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Senior Scientist, Center for Emerging Energy Sciences, Texas Tech Univ.

EDUCATION AND TRAINING:

NASA-Goddard Space Flight Center	NAS/NRC Postdoctoral Associate	1994
Georgia Institute of Technology	Ph.D. Atmospheric Chemistry	1993
University of Texas	M.S.E. Chemical Engineering	1981
Georgia Institute of Technology	B.Ch.E.Chemical Engineering	1978

PREVIOUS EMPLOYMENT:

R&D Coordinator, NovaStar LP, Midland, TX	August, 2003 - July, 2015
Mass Spectrometrist, Midland Certified Reagent Company, Midland, TX	May, 2000 – Jan, 2003
Senior Postdoctoral Associate, Catholic University of America, Washington, DC	Sept., 1997 – April, 2000
NRC Postdoctoral Associate, NASA Goddard Space Center, Greenbelt, MD	June, 1994 – Sept., 1997
Process Engineer, CF Braun Engineers & Constructors, Alhambra, CA	March, 1981 – May, 1983

AWARDS AND HONORS

- NRC Postdoctoral Research Associate awardee, 1994, renewed 1996.

RECENT PEER-REVIEWED PUBLICATIONS

ORCID: 0000-0003-1661-8123

1. Robert P. Thorn Jr., Andrew K. Gillespie, Cuikun Lin, Heather Higgins, Shelby Lacouture, Robert Baca, Baudilio Tejerina, Andrew A. Durso, Django Jones, et al. "A quantitative light-isotope measurement system for climate and energy applications" *Int. J. Mass. Spect.* **2021**, *464*, 116574. DOI: 10.1016/j.ijms.2021.116574
2. Andrew K. Gillespie, Cuikun Lin, Robert P. Thorn, Heather Higgins, Robert Baca, Andrew A. Durso, Django Jones, et al. "A new fast response cryogenic evaporative calorimeter" *Rev. Sci. Inst.* **2020**, *91*, 085103. DOI: 10.1063/5.0013713
3. Regina J. Cody, Walter A. Payne, Jr., R. Peyton Thorn, Jr., Fred L. Nesbitt, Mark A. Iannone, Dwight C. Tardy, and Louis J. Stief, "Rate Constant for the Recombination Reaction $CH_3 + CH_3 \rightarrow C_2H_6$ at $T = 298$ and 202 K" *J. Phys. Chem. A*, **2002**, *106* (25), pp 6060–6067. DOI: 10.1021/jp014044l
4. R. Bruce Klemm, R. Peyton Thorn, Jr. and Louis J. Stief, Thomas J. Buckley and Russell D. Johnson, III, "Heat of Formation of OBrO: Experimental Photoionization Study" *J. Phys. Chem. A*, **2001**, *105* (9), pp 1638–1642. DOI: 10.1021/jp002397z
5. R. Peyton Thorn, Jr., Walter A. Payne, Jr., Xavier D. F. Chillier, Louis J. Stief, Fred L. Nesbitt and D. C. Tardy, "Rate constant and RRKM product study for the reaction between CH_3 and C_2H_3 at T = 298 K", *Int. J. Chem. Kinetics* **2000**, *32* (5), pp 521-537. DOI: 10.1002/(SICI)1097-4601(2000)32:5<304::AID-KIN6>3.0.CO;2-J
6. R. Peyton Thorn, Jr. and Louis J. Stief, Thomas J. Buckley and Russell D. Johnson, III, Paul S. Monks, R. Bruce Klemm, "Photoionization Efficiency Spectrum and Ionization Energy of OBrO", *J. Phys. Chem. A*, **1999**, *103* (42), pp 8384–8388. DOI: 10.1021/jp991555n
7. Robert Peyton Thorn, Jr., Louis J. Stief, Szu-Cherng Kuo, R Bruce Klemm, "Photoionization Mass Spectrometric Study of HOCl: Photoionization Efficiency Spectrum and Ionization Energy", *J. Phys. Chem. A*, **1999**, *103* (7), pp 812–815. DOI: 10.1021/jp9834053

8. Fred L. Nesbitt, R. Peyton Thorn, Jr. and Walter A. Payne, Jr., D. C. Tardy, "Absolute Rate Constant and Product Branching Fractions for the Reaction between F and C_2H_4 at T = 202−298 K", *J. Phys. Chem. A*, **1999**, *103* (23), pp 4470–4479. DOI: 10.1021/jp9901747
9. Robert Peyton Thorn, Jr., Paul S. Monks, Louis J. Stief, Szu-Cherng Kuo, R Bruce Klemm, "Photoionization-Efficiency Spectrum and Ionization Energy of the Cyanomethyl Radical CH_2CN and Products of the $N(^4S)$ + C_2H_3 Reaction", *J. Phys. Chem. A*, **1998**, *102* (5), pp 846–851. DOI: 10.1021/jp973164j
10. Walter A. Payne, R. Peyton Thorn, Jr., Fred L. Nesbitt, and Louis J. Stief, "Rate Constant for the Reaction of $O(^3P)$ with IO at T = 298 K", *J. Phys. Chem. A*, **1998**, *102* (31), pp 6247–6250. DOI: 10.1021/jp9811530
11. Szu-Cherng Kuo, Zhengyu Zhang, Stuart K. Ross, and R. Bruce Klemm, Russell D. Johnson, III, Paul S. Monks, R. Peyton Thorn, Jr., and Louis J. Stief, "Discharge Flow-Photoionization Mass Spectrometric Study of HNO: Photoionization Efficiency Spectrum and Ionization Energy and Proton Affinity of NO", *J. Phys. Chem. A*, **1997**, *101* (22), pp 4035–4041. DOI: 10.1021/jp9705941
12. Paul W. Seakins, Struan H. Robertson, and Michael J. Pilling, David M. Wardlaw, Fred L. Nesbitt, R. Peyton Thorn, Walter A. Payne, and Louis J. Stief, "Temperature and Isotope Dependence of the Reaction of Methyl Radicals with Deuterium Atoms", *J. Phys. Chem. A*, **1997**, *101* (51), pp 9974–9987. DOI: 10.1021/jp9720348

ORAL PRESENTATION

- ASMS Annual Conference, Philadelphia, PA. Instrumentation session MOA pm, November 1, 2021, "A quantitative light-isotope measurement system for climate and energy applications"

PROFESSIONAL MEMBERSHIPS

- Society of Petroleum Engineers, American Chemical Society, American Physical Society, and American Society for Mass Spectrometry.