

**V. RAMAMURTHY**

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**Academic Training**

Undergraduate and Graduate Training:

B. Sc., Chemistry, University of Madras, India 1966.

M. Sc., Chemistry, Indian Institute of Technology, Madras, India, 1968.

Ph. D., Chemistry, University of Hawaii, Honolulu, U.S.A., 1974, (R.S.H. Liu)

Postdoctoral Fellow:

University of Western Ontario, London, Canada, 1974-75, (P. de Mayo).

Columbia University, New York, U.S.A., 1975-78, (N. J. Turro).

**Professional Appointments**

*Assistant Professor*, Department of Organic Chemistry, Indian Institute of Science, Bangalore, India, 1978-83.

*Associate Professor*, Department of Organic Chemistry, Indian Institute of Science, Bangalore, India, 1983-88.

*Senior Research Scientist*, Central Research and Development, Experimental Station, The du Pont Company, Wilmington, DE 19880-0328, 1987-1994.

*Bernard-Baus Professor of Chemistry*, Tulane University, New Orleans, LA. July, 1994 – Dec 2004  
Professor of Chemistry, University of Miami, Coral Gables, Jan 2005 – present.

**Administrative Appointments**

Chair of Chemistry, Tulane University, New Orleans, LA. July, 2003 – December 2004

Chair of Chemistry, University of Miami, Coral Gables, Jan 2005 – Sep 2013.

**Editor**

Senior Editor, Langmuir (ACS journal) 2008-current

**Editorial Board**

Editorial Board: Journal of Photochemistry: C (2001-current)

Editorial Board: Journal of Photochemistry: A (2002-current)

Editorial Board: Molecules (2015-current)

Editor, The Inter-American Photochemical Society Newsletter, (1991-1994).

Editorial Board: Langmuir (1998-2004)

Editorial Board: Indian Journal of Chemistry: B (1995-2000)

Editorial Board: Supramolecular Catalysis (2014-2016)

### **Visiting Appointments**

Visiting Professor, Tokyo Metropolitan University, Tokyo, Japan, (2 months) 2000  
ICOS Visiting Professor, Indian Institute of Science, Bangalore, (2 months), 2002  
Institute Alumni Visiting Professor, Indian Institute of Technology, Madras, (2 months), 2002  
Global Education and Research Center Visiting Professor, Osaka University, Osaka, Japan, January 2012  
Institute Visiting Professor, Indian Institute of Science, Bangalore, India, August 2012,  
Taiwan Chemistry Research Promotion Center Visiting Professor, National Chiao Tung University, Hsinchu, Taiwan, December 2012  
Visiting Professor, Department of Chemical and Biological Engineering, University of New Mexico, Albuquerque, NM, USA, June and July, 2014  
JSPS Invitational Fellow, Department of Applied Chemistry, Tokyo Metropolitan University, Tokyo, September and October 2014  
Fulbright-Nehru Distinguished Chair, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore, India, December 2014-April 2015.  
Visiting Professor, Chinese Academy of Sciences, Beijing, China, June and July 2016.  
GIAN Guest Professor, National Institute of Technology, Trichy, India, Dec 15, 2016-Jan 15, 2017  
Visiting Professor, Chinese Academy of Sciences, Beijing, China, June, 2018  
Visiting Professor, University Immersion Program-2017, Sichuan University, Chengdu, China, June-July 2017, 2018 and 2019  
Visiting Professor, Graduate School Summer Program, Shanxi Normal University, Xian, China, June, 2019

### **Society Memberships**

Member of the American Chemical Society  
Member of the Inter-American Photochemical Society

### **Recognitions**

Indian National Academy of Sciences Golden Jubilee Research Fellow 1985-1987  
Fellow of the Indian Academy of Sciences, elected in 1986  
Grammatikakas–Neuman Prize of the European Photochemical Society, 1991  
Tulane University LAS Faculty Research Award, 2001.  
Fulbright Fellowship, 2002-2003.  
NSF Special Creativity Award 2005-2008.  
Cooper Fellow, University of Miami, 2009-2012  
Inter-American Photochemical Society Award, 2009  
Distinguished Alumnus Award, Indian Institute of Technology, Madras, 2010  
Chemical Research Society of India (CRSI) Medal, 2011  
University of Miami Provost Award for Scholarly Activity, 2011  
Fellow of the American Chemical Society, elected in 2011  
Elsevier Lectureship Award (Japan Photochemical Association), 2014  
Japan Society for Promotion of Science (JSPS) Invitation Fellow, 2014  
Fulbright-Nehru Distinguished Chair, 2014-15  
Hall Lecturer, Bowling Green State University, Bowling Green, 2019

## Research Publications

1. Self-quenching in Photocycloaddition of thiobenzophenone to Crotononitrile: A Case of Energy Transfer from S<sub>2</sub>.  
R. S. H. Liu and V. Ramamurthy, *Mol. Photochem.*, 3, 261, **1971**.
2. NMR Studies of 7-*cis*- $\beta$ -ionol and Related compounds. Ring chain Conformational Preference.  
V. Ramamurthy, T. T. Bopp and R. S. H. Liu, *Tetrahedron Letters*, 3915, **1972**.
3. Photochemistry of Dehydro- $\beta$ -ionone and Related Compounds.  
V. Ramamurthy and R. S. H. Liu, *Tetrahedron Letters*, 441, **1973**.
4. Photochemistry of  $\beta$ -Ionylideneacetonitrile and Related Compounds.  
Direct Conversion of a Cyclohexadiene to *trans*-Hexatriene.  
V. Ramamurthy and R. S. H. Liu, *Tetrahedron Letters*, 1393, **1973**.
5. Preparation of 7-*cis*-Ionyl and -Ionylidene derivatives and other sterically hindered olefins by one-way sensitized geometric isomerization.  
V. Ramamurthy, Y. Butt, C. Yang, P. Yang and R. S. H. Liu, *J. Org. Chem.*, 38, 1247, **1973**.
6. Preferred directions of photoisomerization of ionlideneacetaldehyde and C<sub>18</sub>-tetraene ketone in the retinal series. Synthesis of the hindered 7-*cis* isomers.  
V. Ramamurthy and R. S. H. Liu, *J. Am. Chem. Soc.*, 96, 5625, **1974**.
7. Gas-complex chromatography: Substituent and steric effects.  
R. J. Laub, V. Ramamurthy and R. L. Pecsok, *Anal. Chem.*, 46, 1659, **1974**.
8. Photochemical and thermal internal cycloadditions in retro- $\gamma$ -ionylidenemalononitrile.  
V. Ramamurthy and R. S. H. Liu, *J. Org. Chem.*, 39, 3435, **1974**.
9. Preparation of sterically hindered geometric isomers of 7-*cis*- $\beta$ -ionyl and  $\beta$ -ionylidene derivatives in the vitamin A series.  
V. Ramamurthy, G. Tustin, C. C. Yau and R. S. H. Liu, *Tetrahedron*, 31, 193, **1975**.
10. 7-*Cis* isomers of retinal via 7-*cis* and 7,9-*dicis*- $\beta$ -C<sub>18</sub>-tetraene ketones.  
V. Ramamurthy and R. S. H. Liu, *Tetrahedron*, 31, 201, **1975**.
11. Geometric isomers of 11, 12-dehydro-15-demethyl- $\beta$ - $\alpha$ xerophetene.  
V. Ramamurthy and R. S. H. Liu, *J. Org. Chem.*, 40, 3460, **1975**.

12.   Excitation, relaxation and deactivation of dienes, trienes and higher polyenes in the Vitamin A series in the sensitized isomerization reaction.  
V. Ramamurthy and R. S. H. Liu, *J. Am. Chem. Soc.*, **98**, 2935, **1976**.
  
13.   Sigmatropic hydrogen migration and electrocyclization processes in compounds in the vitamin A series.  
V. Ramamurthy and R. S. H. Liu, *J. Org. Chem.*, **41**, 1862, **1976**.
  
14.   Rhodopsin analogues from highly hindered 7-*cis* isomers of retinal.  
W. J. De grip, R. S. H. Liu, V. Ramamurthy and A. Asato, *Nature*, **262**, 417, **1976**.
  
15.   7-*cis*- $\beta$ -ionol.  
V. Ramamurthy and R. S. H. Liu, *Photochem. Syn.* **II**, 70, **1976**.
  
16.   Thione photochemistry: Cycloaddition in a saturated alicyclic system.  
A. H. Lawrence, C. C. Liao, P. de Mayo and V. Ramamurthy, *J. Am. Chem. Soc.*, **98**, 2219, **1976**.
  
17.   Thione photochemistry: Mechanism of the short wavelength cycloaddition of adamantanethione: Evidence for an excimer derived from S<sub>2</sub>.  
A. H. Lawrence, C. C. Liao, P. de Mayo and V. Ramamurthy, *J. Am. Chem. Soc.*, **98**, 3572, **1976**.
  
18.   On the mechanism of photocycloaddition of aromatic thiones (n,  $\pi^*$  triplet) to multiple bonds.  
N. J. Turro, V. Ramamurthy, *Tetrahedron Letters*, 2423, **1976**.
  
19.   Reaction of strained acetylenes with molecular oxygen. A novel chemiluminescent reaction and evidence for a dioxetane and a mechanism for thermal generation of singlet oxygen.  
N. J. Turro, V. Ramamurthy, K. C. Liu, A. Krebs and R. Kemper, *J. Am. Chem. Soc.*, **98**, 6758, **1976**.
  
20.   Thermal and photochemical interconversion of several 1,8-naphtho(C<sub>4</sub>H<sub>4</sub>) hydrocarbons. Tests of the Woodward–Hoffman rules.  
N. J. Turro, V. Ramamurthy, R. M. Pagni and A. Butcher, *J. Org. Chem.*, **42**, 92, **1977**.
  
21.   Highlights of Organic Photochemistry–1975-76.  
W. Cherry, M. F. Chow, M. J. Mirbach, M. F. Mirbach, V. Ramamurthy and N. J. Turro, *Mol. Photochem.*, **8**, 175, **1977**.
  
22.   Energy storage and release: Direct and sensitized photoreactions of Dewarbenzene and prismane.  
N. J. Turro, V. Ramamurthy and T. J. Katz, *Nou. J. Chimie*, **1**, 363, **1977**.
  
23.   Source of inefficiency in photochemical triplet cycloaddition and hydrogen abstraction reaction.  
N. J. Turro and V. Ramamurthy, *Mol. Photochem.*, **8**, 239, **1977**.

24. Highlights of Organic Photochemistry–1977.  
W. Cherry, M. F. Chow, V. Ramamurthy and N. J. Turro, *Mol. Photochem.*, 8, 499, **1977**.
25. Antistokes photosensitization. Concept and demonstration of a "red light" to "blue light" transformation.  
N. J. Turro, D. Brewer, W. Farneth and V. Ramamurthy, *Nou. J. de Chimie*, 2, 85, **1978**.
26. The effect of wavelength on organic photoreactions in solution. Reaction from upper excited states.  
N. J. Turro, V. Ramamurthy, W. Cherry and W. Farneth, *Chem. Rev.*, 78, 127, **1978**.
27. Direct photochemical, oxygen catalyzed and temperature dependent population of triplet states. Application to the photochemistry of cyclic azoalkanes.  
N. J. Turro, W. R. Cherry, M. J. Mirbach, M. F. Mirbach and V. Ramamurthy, *Mol. Photochem.*, 9, 111, **1978**.
28. Organic Photochemistry I: General Concepts.  
V. Ramamurthy, *Ind. J. Chem. Edu.*, 5, 1, **1978**.
29. Oxidation of Thiones by Singlet and Triplet oxygen.  
R. Rajee and V. Ramamurthy, *Tetrahedron Letters*, 5127, **1978**.
30. Wavelength Dependent Photochemical Reactions: Photocycloaddition and Hydrogen Abstraction Reactions of Di-*tert*-butylthione.  
R. Rajee and V. Ramamurthy, *Tetrahedron Letters*, 3463, **1978**.
31. Wavelength Dependent Photochemistry: Photoreduction of Di-*tert*-butylthione.  
V. Jayathirtha Rao and V. Ramamurthy, *Indian J. Chem.*, 18B, 265, **1979**.
32. Energy Wastage in Organic Photochemistry: Self-quenching in Thiones.  
R. Rajee and V. Ramamurthy, *J. Photochem.*, 11, 135, **1979**.
33. Non-bonded Interactions in Cyclobutane-thiones.  
K. N. Tantry, P. K. Basu, V. Ramamurthy, C. N. R. Rao, E. A. Seddon and J. C. Green, *Tetrahedron Letters*, 4787, **1979**.
34. Organic Photochemistry II: General Reactions.  
V. Ramamurthy, *Ind. J. Chem. Edu.*, 6, 1, **1979**.
35. Highlights of Organic Photochemistry–1978.  
V. Ramamurthy, *J. Ind. Inst. Sci.*, 61B, 199, **1979**.
36. Spectroscopic properties of molecules related to hindered isomers of retinal.

