U. Schroder, S. S. Datta, J. L. Wile, J. Toke, R. T. desouza, J. R. Huizenga, *Proc. Texas A&M Symp. on Hot Nuclei*, Eds S. Shlomo, R. P. Schmitt, and J. B. Natowitz, (World Scientific, Teaneck, NJ), p. 233 (1988).
34. **Massive Heavy-Ion Reactions**, J. R. Huizenga, M. A. Butler, H. Rossner, J. L. Wile, S. S. Datta, R. T. de Souza, D. Hilscher, W.U. Schroder, and J. Toke, *Proc. All-Union Symp. on the Physics of Nuclear Fission*, Obninsk, U.S.S.R., 1987.
35. **Energy Dissipation and Particle Emission in Heavy-Ion Reactions**, W.U. Schroder, S. S. Datta, J.

L. Wile, R. T. de Souza, J. R. Huizenga, and J. Toke, *Proc. Int. Symp. on Collective Phenomena in Nuclear and Subnuclear Long Range Interactions in Nuclei*, Ed. P. David, (World Scientific, Teaneck, NJ), p. 273 (1988).

36. Temperatures, Energies, and Degree of Thermal Equilibration of Fragments in Damped Nuclear Reactions, J. L. Wile, W. U. Schroder, J.R. Huizenga, and D. Hilscher, *Phys. Rev. C***35**: 1608 (1987)

37. Relaxation of the Mass Asymmetry Degree of Freedom in Heavy-Ion Reactions, M. A. Butler, S. S. Datta, R. T. de Souza, J. R. Huizenga, W. U. Schroder, J. Toke, and J. L. Wile, *Phys. Rev. C***34**: 2018 (1986).

Research Grants Awarded

"Design and Development of a Cubic 4 CsI(Tl) Detector Array" - National Science Foundation and Ball State University - \$93,114 over three years (1993 - 1996)

"Superdeformation Studies in Heavy-Ion Induced Fusion Reactions" - National Science Foundation and Ball State University - \$91,896 over three years (1991-1993)

"Graduate Student Research Grant" - US Department of Energy, National Science Foundation, and the University of Rochester - \$24,000 over two years (1988 - 1990)

Research Grants Awarded to Students Under Dr. Jay L. Wile's Supervision

"Pulse-Shape Discrimination Analysis of CsI(Tl) Detectors" - Burris/Academy Research Grant (Ball State University), \$100.00 awarded to S. Moser

"The Development of a CsI(Tl) Detector for the Analysis of Nuclear Fusion Reactions" - Indiana Academy of Science - \$276.00 awarded to A. L. Michael