# RAGHU SIVARAMAKRISHNAN

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**Professional Experience**

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| 2010 – present | Assistant Chemist, Chemical Sciences & Engineering Division, Argonne National Laboratory |
| 2007 – 2010 | Postdoctoral Research Associate, Chemical Sciences & Engineering Division, Argonne National Laboratory (Sponsor: Joe V. Michael) |
| 2005 – 2007 | Postdoctoral Research Associate, Research Engineer and Research Scientist, University of Illinois at Chicago, (Sponsor: K. Brezinsky) |

**Education**

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| 2005 | University of Illinois at Chicago, Ph.D. Chemical Engineering (Advisor: K. Brezinsky) |
| 2002 | University of Illinois at Chicago, M. S. Chemical Engineering |
| 1999 | University of Madras, B. Tech. Chemical Engineering |

**Areas of Research and Expertise**

Chemical Kinetics Modeling for Combustion Applications; Electronic Structure and Kinetics Theory Applied to Thermal Systems; High Temperature & Pressure Chemical Kinetics using Shock Tubes and Stirred Reactors; Atom/Radical Absorption Diagnostics Applied to Shock Tubes; GC,GC/MS, FTIR Diagnostics Applied to Chemical Shock Tubes, Reactors and Flames.

**Honors and Awards**

Bernard Lewis Fellow, Combustion Institute, 2006; NSF IREE Visiting Scholar (CNRS-Orleans), 2006 & 2007; Rank Holder (University of Madras), 1999.

**Professional Organizations**

American Chemical Society; Combustion Institute; American Institute of Chemical Engineers.

**Professional Activities**

Referee Panel - PCCP, Proceedings of the Combustion Institute, Energy and Fuels, Fuel, International Journal of Chemical Kinetics, Chemical Physics Letters, New Journal of Chemistry; DOE-BES Gas Phase Chemical Physics program; Chemical Kinetics Session Chair-33rd Combustion Symposium, Beijing, 2010.

**Recent Selected Publications**


1. R. Sivaramakrishnan, J. V. Michael, B. Ruscic, "High Temperature Rate Constants for H/D +$C_2H_6$ and $C_3H_8$, Int. J. Chem. Kin., 44, 2012, 194-205.
2. R. Sivaramakrishnan, M.-C. Su, J. V. Michael, S. J. Klippenstein, L. B. Harding, B. Ruscic, "Shock Tube and Theoretical Studies on the Thermal Decomposition of Propane: Evidence for a Roaming, Radical Channel, J. Phys. Chem. A, 115, 2011, 3366-3379.
3. R. Sivaramakrishnan, J. V. Michael, A. F. Wagner, R. Dawes, A. W. Jasper, L. B. Harding, Y. Georgievskii, S. J. Klippenstein, "Roaming Radicals in the Thermal Decomposition of Dimethyl Ether: Experiment and Theory, Comb. and Flame, 158, 2011, 618-632.
4. R. Sivaramakrishnan, M.-C. Su, J. V. Michael, S. J. Klippenstein, L. B. Harding, B. Ruscic, "Rate Constants for the thermal decomposition of ethanol and its bimolecular reactions with OH and D: Reflected shock-tube and theoretical studies" J. Phys. Chem. A, 114, 2010, 9425-9439.
5. R. Sivaramakrishnan, J. V. Michael, S. J. Klippenstein, "Direct Observation of Roaming Radicals in the Thermal Decomposition of Acetaldehyde" J. Phys. Chem. A, 114, 2010, 755-764.
6. R. Sivaramakrishnan, J. V. Michael, "Rate Constants for OH with selected large alkanes: Shock-tube measurements and an improved group scheme" J. Phys. Chem. A, 113, 2009, 5047-5060.