- V. Ramamurthy and R. S. H. Liu, *Proc. Indian Acad. Sci.*, **88A**, 239, **1979**.
37. Excited state interaction of azo molecules with olefins, amines and alcohols.  
V. Ramamurthy and N. J. Turro, *Ind. J. Chem.*, **18B**, 72, **1979**.
  38. 1, 2-Diaza-2,4,6,8-Cyclooctatetraene.  
B. M. Trost, P. H. Schudder, R. M. Cory, N. J. Turro, V. Ramamurthy and T. J. Katz, *J. Org. Chem.*, **44**, 1264, **1979**.
  39. Photochemistry and photophysics of polycyclic azoalkanes: Solvent and temperature effects.  
N. J. Turro and V. Ramamurthy, *Recl. Trav. Chim. Pays. Bas.*, **98**, 173, **1979**.
  40. Adiabatic photoreactions of organic molecules.  
N. J. Turro, J. McVey, V. Ramamurthy and P. Lechtken, *Angew. Chem. Int. Ed. Engl.*, **18**, 572, **1979**.
  41. Quenching of chemiexcited acetone phosphorescence by ketones: A search for electronic effects.  
M. F. Mirbach, V. Ramamurthy, N. J. Turro and P. Wagner, *Nou. J. de Chimie*, **4**, 471, **1980**.
  42. Chemical Generation of Excited States.  
N. J. Turro and V. Ramamurthy in *rearrangements in Ground and Excited States*, Vol. 3, ed., P. de Mayo, Academic Press, New York, 1980, p. 1.
  43. Photochemical Oxidation of Thiones: Di-*tert*-butyl thioketone.  
V. Jayathirtha Rao and V. Ramamurthy, *Ind. J. Chem.*, **19B**, 143, **1980**.
  44. Photooxidation of Di-*tert*-butylthioketone.  
V. Jayathirtha Rao and V. Ramamurthy, *Curr. Sci.*, **49**, 199, **1980**.
  45. Photochemistry of Di-methylthioketene Dimers.  
K. Muthuramu and V. Ramamurthy, *J. Org. Chem.*, **45**, 4532, **1980**.
  46. Photolysis of the Dithiolactone-4-isopropylidene-3,3-dimethyl-1-thietan-2-thione; Norrish Type I Reaction.  
K. Muthuramu and V. Ramamurthy, *J. Chem. Soc., Chem. Comm.*, 243, **1980**.
  47. Mechanistic investigations into the photochemical oxidation of thioketones.  
N. Ramnath, V. Ramesh and V. Ramamurthy, *J. Chem. Soc., Chem. Comm.*, 112, **1981**.
  48. Strain Assisted  $\alpha$ -Cleavage Reactions of Cyclobutanethiones.  
K. Muthuramu, B. Sundari and V. Ramamurthy, *Ind. J. Chem.*, **20B**, 797, **1981**.
  49. Photofragmentation Reaction of Thiocarbonyl Compounds.

- K. Muthuramu and V. Ramamurthy, *Chemistry Letters*, 1261, **1981**.
50. Oxidation of Thioketenes by Singlet Oxygen and Ozone.  
V. Jayathirtha Rao and V. Ramamurthy, *J. Chem. Soc., Chem. Comm.*, 638, **1981**.
51. Non-bonded Interactions in 2,2,4,4-Tetramethyl-1,3-cyclobutanedithione and 2,2,4,4-tetramethyl-3-thio-1,3-cyclobutanedione.  
P. K. Basu, U. C. Singh, K. N. Tantry, V. Ramamurthy and C. N. R. Rao, *J. Molecular Structure*, 76, 237, **1981**.
52. Photochemistry of 2,3-dimethylcyclobutanone: Temperature and wavelength effects.  
N. J. Turro, D. Bauer, V. Ramamurthy and F. Warren, *Tetrahedron Letters*, 611, **1981**.
53. Photoisomerization of the C<sub>15</sub>-aldehyde and C<sub>18</sub>-ketone in the vitamin A series: Solvent effect on photoisomerization of compounds related to retinal.  
V. Ramamurthy, M. Denny and R. S. H. Liu, *Tetrahedron Letters*, 2463, **1981**.
54. Photoreactions of dispiro {naphthalene-1,2'-naphtho[2,1,b]pyran-3',1"-naphthalene}-2(1H), 2''(1''H)-dione. A Novel Case of  $\beta$  C—C cleavage in an Enone.  
T. R. Kasturi, G. J. Raju and V. Ramamurthy, *J. Chem. Soc., Chem. Comm.*, 557, **1981**.
55. Steric Aspects of the Oxidation of Thioketones by Singlet Oxygen.  
N. Ramnath, V. Jayathirtha Rao, V. Ramesh and V. Ramamurthy, *Chemistry Letters*, 89, **1982**.
56. Rates of Oxidation of Thioketones by Singlet Oxygen.  
V. Ramesh, N. Ramnath, V. Jayathirtha Rao and V. Ramamurthy, *J. Photochem.*, 18, 109, **1982**.
57. Efficiency of Singlet Oxygen Production by Thiocarbonyls.  
V. Ramesh, N. Ramnath and V. Ramamurthy, *J. Photochem.*, 18, 293, **1982**.
58. Oxidation of Thioketones by Singlet and Triplet Oxygen.  
V. Jayathirtha Rao, K. Muthuramu and V. Ramamurthy, *J. Org. Chem.*, 47, 127, **1982**.
59. Strain Assisted  $\alpha$ -Cleavage Reactions of Thioketones: Diphenylcyclopropenethione.  
Sharat Singh, M. M. Bhadbhade, K. Venkatesan and V. Ramamurthy, *J. Org. Chem.*, 47, 3550, **1982**.
60. Inhibition of self-quenching in thioketones by micellar compartmentalization.  
V. Ramesh and V. Ramamurthy, *J. Photochem.*, 20, 47, **1982**.
61. Photodimerization of coumarin in aqueous and micellar media.  
K. Muthuramu and V. Ramamurthy, *J. Org. Chem.*, 47, 3976, **1982**.

62. Photodimerization of coumarins in the solid state.  
N. Ramasubbu, T. N. Guru Row, K. Venkatesan, V. Ramamurthy and C. N. R. Rao, *J. Chem. Soc., Chem. Comm.*, 178, **1982**.
63. Topochemical photodimerization of 7-acetoxycoumarin: The acetoxy group as a steering agent.  
N. Ramasubbu, K. Gnanaguru, K. Venkatesan and V. Ramamurthy, *Can. J. Chem.*, 60, 2159, **1982**.
64. Photodimerization of olefins in solid state.  
H. R. Swamy, T. N. Guru Row, V. Ramamurthy, K. Venkatesan and C. N. R. Rao, *Current Science*, 51, 381, **1982**.
65. Reversible photodimerization of some butadiene derivatives in the solid state.  
H. R. Swamy, V. Ramamurthy and C. N. R. Rao, *Ind. J. Chem.*, 21B, 79, 1982.
66. Reversible photodimerization of phenylbutadienes in the solid state.  
T. N. Guru Row, H. R. Swamy, K. R. Acharya, V. Ramamurthy, K. Venkatesan and C. N. R. Rao, *Tetrahedron Letters*, 24, 3263, **1983**.
67. Norrish type II reaction in the solid state: Involvement of a boat like reactant conformation.  
S. Ariel, V. Ramamurthy, J. R. Scheffer and J. Trotter, *J. Am. Chem. Soc.*, 105, 6959, **1983**.
68. Photochemical Oxidation of Thioketones: Steric and Electronic Aspects.  
N. Ramnath, V. Ramesh and V. Ramamurthy, *J. Org. Chem.*, 48, 214, **1983**.
69. Strain assisted  $\alpha$ -Cleavages Reactions of Thioketones: Cyclobutanethiones.  
K. Muthuramu, B. Sundari and V. Ramamurthy, *J. Org. Chem.*, 48, 4482, **1983**.
70. Photofragmentation Reactions of Dithiolactones.  
K. Muthuramu, B. Sundari and V. Ramamurthy, *Tetrahedron*, 39, 2719, **1983**.
71. The problem of Triplet Self-Quenching in Thioketone Photochemistry.  
V. Ramesh, N. Ramnath and V. Ramamurthy, *J. Photochem.*, 23, 141, **1983**.
72. Photodimerization of coumarins in micelles: Limitations of alignment effect.  
K. Muthuramu, N. Ramnath and V. Ramamurthy, *J. Org. Chem.*, 48, 1872, **1983**.
73. Reactive State Selectivity in Photodimerization through Micellar Counter-ion Effects: Photodimerization of Acenaphthylenes.  
V. Ramesh and V. Ramamurthy, *J. Photochem.*, 24, 395, **1984**.
74. Control of regiochemistry in photodimerization through micellar pre-orientational effect: 2-substituted naphthalenes.



- V. Ramesh and V. Ramamurthy, *J. Org. Chem.*, **49**, 536, **1984**.
75. 7-Alkoxycoumarins as fluorescence probes for microenvironments.  
K. Muthuramu and V. Ramamurthy, *J. Photochem.*, **26**, 57, **1984**.
76. Micellar control of photochemical reactions.  
V. Ramamurthy, *Proc. Indian Acad. Sci.*, **93**, 635, **1984**.
77. Photochemical reactions in constrained systems: Changes in mode of solubilization due to long chain hydrophobic groups.  
N. Ramnath and V. Ramamurthy, *J. Org. Chem.*, **49**, 2827, **1984**.
78. Selectivity in chemical reactions in micellar media: Photodimerization of substituted coumarins in micelles.  
K. Muthuramu and V. Ramamurthy, *Indian J. Chem.*, **23B**, 502, **1984**.
79. Surface Photochemistry: Semiconductor photoinduced dimerization of phenyl vinyl ether.  
A. M. Draper, M. Ilyas, P. de Mayo and V. Ramamurthy, *J. Am. Chem. Soc.*, **106**, 6222, **1984**.
80. Novel Photoisomerization of Spirodienones.  
T. R. Kasturi, K. Ganesh Prasad and V. Ramamurthy, *Tetrahedron Letters*, **25**, 2253, **1984**.
81. Upper Excited State Reactions of Thioketenes: Di-*tert*-butylthioketene.  
Sharat Singh and V. Ramamurthy, *J. Org. Chem.*, **49**, 393, **1984**.
82. Oxidation of Thioketenes by Singlet Oxygen.  
V. Jayathirtha Rao, V. Ramamurthy, E. Schaumann and H. Nimmesgern, *J. Org. Chem.*, **49**, 615, **1984**.
83. Oxidation of 1,3-Cyclobutanedithiones and 3-Thio-1,3-cyclobutanethiones by Singlet Oxygen.  
B. Sundari and V. Ramamurthy, *Indian J. Chem.*, **23B**, 498, **1984**.
84. Gas-solid reactions: Photochemical oxidation of thioketones in the crystalline state.  
P. Arjunan, V. Ramamurthy and K. Venkatesan, *J. Org. Chem.*, **49**, 1765, **1984**.
85. Gas-crystal photoreactions: Crystal structures of 4,4'-dimethoxythiobenzo-phenone and 4,4'-bis dimethylamino-thiobenzophenone.  
P. Arjunan, V. Ramamurthy and K. Venkatesan, *Acta. Cryst. Section C*, **40**, 552, **1984**.
86. 4-Biphenyl phenyl thioketone and 1-naphthylphenylthioketone.  
P. Arjunan, V. Ramamurthy and K. Venkatesan, *Acta. Cryst. Section C*, **40**, 556, **1984**.

87. Topochemical dimerization of non-parallel double bonds: 7-methoxycoumarin.  
M. M. Bhadbhade, G. S. Murthy, K. Venkatesan and V. Ramamurthy, *Chem. Phys. Lett.*, **109**, 259, **1984**.
88. A study in crystal engineering: Solid state photodimerization of chloro and methyl coumarins.  
K. Gnanaguru, G. S. Murthy, K. Venkatesan and V. Ramamurthy, *Chem. Phys. Lett.*, **109**, 255, **1984**.
89. Structure reactivity correlation in inclusion complexes: Deoxycholic acid di-*tert*-butyl thioketone.  
K. Padmanabhan, K. Venkatesan and V. Ramamurthy, *Can J. Chem.*, **62**, 2025, **1984**.
90. Topochemical solid-state photodimerization of non-ideally oriented monomers: 7-chlorocoumarin and 7-methoxycoumarin.  
K. Gnanaguru, N. Ramasubbu, K. Venkatesan and V. Ramamurthy, *J. Photochem.*, **27**, 355, **1984**.
91. Thiocarbonyl Photochemistry.  
V. Ramamurthy, *Organic Photochemistry*, Vol. 7, Ed., A. Padwa, Marcel Dekker, New York, 1985, p, 231.
92. A study on the photochemical dimerization of coumarins in the solid state  
K. Gnanaguru, N. Ramasubbu, K. Venkatesan and V. Ramamurthy, *J. Org. Chem.*, **50**, 2337, **1985**.
93. Photochemical reactions in oriented systems.  
V. Ramamurthy in *Organic Phototransformations in Non-homogeneous Media*, Ed., M. A. Fox, American Chemical Society, Washington, D.C., 1985, p. 267.
94. Photochemically induced organic reactions in the solid state,  
P. Arjunan, K. Gnanaguru, V. Ramamurthy and K. Venkatesan, in *Natural Products Chemistry*, Ed., R. I. Zalewski and J. J. Skolik, Elsevier, Amsterdam, 1985, p. 347.
95. Synthesis and Stability of  $\alpha$ ,  $\beta$ -Unsaturated Sulfines.  
V. Pushkara Rao and V. Ramamurthy, *Synthesis*, 525, **1985**.
96. Mechanism of Oxidation of  $\alpha$ ,  $\beta$ -Unsaturated Thiones by Singlet Oxygen.  
V. Pushkara Rao and V. Ramamurthy, *Tetrahedron*, **41**, 2169, **1985**.
97. Laser Flash Photolysis study of Aliphatic Thioketone Triplets. Self-Quenching and Singlet Oxygen Sensitization.  
K. Bhattacharyya, C.V. Kumar, B. Jayasree, P.K. Das and V. Ramamurthy, *J. Chem. Soc. Faraday Trans. 2*, **81**, 1383, **1985**.
98. A Laser Flash Photolysis Study of Triplets of Cyclobutanethiones.  
K. Bhattacharyya, B. Nageswara Rao, P. K. Das and V. Ramamurthy, *J. Photochem.*, **32**, 331, **1986**.

99. Photochemical Behavior of Thioketenes in Solution: Reaction from S<sub>2</sub>.  
S. Sharat, H. Neimsgreen E. Schaumann and V. Ramamurthy, *J. Org. Chem.*, **50**, 4799, **1985**.
100. Regioselectivity in  $\alpha$ -cleavage Reactions: Aryl alkyl cyclopropenethiones.  
S. Sharat and V. Ramamurthy, *J. Org. Chem.*, **50**, 3732, **1985**.
101. Upper excited State Reactions of  $\alpha$ ,  $\beta$ -Unsaturated Thiones: Photocycloaddition to Electron Deficient Olefins.  
V. Pushkara Rao and V. Ramamurthy, *J. Org. Chem.*, **50**, 5009, **1985**.
102. Structure of micelles—A review.  
N. Ramnath, V. Ramesh and V. Ramamurthy, *J. Sci. Ind. Res.*, **44**, 199, **1985**.
103. Micellar structure and micellar control of photochemical reactions.  
N. Ramnath, V. Ramesh and V. Ramamurthy, *J. Photochem.*, **31**, 75, **1985**.
104. Consequence of hydrophobic association in photoreactions: Photodimerization of stilbenes in water.  
M. S. Syamala and V. Ramamurthy, *J. Org. Chem.*, **51**, 3712, **1986**.
105. The origin of regioselectivity in  $\alpha$ -cleavage reactions of cyclopropenethions: Potential role of pseudo Jahn-Teller effect in substituted cyclopropenyl systems.  
G. Usha, B. Nageswer Rao, J. Chandrasekhar and V. Ramamurthy, *J. Org. Chem.*, **51**, 3630, **1986**.
106. Triplet State Photophysics and Transient Photochemistry of Cyclic Enethiones: A Laser Flash Photolysis Study.  
K. Bhattacharyya, V. Pushkara Rao, V. Ramamurthy and P. K. Das, *J. Chem. Soc. Faraday Trans. 2*, **82**, 135, **1986**.
107. Short-lived triplets of aliphatic thioketenes.  
K. Bhattacharyya, S. Sharat, V. Ramamurthy and P. K. Das, *J. Photochem.*, **35**, 299, **1986**.
108. Solid state photochemistry of nitro compounds: Structure reactivity correlation.  
K. Padmanabhan, D. Dopp, K. Venkatesan and V. Ramamurthy, *J. Chem. Soc. Perkin Trans. II*, 897, **1986**.
109. Structure-reactivity correlations of aromatic nitro compounds: Structures of 1-*tert*-butyl-3,5-dimethyl-2,4,6-trinitrobenzene and 1-*tert*-butyl-3, 4, 5-trimethyl-2,6-dinitrobenzene.  
K. Padmanabhan, V. Ramamurthy, K. Venkatesan, M. N. Ponnuswamy and J. Trotter, *Acta. Cryst. Section C.*, **42**, 610, **1986**.

110. Selectivity in the Photochemistry of  $\beta$ -ionyl and  $\beta$ -ionylidene derivatives in  $\beta$ -cyclodextrin: Microsolvent effect.  
P. Arjunan and V. Ramamurthy, *J. Photochem.*, **33**, 123, **1986**.
111. Modification of chemical reactivity via inclusion complex formation: Photochemistry of dibenzyl ketones and benzyl phenyl acetates.  
B. Nageswer Rao, N. J. Turro and V. Ramamurthy, *J. Org. Chem.*, **51**, 460, **1986**.
112. Modification of chemical reactivity by cyclodextrins: Observation of moderate effects on Norrish type I and type II photobehavior.  
S. Sharat, G. Usha, C. H. Tung, N. J. Turro and V. Ramamurthy, *J. Org. Chem.*, **51**, 941, **1986**.
113. Modification of the photochemistry by cyclodextrin complexation: Competitive Norrish type I and type II reactions of benzoin alkyl ethers.  
G. Dasaratha Reddy, G. Usha, K. V. Ramanathan and V. Ramamurthy, *J. Org. Chem.*, **51**, 3085, **1986**.
114. Modification of the photochemical behaviour of organic molecules by cyclodextrin: Geometric isomerization of stilbenes and alkyl cinnamates.  
M. S. Syamala, S. Devanathan and V. Ramamurthy, *J. Photochem.*, **34**, 219, **1986**.
115. Chemistry in Cavities.  
G. Dasaratha Reddy, M. S. Syamala, B. Nageswer Rao and V. Ramamurthy, *Current Science*, **55**, 875, **1986**.
116. Organic Photochemistry in Organized Media.  
V. Ramamurthy, *Tetrahedron*, **42**, 5753, **1986**.
117. Modification of photochemical reactivity by cyclodextrin complexation: Consequence of restricted rotation of Norrish type II 1,4-biradicals from arylalkyl ketones  
G. Dasaratha Reddy, B. Jayasree and V. Ramamurthy, *J. Org. Chem.*, **52**, 3107, **1987**.
118. Modification of photochemical reactivity by cyclodextrin complexation: Difference in photobehavior between short chain and long chain benzoin alkyl ethers—conformational effect.  
G. Dasaratha Reddy and V. Ramamurthy, *J. Org. Chem.*, **52**, 3952, **1987**.
119. Modification of photochemical reactivity by cyclodextrin complexation: A remarkable effect on the photobehavior of  $\alpha$ -alkyldibenzyl ketones.  
B. Nageswer Rao, M. S. Syamala, N. J. Turro and V. Ramamurthy, *J. Org. Chem.*, **52**, 5517, **1987**.
120. Modification of photochemical reactivity by cyclodextrin complexation: Alteration of the photochemical behavior via restriction of translational and rotational motions—alkyldeoxybenzoins.

- G. Dasaratha Reddy and V. Ramamurthy, *J. Org. Chem.*, 52, 5521, **1987**.
121. Structure-reactivity correlation of photochemical reactions in organic crystals: Intramolecular hydrogen abstraction in an aromatic nitro compounds.  
K. Padmanabhan, R. Schmidt, D. Dopp, K. Venkatesan and V. Ramamurthy, *J. Chem. Soc. Perkin Trans. II*, 1153, **1987**.
  122. Photochemical Reactions of Organic Crystals.  
V. Ramamurthy and K. Venkatesan, *Chem. Rev.*, 87, 433, **1987**.
  123. Structure of  $\alpha$ -benzylidene ( $\pm$ ) pipertone: An exception to the topochemical behaviour.  
D. Kanagapuspam, V. Ramamurthy and K. Venkatesan, *Acta. Cryst. Section C.*, 43, 1128, **1987**.
  124. Structure-reactivity correlation in inclusion complexes: Deoxycholic acid-thiocamphenilone.  
K. Padmanabhan, V. Ramamurthy and K. Venkatesan, *J. Inclusion. Phenomena.*, 5, 315, **1987**.
  125. Consequence of lattice relaxability in solid state photodimerization.  
G. S. Murthy, P. Arjunan, K. Venkatesan and V. Ramamurthy, *Tetrahedron*, 43, 1225, **1987**.
  126. A laser flash photolysis study of pivalothiophenone triplets: Steric and electronic effects in thione photoreaction kinetics.  
K. Bhattacharyya, V. Ramamurthy and P.K. Das, *J. Phys. Chem.*, 91, 5626, **1987**.
  127. Photoreactions in hydrophobic pockets.  
M. S. Syamala, S. Devanathan and V. Ramamurthy, *Proc. Ind. Acad. Sci.*, 98, 391, **1987**.
  128. Consequence of hydrophobic association in photoreactions: Photodimerization of alkylcinnamates in water.  
S. Devanathan and V. Ramamurthy, *J. Photochem. Photobiol.*, A, 40, 67, **1987**.
  129. Structure of 6-acetoxy coumarin: Topochemical photodimerization and analysis of acetoxy-acetoxy interactions in the solid state.  
G. S. Murthy, V. Ramamurthy and K. Venkatesan, *Acta. Cryst. Section C.*, 44, 307, **1988**.
  130. Structure-reactivity correlation of benzoin alkyl ethers, Structures of 2-methoxy-1,2-diphenylethanone (I) and 2-isopropoxy-1,2-biphenylethanone (II).  
D. Kanagapuspam, V. Ramamurthy and K. Venkatesan, *Acta. Cryst. Section C.*, 44, 894, **1988**.
  131. Intramolecular orientation at the micellar interface: Control of Norrish type I and type II reactivity of benzoinalkylethers via conformational effects.  
S. Devanathan and V. Ramamurthy, *J. Phys. Org. Chem.*, 1, 91, **1988**.

132. Photochemistry of  $\alpha$ ,  $\beta$ -unsaturated thiones: Addition to electron rich olefins from T<sub>1</sub>.  
V. Pushkara Rao and V. Ramamurthy, *J. Org. Chem.*, **53**, 327, **1988**.
133. Photochemistry of  $\alpha$ ,  $\beta$ -unsaturated thiones: Cycloaddition to electron deficient olefins from higher excited states.  
V. Pushkara Rao and V. Ramamurthy, *J. Org. Chem.*, **53**, 332, **1988**.
134. Photochemistry of  $\alpha$ ,  $\beta$ -unsaturated thiones: Cycloaddition of thiocoumarin to electron rich and electron deficient olefins from T<sub>1</sub>.  
S. Devanathan and V. Ramamurthy, *J. Org. Chem.*, **53**, 741, **1988**.
135. Thermal and photochemical cycloaddition reactions of thiocarbonyls: A qualitative molecular orbital analysis.  
V. Pushkara Rao, J. Chandrasekhar and V. Ramamurthy, *J. Chem. Soc. Perkin Trans. II*, 647, **1988**.
136. Photochemical, Photophysical and Theoretical Studies on Cyclobutanethiones:  $\alpha$ -Cleavage Reactions.  
B. Nageswer Rao, J. Chandrasekhar and V. Ramamurthy, *J. Org. Chem.*, **53**, 745, **1988**.
137. Photophysics and Intramolecular Photochemistry of Thiones in Solution.  
R. P. Steer and V. Ramamurthy, *Acc. Chem. Res.*, **21**, 380, **1988**.
138. Photoreactions of dispiro [naphthalene-1,2'-naphtho(2,1,b)pyran-3',1''-naphthalene]-2(1H)-dione and similar dispiro-naphthalenones. A novel case of  $\beta$  C—C cleavage in enones.  
T. R. Kasturi, P. Amruta Reddy, G. J. Raju, G. Madusudana Reddy and V. Ramamurthy, *Ind. J. Chem.*, **27B**, 5, 1988.
139. Modification of photochemical reactivity by cyclodextrin complexation: Selectivity in photo-Claisen rearrangement.  
M. S. Syamala and V. Ramamurthy, *Tetrahedron*, **44**, 7223, **1988**.
140. Modification of photochemical reactivity by cyclodextrin complexation: Product selectivity in photo-Fries rearrangement.  
M. S. Syamala, B. Nageswer Rao and V. Ramamurthy, *Tetrahedron*, **44**, 7234, **1988**.
141. Photochemistry and Photophysics within Cyclodextrin Cavities  
V. Ramamurthy and D. F. Eaton, *Acc. Chem. Res.*, **21**, 300, **1988**.
142. Modification of photochemical reactivity by zeolites: Norrish type I and type II reactions of benzoin derivatives.  
D. R. Corbin, D. F. Eaton and V. Ramamurthy, *J. Am. Chem. Soc.*, **110**, 4848, **1988**.

143. Modification of photochemical reactivity by zeolites: Selective photorearrangement of  $\alpha$ -alkylbenzoins to *p*-alkylbenzophenones in the cavities of Faujasites.  
D. R. Corbin, D. F. Eaton and V. Ramamurthy, *J. Org. Chem.*, **53**, 5384, **1988**.
144. Modification of photochemical reactivity by zeolites: Consequences of rotational restriction on Norrish type II reaction of alkanophenones.  
V. Ramamurthy, D. R. Corbin and D. F. Eaton, *J. Chem. Soc., Chem. Comm.*, 1213, **1989**.
145. Modification of photochemical reactivity by zeolites: Role of Cations in Controlling the behavior of radicals generated within faujasites.  
V. Ramamurthy, D. R. Corbin, D. F. Eaton and N. J. Turro, *Tetrahedron Letters*, **30**, 5833, **1989**.
146. Modification of photochemical reactivity by zeolites: Cation enhanced  $\alpha$ -cleavage of aryl alkyl ketones included in faujasites.  
V. Ramamurthy, D. R. Corbin, N. J. Turro and Y. Sato, *Tetrahedron Letters*, **30**, 5829, **1989**.
147. Modification of photochemical reactivity by zeolites: Location of guests within Faujasites by heavy atom induced phosphorescence.  
V. Ramamurthy, J. V. Caspar, D. R. Corbin and D. F. Eaton, *J. Photochem. Photobiol. A: Chemistry*, **50**, 157, **1989**.
148. Modification of photochemical reactivity by incorporation of reactants into hydrophobic pockets and cavities: Conformational and cage effects.  
S. Devanathan, G. Dasaratha Reddy and V. Ramamurthy in *Surfactants in solution: Modern Aspects* (Proceedings of the 6th international symposium on surfactants in solution), Ed., K. L. Mittal, Plenum Press, New York, 1990.
149. The location of organic guests within X-type faujasite zeolites via external heavy atom induced phosphorescence.  
J. V. Caspar, V. Ramamurthy and D. R. Corbin, *Coord. Chem. Rev.* **97**, 225, **1990**.
150. Modification of photochemical reactivity by zeolites: Heavy cation induced phosphorescence and entrapment of rotational conformers of *trans*-stilbene.  
V. Ramamurthy, J. V. Caspar and D. R. Corbin, *Tetrahedron Letters*, **31**, 1097, **1990**.
151. Modification of photochemical reactivity by zeolites: Cation controlled photodimerization of acenaphthylene within faujasites.  
V. Ramamurthy, D. R. Corbin, C. V. Kumar and N. J. Turro, *Tetrahedron Letters*, **31**, 47, **1990**.
152. Modification of photochemical reactivity by zeolites: Arrested molecular rotation of polyenes by inclusion in zeolites.

- V. Ramamurthy, J. V. Caspar, D. R. Corbin, D. F. Eaton, J. S. Kauffman and C. Dybowski, *J. Photochem. Photobiol., A: Chemistry*, **51**, 259, **1990**.
153. Triplet state photophysics of naphthalene and  $\alpha,\omega$ -diphenylpolyenes included in heavy cation exchanged zeolites.  
V. Ramamurthy, J. V. Caspar, D. R. Corbin, B. D. Schlyer and A. H. Maki, *J. Phys. Chem.*, **94**, 3391, **1990**.
  154. Photochemistry in zeolite cavities.  
V. Ramamurthy in *Inclusion Phenomena and Molecular Recognition*, Ed., J. A. Atwood, Plenum Press, New York, 1990, p. 351.
  155. Norrish type I and type II reactions of ketones as photochemical probes of the interior of zeolites.  
V. Ramamurthy, D. R. Corbin, D. F. Eaton, *J. Org. Chem.*, **55**, 5269, **1990**.
  156. A comparison between zeolite-solvent slurry and dry solid photolysis.  
V. Ramamurthy, D. R. Corbin, N. J. Turro, Z. Zhang, M. A. Garcia-Garibay, *J. Org. Chem.*, **56**, 255, **1991**.
  157. Generation, entrapment and spectroscopic characterization of radical cations of  $\alpha,\omega$ -diphenylpolyenes within the channels of pentasil zeolites.  
V. Ramamurthy, J. V. Caspar and D. R. Corbin, *J. Am. Chem. Soc.*, **113**, 594, **1991**.
  158. Preparation and spectroscopic characterization of polarons and bipolarons of thiophene oligomers within the channels of pentasil zeolites: The evolution of organic radical ions into conducting polymers.  
J. V. Caspar, V. Ramamurthy and D. R. Corbin, *J. Am. Chem. Soc.*, **113**, 600, **1991**.
  159. Photochemistry of Macrocyclic Ketones within Zeolites: Competition between Norrish Type I and Type II Reactivity.  
V. Ramamurthy, X. G. Lei, N. J. Turro, T. R. Lewis and J. R. Scheffer, *Tetrahedron Lett.*, **32**, 7675, **1991**.
  160. Photoprocesses of Host–Guest Complexes in the Solid State.  
V. Ramamurthy in *Photochemistry in Organized and Confined Media*, Ed., V. Ramamurthy, VCH Publishers, New York, 1991, p. 303.
  161. Bimolecular Photoreactions in Crystals.  
K. Venkatesan and V. Ramamurthy in *Photochemistry in Organized and Confined Media*, Ed., V. Ramamurthy, VCH Publishers, New York, 1991, p. 133.
  162. Photoprocesses of Organic Molecules Included in Zeolites



- V. Ramamurthy in *Photochemistry in Organized and Confined Media*, Ed., V. Ramamurthy, VCH Publishers, New York, 1991, p. 429.
163. Modification of photochemical reactivity on formation of inclusion complexes: Photorearrangement of benzyl phenyl ethers and methyl phenoxyacetates.  
K. Pitchumani, S. Devanathan and V. Ramamurthy, *J. Photochem. Photobiol. A: Chem.*, **69**, 201, **1992**.
164.  $^2\text{H}$  NMR Investigations of Ion–Molecule Interactions of Aromatics Included in Zeolites.  
M. A. Hepp, V. Ramamurthy, D. R. Corbin and C. Dybowski, *J. Phys. Chem.*, **96**, 2629, **1992**.
165. Photophysical Studies of Organic Molecules Included within Zeolites.  
V. Ramamurthy and J. V Caspar, *Mol. Cryst. Liq. Cryst.*, **211**, 211, **1992**.
166. A Study of Norrish Type II Reactions of Aryl Alkyl Ketones Included within Zeolites.  
V. Ramamurthy, D. R. Corbin and L. J. Johnston, *J. Am. Chem. Soc.*, **114**, 3870, **1992**.
167. Photophysical Probes for Monitoring the Electric Field/Micropolarity within the Faujasite Supercage.  
V. Ramamurthy, D. R. Sanderson and D. F. Eaton, *Photochem. Photobiol.*, **56**, 297, **1992**.
168. Heavy Atom Induced Phosphorescence of Aromatics and Olefins Included within Zeolites.  
V. Ramamurthy, J. V Caspar, D. F. Eaton, E. W. Kuo and D. R. Corbin, *J. Am. Chem. Soc.*, **114**, 3882, **1992**.
169. Relative Size of the Host and the Guest Determine the Reaction Product Selectivity: Norrish Type II Reaction of Alkanones within Zeolite.  
V. Ramamurthy and D. R. Sanderson, *Tetrahedron Letters*, **33**, 2757, **1992**.
170. Photochemistry and Photophysics within Zeolites.  
V. Ramamurthy, *Chimia*, **46**, 359, **1992**.
171. Photochemistry and Photophysical Studies of Organic Molecules Included within Zeolites.  
V. Ramamurthy, D. F. Eaton and J. V Caspar, *Acc. Chem. Res.*, **25**, 299, **1992**.
172. A High Resolution Synchrotron X-ray Powder Diffraction Study of *trans*-Stilbene in Zeolite ZSM-5.  
J. B. Parise, J. Hriljac, D. E. Fox, D. R. Corbin and V. Ramamurthy, *J. Chem. Soc., Chem. Commun.*, 226, **1993**.
173. A Model for the Influence of Organized Media on Photochemical Reactions.  
V. Ramamurthy, R. G. Weiss and G. S. Hammond, *Adv. Photochem.*, **18**, 67, **1993**.

174. Dependence of Charge Density and Electric Field within the Cages of X and Y zeolites on the Cation: Photophysical Probes.  
V. Ramamurthy and D. F. Eaton, *Proceedings of 9th International Zeolite Conference*, (1992, Montreal), Volume 1, Eds., R. von Ballmoos, J. B. Higgins and M. M. J. Treacy, Butterworth-Heinmann, Boston, 1993, pp. 587-594.
175. Photochemistry in Organized and Confining Media: A Model.  
R. G. Weiss, V. Ramamurthy and G. S. Hammond, *Acc. Chem. Res.*, **26**, 530, **1993**.
176. Control of Dye Assembly within Zeolites: Role of Water  
V. Ramamurthy, D. R. Sanderson and D. F. Eaton, *J. Am. Chem. Soc.*, **115**, 10438, **1993**.
177. Distribution of Organic Molecules within Zeolites as Revealed by Aromatic Photophysical Probes: Role of Water and other Co-adsorbents.  
V. Ramamurthy, D. R. Sanderson and D. F. Eaton, *J. Phys. Chem.*, **97**, 13380, **1993**.
178. Photochemists; Festschrift, Special issue, Preface *J. Phys. Chem. A*. V. Ramamurthy, R. H. Schmehl and M. A. Garcia-Garibay, **102**, 5313, **1998**.
179. Photochemistry: Introduction (Editorial to a special issue)  
V. Ramamurthy and N. J. Turro, *Chem. Rev.*, **93**, 1, **1993**.
180. Non-homogeneous Distribution of Organic Molecules within Zeolites  
V. Ramamurthy, *Mol. Cryst. Liq. Cryst.*, **1994**, **240**, 53.
181. Organic Guests within Zeolites: Xenon as a Photophysical Probe.  
V. Ramamurthy, *J. Am. Chem. Soc.*, **1994**, **116**, 1345.
182. Perspectives on Solid State Host-Guest Assemblies  
V. Ramamurthy and D. F. Eaton, *Chem. Materials*, **1994**, **6**, 1128.
183. An Ionic Heavy-Atom Effect in the Solid State Photochemistry of  $\beta,\gamma$ -Unsaturated Ketone  
B. Borecka, A. Gudmundsdottir, G. Olovsson, V. Ramamurthy, J. R. Scheffer and J. Trotter  
*J. Am. Chem. Soc.*, **1994**, **116**, 10322.
184. Formation of Rearrangement Product in Photolysis of  $\alpha,\alpha$ -Dimethyldeoxybenzoin upon Cyclodextrin Complexation.  
K. Pitchumani and V. Ramamurthy, *Photochem. Photobiol.*, **59**, 399, **1994**.
185. Thiocarbonyls: Photochemical Hydrogen Abstraction Reactions.  
V. Pushkara Rao, B. Nageswar Rao and V. Ramamurthy,

*CRC Handbook of Organic Photochemistry and Photobiology*, Edited by W. Horspool and P-Soon Song, CRC Press, Boca Raton, 1995, 793.

186. Solution Photochemistry of Thioketones.  
B. Nageswer Rao, V. Pushkara Rao and V. Ramamurthy, *CRC Handbook of Organic Photochemistry and Photobiology*, Edited by W. Horspool and P-Soon Song, CRC Press, Boca Raton, 1995, 775.
187. Photochemistry of Organic Molecules within Zeolites: Role of Cations,  
V. Ramamurthy and N. J. Turro in *Inclusion Chemistry within Zeolites: Nanoscale Materials by Design*, Ed., N. Herron and D. R. Corbin, Kluwer Academic Press, Holland, **1995**, pp. 239-282.
188. Excited State Chemistry of Organic Molecules Included within Zeolites  
V. Ramamurthy in *Surface Photochemistry*, Ed., M. Anpo, John Wiley, Chichester, **1996**, pp.65-115.
189. Asymmetric Induction in Photochemical Reactions Conducted in Zeolites and in the Crystalline State  
M. Leibovitch, G. Olovsson, G. Sundarababu, V. Ramamurthy, J. R. Scheffer and J. Trotter, *J. Am. Chem. Soc.*, **1996**, *118*, 1219.
190. Structure of a zeolite ZSM-5 Bithiophene Complex as Determined by High Resolution Synchrotron X-Ray Powder Diffraction.  
C. Eylem, J. A. Hriljac, V. Ramamurthy, D. R. Corbin and J. B. Parise, *Chem. Mater.*, **1996**, *8*, 844.
191. Zeolites as Supramolecular Hosts for Photochemical Transformations  
V. Ramamurthy and M. Garcia-Garibay in *Comprehensive Supramolecular Chemistry*, Vol. 7, Ed., T. Bein, Pergamon Press, Oxford, U.K., 1996, p 693.
192. Electron Transfer Reactions within Zeolites: Radical Cations from Benzonorbornadiene  
K. Pitchumani, D. R. Corbin and V. Ramamurthy, *J. Am. Chem. Soc.*, **1996**, *118*, 8152.
193. Zeolite as a host for chiral induction.  
G. Sundarababu, M. Leibovitch, D. R. Corbin, J. R. Scheffer and V. Ramamurthy, *J. Chem. Soc. Chem. Comm.*, **1996**, 2159.
194. Triplet–Triplet Energy Transfer Between Organic Molecules Trapped in Zeolites.  
K. Pitchumani, J. N. Gamlin, V. Ramamurthy and J. R. Scheffer, *J. Chem. Soc., Chem. Comm.*, **1996**, 2049.
195. Role of Water in Intrazeolite Photochemistry  
Z. Zhang, N. J. Turro, L. Johnston and V. Ramamurthy, *Tetrahedron Letters*, **1996**, *37*, 4861.
196. Cation to Anion Triplet–Triplet Energy Transfer in Crystalline Organic Salts  
J. N. Gamlin, G. Olovsson, K. Pitchumani, V. Ramamurthy, J. R. Scheffer and J. Trotter, *Tetrahedron*

- Letters*, **1996**, 37, 6037.
197. Cation-Guest Interaction Within Zeolites: Li<sup>+</sup> Exchanged Zeolites Are Unique  
K. Pitchumani and V. Ramamurthy, *Tetrahedron Letters*, **1996**, 37, 5297.
  198. Electron Transfer Reactions Within Zeolites: Photooxidation of Stilbenes  
X. Li and V. Ramamurthy, *Tetrahedron Letters*, **1996**, 37, 5235.
  199. Remarkable Product Selectivity During Photo-Fries and Photo-Claisen Rearrangements within Zeolites  
K. Pitchumani, M. Warrier and V. Ramamurthy, *J. Am. Chem. Soc.*, **1996**, 118, 9428.
  200. Photo-Fries Reaction of Naphthyl Esters within Zeolites  
K. Pitchumani, M. Warrier, C. Cui, R. G. Weiss and V. Ramamurthy, *Tetrahedron Letters*, **1996**, 37, 6251.
  201. Selective Oxidation of Olefins within Organic Dye Cation Exchanged Zeolites  
X. Li and V. Ramamurthy, *J. Am. Chem. Soc.*, **1996**, 118, 10666.
  202. An Exceptionally Stable Carbocation from Indene Generated and Trapped within Ca Y Zeolite.  
K. Pitchumani and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1996**, 2763.
  203. Cation Radical and Carbocation Mediated Reactions within Ca Y Zeolite: 1-Phenyl 3,4-dihydronaphthalene  
K. Pitchumani, P. H. Lakshminarasimhan, G. Turner, M. Bakker and V. Ramamurthy, *Tetrahedron Letters*, **1997**, 38, 371.
  204. Zeolite as a Reagent and as a Catalyst: Reduction and Isomerization of Alkenes by Ca Y.  
K. Pitchumani, Abraham Joy, Nicolette Prevost and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1997**, 127.
  205. Generation, Entrapment and Reactivity of Long Lived Organic Carbocations and Radical Cations within a Supramolecular assembly: Ca Y zeolite  
K. Pitchumani, P. H. Lakshminarasimhan, N. Prevost, D. R. Corbin and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1997**, 181.
  206. Generation and Reactivity of Singlet Oxygen Within Zeolites: Remarkable Control of hydroperoxidation of alkenes  
R. Robbins and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1997**, 1071.
  207. Generation of Stable and Persistent Carbocations From 4-Vinylanisole Within Zeolites  
V. Jayathirtha Rao, N. Prevost, V. Ramamurthy, M. Kojima and L. Johnston, *J. Chem. Soc. Chem.*

- Commun.*, **1997**, 2209.
208. Asymmetrically Modified Zeolite As a Medium For Enantioselective Photoreactions: Reactions From Spin Forbidden Excited States  
Abraham Joy, Rebecca Robbins, Kasi Pitchumani and V. Ramamurthy, *Tetrahedron Letters*, **1997**, 8825.
209. Detection of Low Levels of Brønsted Acidity in Na<sup>+</sup>Y and Na<sup>+</sup>X Zeolites.  
V. Jayathirtha Rao, Deborah L. Perlstein, Rebecca J. Robbins, P. H. Lakshminarasimhan, Hsein-Ming Kao, Clare P. Grey and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1998**, 269.
210. Facial Selective Photoreduction of Steroids: Role of Zeolites.  
V. Jayathirtha Rao, S. Uppili, D. R. Corbin, S. Schwarz, S. R. Lustig and V. Ramamurthy, *J. Am. Chem. Soc.*, **1998**, *120*, 2480.
211. Photoinduced Electron Transfer Reactions Within Zeolites: Detection of Radical Cations and Dimerization of Aryl alkenes.  
L. Brancalion, D. Brouismiche, V. Jayathirtha Rao, L. J. Johnston and V. Ramamurthy, *J. Am. Chem. Soc.*, **1998**, *120*, 4926.
212. Activation Conditions Play a Key Role in the Activity of Zeolite CaY: NMR and Product Studies of Brønsted Acidity  
H. M. Kao, C. P. Grey, K. Pitchumani, P. H. Lakshminarasimhan and V. Ramamurthy, *J. Phys. Chem.*, **1998**, *102*, 5627.
213. Enantioselective Photoelectrocyclization within Zeolites: Tropolone methyl ether in Chirally Modified NaY.  
A. Joy, J. R. Scheffer, D. R. Corbin and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1998**, 1379.
214. Novel Approaches Towards the Generation of Excited Triplets of Organic Guest Molecules within Zeolites.  
K. Pitchumani, M. Warrier, J. R. Scheffer and V. Ramamurthy, *J. Chem. Soc. Chem. Commun.*, **1998**, 1197.
215. Energy Transfer, Proton Transfer and Electron Transfer Reactions Within Zeolites (Feature article)  
V. Ramamurthy, P. Lakshminarasimhan, C. P. Grey and L. J. Johnston, *J. Chem. Soc. Chem. Commun.*, **1998**, 2411-2424.
216. Detection and Estimation of Brønsted Acidities in Alkali Metal Cation exchanged X and Y Zeolites.  
K. J. Thomas and V. Ramamurthy, *Langmuir*, **1998**, *14*, 6687

217. Studies on Chiral Induction within Zeolites: Photoelectrocyclization of Tropolone alkylethers.  
A. Joy, D. R. Corbin and V. Ramamurthy in *Proceedings of 12<sup>th</sup> International Zeolite Conference*, M. M. J. Traacy, B. K. Marcus, B. E. Bisher and J. B. Higgins (Eds.), Materials Research Society: Warrendale, PA, **1999**, pp. 2095.
218. Zeolite as a Medium for Photochemical Reactions  
V. Ramamurthy, R. J. Robbins, K. J. Thomas and P. H. Lakshminarasimhan, in '*Organized Molecular Assemblies in the Solid State*', J. K. Whitsell (ed.), John Wiley: Chichester, **1999**, pp. 63-140.
219. Utility of zeolitic medium in photo-Fries and photo-Claisen rearrangements.  
K. Pitchumani, M. Warriar and V. Ramamurthy, *Res. Chem. Intermediates*, **1999**, 25, 623.
220. Characterization of persistent intermediates generated upon inclusion of 1,1-diarylethylenes within CaY zeolite: Spectroscopy and Product Studies.  
P. Lakshminarasimhan, K. J. Thomas, L. Brancalion, P. D. Wood, L. J. Johnston and V. Ramamurthy, *J. Phys. Chem., B*, **1999**, 103, 9247.
221. Photo-Fries reactions of 1-naphthyl esters in cation exchanged zeolite Y and polyethylene media.  
W. Gu, M. Warriar, V. Ramamurthy and R. G. Weiss, *J. Am. Chem. Soc.*, **1999**, 121, 9467.
222. Zeolite as a spectroscopic matrix.  
S. Uppili, P. Lakshminarasimhan and V. Ramamurthy, *IAPS Newsletter*, **1999**, 22, 32.
223. Enforcing molecules to behave.  
A. Joy, M. Warriar and V. Ramamurthy, *Spectrum*, **1999**, 12, issue 3, 1.
224. Probing zeolites with organic molecules: Supercages of X and Y zeolites are superpolar.  
S. Uppili, K. J. Thomas, E. Crompton and V. Ramamurthy, *Langmuir*, **2000**, 16, 265.
225. Chiral photochemistry within zeolites.  
A. Joy and V. Ramamurthy, *Chemistry: A European Journal*, **2000**, 6, 1287.
226. Photochemistry of Tropolone ethers and 2,2-dimethyl-1-(2H)-naphthalenones within a Zeolite: Enhanced diastereoselectivity Via Confinement.  
Abraham Joy, Sundararajan Uppili, Matthew R. Netherton John R. Scheffer and V. Ramamurthy, *J. Am. Chem. Soc.*, **2000**, 122, 728.
227. Chirally Modified Zeolite as a Reaction Medium: Photochemistry of an Achiral Tropolone ether.  
Abraham Joy, John R. Scheffer and V. Ramamurthy, *Org. Letters*, **2000**, 2, 119.
228. Cation- $\pi$ -interaction promoted aggregation of aromatic molecules and energy transfer within zeolites

- K. J. Thomas, R. B. Sunoj, J. Chandrasekhar and V. Ramamurthy, *Langmuir*, **2000**, *16*, 4912.
229. Enantioselective Photoreduction of arylalkyl ketones via restricting the reaction to chirally modified zeolite cages.  
J. Shailaja, K. J. Ponchot and V. Ramamurthy, *Org. Letters*, **2000**, *2*, 937.
  230. Cation- $\pi$  Interaction Controlled Selective Geometric Photoisomerization of Diphenylcyclopropane  
P. Lakshminarasimhan, R. B. Sunoj, J. Chandrasekhar and V. Ramamurthy, *J. Am. Chem. Soc.*, **2000**, *122*, 4815.
  231. Asymmetric Induction with Cyclodextrins: Photocyclization of Tropolone Alkyl ethers.  
S. Koodenjeri, A. Joy and V. Ramamurthy, *Tetrahedron*, **2000**, *56*, 7003.
  232. Singlet Oxygen Mediated Oxidation of Olefins Within Zeolites: Selectivity and Complexities.  
J. Shailaja, J. Sivaguru, R. J. Robbins, V. Ramamurthy, R. B. Sunoj and J. Chandrasekhar, *Tetrahedron*, **2000**, *56*, 6927.
  233. Understanding the Influence of Active (Zeolite) and Passive (Polyethylene) Reaction Cages on Photo-Claisen Rearrangements of Aryl Benzyl Ethers.  
Weiqiang Gu, Manoj Warriar, Brian Schoon, V. Ramamurthy, and Richard G. Weiss, *Langmuir*, **2000**, *16*, 6977.
  234. Heavy Cation Effect on Intersystem Crossing Between Triplet and Singlet Phenylacyl and Benzyl Geminate Radical Pairs Within Zeolites  
Manoj Warriar, N. J. Turro and V. Ramamurthy, *Tetrahedron Letters*, **2000**, *41*, 7163.
  235. Heavy-Cation-Induced Phosphorescence of Alkanones and Azoalkanes In Zeolites As Hosts: Induced  $S_1$  ( $n\pi^*$ ) to  $T_1$  ( $n\pi^*$ ) Intersystem Crossing and  $S_0$  to  $T_1$  ( $n\pi^*$ ) Absorption  
Sundararajan Uppili, Vincenti Marti, Achim Nikolaus, Steffen Jockusch, Waldemar Adam, Paul S. Engel, Nicholas J. Turro and V. Ramamurthy, *J. Am. Chem. Soc.*, **2000**, *122*, 11025.
  236. Wavelength Dependent Oxygen Mediated Electron Transfer Reactions Within  $M^+Y$  Zeolites: Photo oxidation And Reduction of 1,1-Diarylethylenes  
P. Lakshminarasimhan, K. J. Thomas, L. J. Johnston and V. Ramamurthy, *Langmuir*, **2000**, *16*, 9360.
  237. Enantio- and diastereo-differentiating *cis,trans*-photoisomerization of 2 $\beta$ ,3 $\beta$ -diphenylcyclopropane-1 $\alpha$ -carboxylic acid derivatives in organized media  
Eugene Cheung, Kenneth C.W. Chong, Sivaguru Jayaraman, V. Ramamurthy, John R. Scheffer and James Trotter, *Organic Letters*, **2000**, *2*, 2801.
  238. The Influence Of Chiral Auxiliaries Is Enhanced Within Zeolites

- Sivaguru Jayaraman, Sundararajan Uppili, Arunkumar Natarajan, Abraham Joy, Kenneth C. W. Chong, Mathew R. Netherton, Alla Zenova, J. R. Scheffer, and V. Ramamurthy, *Tetrahedron Letters*, **2000**, *41*, 8231.
239. Controlling Photochemical Reactions via Confinement: Zeolites  
V. Ramamurthy, *J. Photochem. Photobiol. C*, **2000**, *1*, 145-166.
  240. Controlling the Reactive State Through Cation Binding: Photochemistry of Enones within Zeolites  
Sundararajan Uppili, Shinsuke Takagi, R. B. Sunoj, P. Lakshminarasimhan, J. Chandrasekhar and V. Ramamurthy, *Tetrahedron Letters*, **2001**, *42*, 2079.
  241. Use of a Confined Space (Zeolite) in Enantio and Diastereoselective Photoreactions  
J. Shailaja, J. Sivaguru, S. Uppili, A. Joy and V. Ramamurthy, *Microporous and Mesoporous Materials*, **2001**, *48*, 319.
  242. Configuration Interaction and Density Functional Study of the Influence of Lithium Cation Complexation on Vertical and Adiabatic Excitation Energies of Enones.  
R. B. Sunoj, P. Lakshminarasimhan, V. Ramamurthy and J. Chandrasekhar, *J. Comput. Chem.* **2001**, *22*, 1598.
  243. Achieving Enantio and Diastereoselectivities in Photoreactions Through the Use of a Confined Space,  
J. Sivaguru, J. Shailaja, S. Uppili, K. Ponchot, A. Joy, N. Arunkumar and V. Ramamurthy, *Organic Solid State Reactions*, F. Toda (Ed.), Kluwer Academic Press, **2002**, pp. 159-188.
  244. Use of Chirally Modified Zeolites and Crystals in Photochemical Asymmetric Synthesis  
Kenneth C.W. Chong, Sivaguru Jayaraman, Tetsuya Shichi, Yasuharu Yoshimi, V. Ramamurthy, John R. Scheffer, *J. Am. Chem. Soc.*, **2002**, *124*, 2858.
  245. Enhanced Enantio- and Diastereoselectivities via Confinement: Photorearrangement of 2,4-Cyclohexadienones Included in Zeolites  
Sundararajan Uppili and V. Ramamurthy, *Organic Letters*, **2002**, *4*, 87.
  246. Zeolite-coated quartz fibers as media for photochemical and photophysical studies  
Ajit R. Pradhan, Sundararajan Uppili, J. Shailaja, J. Sivaguru and V. Ramamurthy, *J. Chem. Soc., Chem. Commun.*, **2002**, 596.
  247. Confined Space and Cations Enhance the Power of a Chiral Auxiliary: Photochemistry of 1,2-Diphenylcyclopropane Derivatives  
J. Sivaguru, John R. Scheffer, J. Chandrasekhar and V. Ramamurthy, *J. Chem. Soc., Chem. Commun.*, **2002**, 830.



248. Control of Enantioselectivity in the Photochemical Conversion of  $\alpha$ -Oxoamides into  $\beta$ -Lactam Derivatives.  
N. Arunkumar, K. Wang, V. Ramamurthy and J. R. Scheffer, *Organic Letters*, **2002**, 4, 1443.
249. Cation Controlled Singlet Oxygen Mediated Oxidation of Olefins Within Zeolites  
L. S. Kaanumalle, J. Shailaja, R. J. Robins and V. Ramamurthy, *J. Photochem. Photobiol A: Chemistry*, **2002**, 153, 55-65.
250. Direct and Sensitized (Energy and Electron Transfer) Geometric Isomerization of Stilbene within Zeolites: A Comparison Between Solution and Zeolite as Reaction Media  
P. H. Lakshminarasimhan, R. B. Sunoj, S. Karthikeyan, J. Chandrasekhar, L. J. Johnston, and V. Ramamurthy, *J. Photochem. Photobiol A: Chemistry*, **2002**, 153, 41-53.
251. Asymmetric Induction with  $\beta$ -Cyclodextrin: *Cis-trans* Isomerization of Diphenylcyclopropane and its Derivatives,  
S. Koodenjeri, S. Jayaraman, A. Pradhan and V. Ramamurthy, *Proc. Indian. Natl Acad. Sci: Chemical Sci*, **2002**, 68A, 453.
252. Enhanced Enantio- and Diastereoselectivity via Confinement and Cation Binding: Yang Photocyclization of 2-Benzoyladamantane Derivatives Within Zeolites  
N. Arunkumar, Abraham Joy, Lakshmi S. Kaanumalle, John R. Scheffer and V. Ramamurthy, *J. Org. Chem.*, **2002**, 67, 8339.
253. Reactive State Spin Dependent Diastereoselective Photoisomerization of *trans*, *trans*-Diphenylcyclopropane-1-Carboxylic Acid Derivatives Included in Zeolites  
J. Sivaguru, T. Shichi and V. Ramamurthy, *Org. Lett*, **2002**, 4, 4221.
254. Cyclodextrin Mediated Enantio and Diastereo Selective Geometric Photoisomerization of Diphenylcyclopropane and Its Derivatives  
Smriti Koodanjeri and V. Ramamurthy, *Tetrahedron Letters*, **2002**, 43, 9229.
255. Cyclodextrin Mediated Solvent-Free Enantioselective Photocyclization of N-Alkyl Pyridones  
J. Shailaja, S. Karthikeyan and V. Ramamurthy, *Tetrahedron Letters*, **2002**, 43, 9335.
256. Light Induced Geometric Isomerization of 1,2-Diphenylcyclopropanes Included Within Y Zeolites: Role of Cation-Guest Binding  
L. S. Kaanumalle, J. Sivaguru, P. H. Lakshminarasimhan, R. B. Sunoj, J. Chandrasekhar and V. Ramamurthy, *J. Org. Chem.*, **2002**, 67, 8711.
257. Cation- $\pi$  Interaction As a Tool To Enhance the Power of a Chiral Auxiliary During Asymmetric Photoreactions within Zeolites

- L. S. Kaanumalle, J. Sivaguru, N. Arunkumar, S. Karthikeyan, and V. Ramamurthy, *J. Chem. Soc. Chem. Comm.*, **2003**, 116.
258. Persistent Carbocations From 4,4'-Dimethylaminodiphenylethylenes Within CaY Zeolite: Intrazeolite-Water Controls the Structure of the Carbocation  
S. Koodanjeri and V. Ramamurthy, *Tetrahedron Letters*, **2003**, 44, 1615.
  259. Alkali Ion Controlled Excited State Ordering of Acetophenones Included in Zeolites: Emission, Solid State NMR and Computational Studies  
J. Shailaja, P. H. Lakshminarasimhan, A. Pradhan, R. B. Sunoj, S. Jockusch, S. Karthikeyan, S. Uppili, J. Chandrasekhar, N. J. Turro and V. Ramamurthy, *J. Phys. Chem. A* **2003**, 107, 3187.
  260. Cyclodextrin Mediated Regioselective Photo-Fries Reaction of 1-Naphthyl Phenyl Acylates  
S. Koodanjeri, A. R. Pradhan, L. S. Kaanumalle and V. Ramamurthy, *Tetrahedron Letters*, **2003**, 44, 3207.
  261. A Perfect Fit, V. Ramamurthy, *Nature*, **2003**, 423, 394.
  262. Weak Interactions Between Organic Molecules and Alkali Metal Ions Present in Zeolites Help Manipulate the Excited State Behavior of Organic Molecules  
V. Ramamurthy, *J. Photoscience*, **2003**, 10, 127.
  263. Organic Photochemistry within Zeolites: Selectivity Through Confinement, J. Shailaja, J. Sivaguru and V. Ramamurthy, in *Handbook of Zeolites and Microporous Materials*, S. Auerbach, K. Carrado and P. Dutta (eds.), Marcell Dekker: New York, **2003**, pp. 515-590.
  264. Triplet Photochemistry within Zeolites Through Heavy Atom Effect, Sensitization and Light Atom Effect  
K. Pitchumani, M. Warrier, L. S. Kaanumalle and V. Ramamurthy, *Tetrahedron*, **2003**, 59, 5763.
  265. Asymmetric Photoreactions Within Zeolites: Role of Confinement and Alkali Metal Ions  
J. Sivaguru, A. Natarajan, L. S. Kaanumalle, J. Shailaja, S. Uppili, A. Joy and V. Ramamurthy, *Acc. Chem. Res.*, **2003**, 36, 509-521.
  266. Controlling chemistry with cations: photochemistry within zeolites  
V. Ramamurthy, J. Shailaja, L. S. Kaanumalle, R. B. Sunoj, and J. Chandrasekhar, *J. Chem. Soc. Chem. Comm.*, (Feature Article), **2003**, 1987-1999.
  267. Alkali Metal Ion Controlled Product Selectivity During Photorearrangements of 1-Naphthyl Phenyl Acylates and Dibenzyl Ketones Within Zeolites  
M. Warrier, L. S. Kaanumalle, V. Ramamurthy, *Can. J. Chem.*, **2003**, 81, 620-631.

268. Photoisomerization of 2,3-Diphenylcyclopropane-1-carboxylic Acid Derivatives  
J. Sivaguru, S. Jockusch, N. J. Turro and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2003**, 2, 1101-1106.
269. Manipulating Photochemical Reactions  
N. Arunkumar, L. S. Kaanumalle and V. Ramamurthy, CRC Handbook of Organic Photochemistry and Photobiology, 2<sup>nd</sup> Edition, W. Horspool and F. Lenci (Eds.), CRC Press: Boca Raton, **2004**, pp. 107.1.
270. Medium Effects on Photochemical Processes: Organized and Confined Media  
L. S. Kaanumalle, A. Natarajan, and V. Ramamurthy, in Synthetic Organic Photochemistry, A. Griesbeck and J. Mattay (Eds.), Marcell Dekker: New York, **2005**, pp. 551-616.
271. Chiral Photochemistry Within Zeolites  
V. Ramamurthy, J. Sivaguru, N. Arunkumar, L. S. Kaanumalle, S. Karthikeyan, J. Shailaja and A. Joy, in Chiral Photochemistry, Y. Inoue and V. Ramamurthy (Eds.), Marcell Dekker: New York, **2004**, pp. 563-631.
272. Enhanced Diastereoselectivity via Confinement: Photoisomerization of 2,3-Diphenylcyclopropane-1-carboxylic Acid Derivatives within Zeolites.  
J. Sivaguru, R. B. Sunoj, T. Wada, Y. Origane, Y. Inoue and V. Ramamurthy, *J. Org. Chem.*, **2004**, 69, 6533-6547.
273. Enhanced Diastereoselectivity via Confinement: Photoisomerization of 2,3-Diphenyl-1-benzoylcyclopropane Derivatives Within Zeolites  
J. Sivaguru, R. B. Sunoj, T. Wada, Y. Origane, Y. Inoue and V. Ramamurthy, *J. Org. Chem.*, **2004**, 69, 5528-5536.
274. Water-Soluble Dendrimers as Photochemical Reaction Media: Chemical Behavior of Singlet and Triplet Radical Pairs Inside Dendritic Reaction Cavities  
L. S. Kaanumalle, J. Nithyanandhan, M. Pattabiraman, N. Jayaraman and V. Ramamurthy, *J. Am. Chem. Soc.*, **2004**, 126, 8999-9006.
275. Controlling Photochemistry With Distinct Hydrophobic Nano-Environments  
L. S. Kaanumalle, C. L. D. Gibb, B. C. Gibb and V. Ramamurthy, *J. Am. Chem. Soc.*, **2004**, 126, 14366-14367.
276. Mechanism of Photoisomerization of Optically Pure *trans*-2,3-Diphenylcyclopropane-1-Carboxylic Acid Derivatives.  
J. Sivaguru, T. Wada, Y. Origane, Y. Inoue and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2005**, 4, 119-127.
277. Templating Photodimerization of *trans*-Cinnamic acids with Cucurbit[8]uril and  $\gamma$ -Cyclodextrin

- M. Pattabiraman, A. Natarajan, L. S. Kaanumalle and V. Ramamurthy, *Organic Letters*, **2005**, 7, 529-532.
278. Asymmetric Induction During Yang Cyclization of  $\alpha$ -Oxoamides: The Power of a Covalently Linked Chiral Auxiliary is Enhanced in the Crystalline State.  
N. Arunkumar, J. T. Mague and V. Ramamurthy, *J. Am. Chem. Soc.*, **2005**, 127, 3568-3576.
279. A Hydrophobic Nanocapsule Controls the Photophysics of Aromatic Molecules By Suppressing their Favored Solution Pathways  
L. S. Kaanumalle, C. L. D. Gibb, B. C. Gibb, V. Ramamurthy, *J. Am. Chem. Soc.*, **2005**, 127, 3674-3675.
280. Direct Measurement of the Singlet Oxygen Lifetime in Zeolites by Near-IR Phosphorescence  
S. Jockusch, J. Sivaguru, N. J. Turro and V. Ramamurthy, *Photochem. Photobio. Sci.*, **2005**, 4, 403-405.
281. Solvent-Free Photosynthesis of Cyclobutanes: Photodimerization of Crystalline Olefins  
Arunkumar Natarajan and V. Ramamurthy, in 'The Chemistry of Cyclobutanes', Z. Rappoport and J. F. Liebman (Eds.), John Wiley: Chichester, **2005**, pp. 807-872.
282. Self-Assembled Coordination Cage as a Reaction Vessel: Triplet Sensitized [2+2] Photodimerization of Acenaphthylene, and [4+4] Photodimerization of 9-Anthraldehyde.  
S. Karthikeyan and V. Ramamurthy, *Tetrahedron Letters*, **2005**, 46, 4495-4498.
283. Large molecular motions are tolerated in crystals of diamine double salt of *trans*-chlorocinnamic acids with *trans*-1,2-diaminocyclohexane  
A. Natarajan, J. T. Mague, K. Venkatesan and V. Ramamurthy, *Organic Letters*, **2005**, 7, 1895-1898.
284. Dendrimers as Photochemical Reaction Media. Photochemical Behavior of Unimolecular and Bimolecular Reactions in Water-Soluble Dendrimers  
L. S. Kaanumalle, R. Ramesh, V. S. N. M. Maddipatla, J. Nithyanandhan, N. Jayaraman and V. Ramamurthy, *J. Org. Chem.*, **2005**, 70, 5062-5069.
285. Role of Cations and Confinement in Asymmetric Photochemistry: Enantio and Diastereoselective Photocyclization of Tropolone Derivatives within Zeolites  
A. Joy, L. S. Kaanumalle and V. Ramamurthy, *Org. Biomol. Chem.*, **2005**, 3, 3045 - 3053.
286. A latent photoreaction predominates within water soluble calixarenes: Photochemistry of benzoin alkyl ethers  
R. Kaliappan, L. S. Kaanumalle and V. Ramamurthy, *Chem. Commun.* **2005**, 4056-4058.
287. Template directed photodimerization of *trans* 1,2-bis(*n*-pyridyl)-ethylenes and stilbazoles in water.

- M. Pattabiraman, A. Natarajan, R. Kaliappan, J. T. Mague and V. Ramamurthy, *Chem. Commun.* **2005**, 4542-4544.
288. Amphiphilic Homopolymer as Reaction Medium in Water: Product Selectivity Within Polymeric Nanopockets  
S. Arumugam, D. R. Vutukuri, S. Thayumanavan and V. Ramamurthy, *J. Am. Chem. Soc.*, **2005**, *127*, 13200.
  289. Viability of a Covalent Chiral Auxiliary Method to Induce Asymmetric Induction in Solid State Photoreactions Explored  
A. Natarajan, J. T. Mague and V. Ramamurthy, *Crystal Growth*, **2005**, *5*, 2348.
  290. Volume-demanding *cis-trans* isomerization of 1,2-diaryl olefins in the solid-state.  
A. Natarajan, J. T. Mague, K. Venkatesan, T. Arai and V. Ramamurthy, *J. Org. Chem.*, **2006**, *71*, 1055-1059.
  291. Photoproduct Selectivity in Reactions involving Singlet and Triplet Excited States within Bile Salt Micelles.  
M. Pattabiraman, L. S. Kaanumalle and V. Ramamurthy, *Langmuir*, **2006**, *22*, 2185-2192.
  292. Alkali Ion Exchanged Nafion as a Confining Medium for Photochemical Reactions  
S. Arumugam, L. S. Kaanumalle and V. Ramamurthy, *Photochem. Photobiol.*, **2006**, *82*, 139-145.
  293. Control of Chirality By Cations In Confined Spaces: Photooxidation of Enecarbamates Inside Zeolite Supercages.  
J. Sivaguru, H. Saito, M. R Solomon, L. S Kaanumalle, T. Poon, S. Jockusch, W. Adam, V. Ramamurthy, Y. Inoue, and N. J. Turro, *Photochem. Photobiol.*, **2006**, *82*, 123-131.
  294. Asymmetric Induction During Electron Transfer Mediated Photoreduction of Carbonyl Compounds: Role of Zeolites.  
J. Shailaja, L. S. Kaanumalle, K. Sivasubramanian, A. Natarajan, K. J. Ponchot, A. Pradhan and V. Ramamurthy, *Org. Biomol. Chem.*, **2006**, *4*, 1561-1571.
  295. A comparison between zeolites and crystalline state as reaction media: Photocyclization  $\alpha$ -mesitylacetophenones to 2-indanols  
A. Natarajan, J. T. Mague and V. Ramamurthy, *Mol. Cryst. Liq. Cryst.* **2006**, *456*, 71-83.
  296. Bioinspired-Green-Supramolecular-Nano Photochemistry: Photoproducts Control Through Weak Intermolecular Forces  
L. S. Kaanumalle, A. Natarajan, K. Sivasubramanian, R. Kaliappan, M. Pattabiraman and V. Ramamurthy, *Spectrum*, **2006**, *19*, 16-21.

297. Templating Photodimerization of Stilbazoles Within Water-soluble Calixarenes  
R. Kaliappan, L. S. Kaanumalle, A. Natarajan, and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2006**, 5, 925 - 930.
298. Templating Photodimerization of Coumarins Within a Water Soluble Nano Reaction-Vessels  
S. Karthikeyan and V. Ramamurthy, *J. Org. Chem.*, **2006**, 71, 6409-6413.
299. Regioselective Photodimerization of Cinnamic Acids In Water: Templatation with Cucurbiturils  
M. Pattabiraman, L. S. Kaanumalle, A. Natarajan and V. Ramamurthy, *Langmuir*, **2006**, 22, 7605-7609.
300. Asymmetric induction during photocyclization of chiral and achiral  $\alpha$ -oxoamides within achiral zeolites  
A. Natarajan and V. Ramamurthy, *Org. Biomol. Chem.*, **2006**, 4, 4533-4542.
301. A Styrene Based Water Soluble Polymer as a Reaction Medium for Photodimerization of Aromatic Hydrocarbons in Water  
S. Arumugam, Dharma Rao Vutukuri, S. Thayumanavan and V. Ramamurthy, *J. Photochem. Photobiol. A*, **2007**, 185, 168-171.
302. A Latent Photoreaction Enhanced Upon Cyclodextrin Encapsulation: Photochemistry of  $\alpha$ -Alkyl dibenzyl ketones in Water  
S. Arumugam, L. S. Kaanumalle and V. Ramamurthy, *J. Photochem. Photobiol. A*, **2007**, 185, 364-370.
303. Photo-Fries Reaction in Water Made Selective With a Capsule  
L. S. Kaanumalle, C. L. D. Gibb, B. Gibb and V. Ramamurthy, *Org. Biomol. Chem.*, **2007**, 5, 236 - 238
304. Templating Photodimerization of *trans*-Cinnamic Acid Esters with a Water Soluble Pd nanocage  
S. Karthikeyan and V. Ramamurthy, *J. Org. Chem.*, **2007**, 72, 452-458.
305. Photodimerization of Acenaphthylene Within a Nanocapsule: Excited state lifetime dependent dimer selectivity  
L. S. Kaanumalle and V. Ramamurthy, *Chem. Commun.*, **2007**, 1062-1064.
306. Controlling Photoreactions with Restricted Spaces and Weak Intermolecular Forces: Exquisite Selectivity during Oxidation of Olefins by Singlet Oxygen  
A. Natarajan, L. S. Kaanumalle, S. Jockusch, C. L. D. Gibb, B. C. Gibb, N. J. Turro, and V. Ramamurthy, *J. Am. Chem. Soc.*, **2007**, 129, 4132-4133.

307. Value of Zeolites In Asymmetric Induction During Photocyclization of Pyridones, Cyclohexadienones and Naphthalenones  
K. Sivasubramanian, L. S. Kaanumalle, S. Uppili and V. Ramamurthy, *Org. Biomol. Chem.*, **2007**, 5, 1569 - 1576.
308. Pre-orientation of olefins towards a single photodimer: Cucurbituril mediated photodimerization of protonated azastilbenes in water  
M. V. S. N. Maddipatla, L. S. Kaanumalle, A. Natarajan, M. Pattabiraman and V. Ramamurthy, *Langmuir*, **2007**, 23, 7545-7554.
309. Crystal engineering principles applied to solution photochemistry: controlling the photodimerization of stilbazolium salts within  $\gamma$ -cyclodextrin and cucurbituril[8] in water  
R. Kaliappan, Murthy V. S. N. Maddipatla, L. S. Kaanumalle and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2007**, 6, 737-740.
310. Making a difference on excited state chemistry by controlling free space within a nanocapsule: Photochemistry of 1-(4-alkylphenyl)-3-phenylpropan-2-ones  
A. K. Sundaresan and V. Ramamurthy, *Organic Letters*, **2007**, 9, 3575-3578.
311. Controlling Photochemical Geometric Isomerization of a Stilbene and Dimerization of a Styrene Using a Confined Reaction Cavity in Water  
A. Parthasarathy, L. S. Kaanumalle and V. Ramamurthy, *Organic Letters*, **2007**, 9, 5059-5062.
312. Templatation of the Excited State Chemistry of  $\alpha$ -(*n*-alkyl)dibenzyl ketones: How Guest Packing within a Nanoscale Supramolecular Capsule influences Photochemistry  
C. L. D. Gibb, Arun Kumar Sundaresan, V. Ramamurthy and Bruce C. Gibb, *J. Am. Chem. Soc.*, **2008**, 130, 4069.
313. An EPR and NMR study of supramolecular effects on paramagnetic interaction between a nitroxide incarcerated within a nanocapsule with a nitroxide in bulk aqueous media  
J. Y- Chen, N. Jayaraj, S. Jockusch, M. F. Ottaviani, V. Ramamurthy and N. J. Turro, *J. Am. Chem. Soc.*, **2008**, 130, 7206-7207.
314. Consequences of Controlling Free Space Within a Reaction Cavity With a Remote Alkyl Group: Photochemistry of *para*-Alkyl Dibenzyl Ketones Within an Organic Capsule in Water  
Arun Kumar Sundaresan, V. Ramamurthy, *Photochem. Photobiol. Sci.*, (Turro special issue), **2008**, 7, 1555-1564.
315. Turro the researcher, mentor and teacher. Ramamurthy, V. *Photochemical & Photobiological Sciences* **2008**, 7, 1441-1443.

316. Cavitand Octa Acid Forms a Non-Polar Capsuleplex Dependent on the Molecular Size and Hydrophobicity of the Guest  
Mintu Porel, Nithyanandhan Jayaraj, Sireesha L. Kaanumalle, Murthy V. S. N. Maddipatla, Anand Parthasarathy and V. Ramamurthy, *Langmuir*, **2009**, 25, 3473-3481.
317. Chiral Photochemistry within a Confined Space: Diastereoselective Photorearrangements of a Tropolone and a Cyclohexadienone Included in a Synthetic Cavitand  
Arun Kumar Sundaresan, Lakshmi S. Kaanumalle, Corinne L. D. Gibb, Bruce C. Gibb, and V. Ramamurthy, *Dalton Transactions*, (Special issue on Supramolecular Photochemistry), **2009**, 4003-4011.
318. Chiral Photochemistry in a Confined Space: Torquoselective Photoelectrocyclization of Pyridones within an Achiral Hydrophobic Capsule  
Arun Kumar Sundaresan, C. L. D. Gibb, B. C. Gibb and V. Ramamurthy, *Tetrahedron* (Special issue on Container Compounds), **2009**, 65, 7277-7288.
319. Sulfonatocalix[8]arene as a Potential Reaction Cavity: Photo- and Electro-active Dicationic Guests Arrest Conformational Equilibrium,  
Raja Kaliappan, Yonghua, Ling, Angel E. Kaifer and V. Ramamurthy, *Langmuir*, **2009**, 25, 8982–8992
320. Controlling photoreactions with confinement: Photochemistry of benzoin alkyl ethers within water soluble *p*-sulfonato calix[n]arenes  
Raja Kaliaapan and V. Ramamurthy, *J. Photochem. Photobiology A* (Inoue special issue), **2009**, 207, 32-37.
321. Chiral Photochemistry within Natural and Functionalized Cyclodextrins: Chiral Induction in Photocyclization Products from Carbonyl Compounds  
Raja Kaliappan and V. Ramamurthy, *J. Photochem. Photobiology A* (Inoue special issue), **2009**, 207, 144-152.
322. Nature of Supramolecular Complexes Controlled by the Structure of the Guest Molecules: Formation of Octa-acid Based Based Capsuleplex and Cavitandplex,  
N. Jayaraj, Y. Zhao, A. Parthasarathy, M. Porel, R. S. H. Liu and V. Ramamurthy, *Langmuir*, **2009**, 25, 10575-10586.
323. Self Aggregation of Supramolecules of Nitroxides@Cucurbit[8]uril Revealed by EPR Spectra, N. Jayaraj, M. Porel, M. F. Ottaviani, M. V. S. N. Maddipatla, A. Modelli, J. P. Da Silva, B. R. Bhogala, B. Captain, S. Jockusch, N. J. Turro and V. Ramamurthy, *Langmuir*, **2009**, 25, 13820-13832.
324. Activation of fluorescent protein chromophores by encapsulation



- A. Baldrige, S. R. Samanta, N. Jayaraj, V. Ramamurthy and L. M. Tolbert, *J. Am. Chem. Soc.*, **2010**, *132*, 1498.
325. Guest rotations within a capsuleplex probed by NMR and EPR techniques  
R. Kulasekharan, N. Jayaraj, M. Porel, R. Choudhury, A. K. Sundaresan, A. Parthasarathy, M. F. Ottaviani, S. Jockusch, N. J. Turro and V. Ramamurthy, *Langmuir*, **2010**, *26*, 6943.
  326. Electron Spin Polarization Transfer from a Nitroxide Incarcerated within a Nanocapsule to a Nitroxide in the Bulk Aqueous Solution  
S. Jockusch, O. Zeika, N. Jayaraj, V. Ramamurthy, N. J. Turro, *J. Phys. Chem. Letters*, **2010**, *1*, 2628-2632.
  327. Closed nanocontainer enables thioketones to phosphoresce at room temperature in aqueous solution  
N. Jayaraj, M. V. S. N. Maddipatla, R. Prabhakar, S. Jockusch, N. J. Turro and V. Ramamurthy, *J. Phys. Chem. B*, **2010**, *114*, 14320.
  328. Thiourea as a Template for Photodimerization of Azastilbenes  
B. R. Bhogala, B. Captain, A. Parthasarathy and V. Ramamurthy, *J. Am. Chem. Soc.*, **2010**, *132*, 13434-13442.
  329. Suppression of spin-spin coupling in nitroxyl biradicals by supramolecular host-guest interactions  
M. Porel, M. F. Ottaviani, S. Jockusch, N. Jayaraj, N. J. Turro and V. Ramamurthy, *Chem. Comm.* **2010**, *46*, 7736-7738.
  330. Chemistry in Confined Spaces: High Energy Conformer of a Piperidine Derivative is Favored Within a Water-soluble Capsuleplex  
M. Porel, N. Jayaraj, S. Raghothama and V. Ramamurthy, *Organic Letters*, **2010**, *12*, 4544.
  331. Steric and Electronic Effects in Capsule-Confined GFP Chromophores  
A. Baldrige, S. R. Samanta, N. Jayaraj, V. Ramamurthy and L. M. Tolbert, *J. Am. Chem. Soc.*, **2011**, *133*, 712-715.
  332. Restricted rotation due to lack of free space within a capsule translates into product selectivity: Photochemistry of cyclohexyl phenyl ketones within a water-soluble organic capsule  
R. Kulasekharan, R. Choudhury, R. Prabhakar and V. Ramamurthy, *Chem. Comm.* **2011**, *47*, 2841 – 2843.
  333. Dynamics of Capsuleplex Formed Between Octaacid and Organic Guest Molecules: Photophysical Techniques Reveal the Opening and Closing of Capsuleplex  
N. Jayaraj, S. Jockusch, L. S. Kaanumalle, N. J. Turro and V. Ramamurthy, *Can. J. Chem.*, **2011**, *89*, 203-213. (J. C. Scaiano special issue).

334. Photodimerization of HCl salts of azastilbenes in the solid  
B. Mondal, B. Captain and V. Ramamurthy, *Photochemical & Photobiological Sciences*, **2011**, *10*, 891-894.
335. Aggregates of cucurbituril complexes in the gas phase  
J. Da Silva, N. Jayaraj, S. Jockusch, Steffen; N. J. Turro and V. Ramamurthy, *Org. Letters*, **2011**, *13*, 2410-2413.
336. Ultrafast singlet-singlet energy transfer between an acceptor electrostatically attached to the walls of an organic capsule and the enclosed donor  
S. Gupta, A. Adhikari, A. K. Mandal, K. Bhattacharyya and V. Ramamurthy, *J. Phys. Chem. C*, **2011**, *115*, 9593-9600.
337. Interfacial Regions Governing Internal Cavities of Dendrimers. Studies of Poly(Alkyl Aryl Ether) Dendrimers Constituted with Linkers of Varying Alkyl Chain Length  
B. Natarajan, S. Gupta, V. Ramamurthy, N. Jayaraman, *J. Org. Chem.*, **2011**, *76*, 4018-4026.
338. Chemistry in Restricted Spaces: Select Photodimerizations in Cages, Cavities and Capsules  
V. Ramamurthy and A. Parthasarathy, *Israel. J. Chem.*, **2011**, *51*, 817-829.
339. New Water-soluble Organic Capsules Are Effective in Controlling Excited State Processes of Guest Molecules  
R. Kulasekharan and V. Ramamurthy, *Org. Letters*, **2011**, *13*, 5092-5095.
340. Role of free space and weak interactions on geometric isomerization of stilbenes in a confined space  
A. Parthasarathy and V. Ramamurthy, *Photochemical & Photobiological Sciences*, **2011**, *10*, 1455-1462.
341. Interaction Between Encapsulated Excited Organic Molecules and Free Nitroxides: Communication Across a Molecular Wall  
M. Porel, S. Jockusch, M. F. Ottaviani, N. J. Turro and V. Ramamurthy, *Langmuir*, **2011** *27*, 10548-10555.
342. CIDEP from a Ketone Triplet State Incarcerated within a Nanocapsule to a Nitroxide in the Bulk Aqueous Solution  
S. Jockusch, M. Porel, V. Ramamurthy, N. J. Turro, *J. Phys. Chem. Lett.* **2011**, *2*, 2877-2880.
343. Photochemical Generation and Reactivity of Carbenes Within an Organic Cavitand and Capsule: Photochemistry of Adamantanediazirines,  
S. Gupta, R. Choudhury, D. Krois, G. Wagner, U. H. Brinker and V. Ramamurthy, *Org. Letters*, **2011**, *13*, 6074-6077.

344. Controlling Photoreactions Through Noncovalent Interactions Within Zeolite Nanocages in *Supramolecular Photochemistry: Controlling Photochemical Processes*, V. Ramamurthy and Y. Inoue (eds.), John Wiley & Sons, Inc, Hoboken, **2011**, pp. 389-442.
345. Capsular complexes of non-polar guests with octa amine host detected in the gas phase  
J. P. Da Silva, R. Kulasekharan, C. Cordeiro, S. Jockusch, N. J. Turro and V. Ramamurthy, *Org. Letters*, **2012**, *14*, 560-563.
346. Photoinduced Electron Transfer Between a Donor and an Acceptor Separated by a Capsular Wall  
M. Porel, S. Jockusch, A. Parthasarathy. V. Jayathirtha Rao, N. J. Turro and V. Ramamurthy, *Chem. Commun.*, **2012**, *48*, 2710 - 2712.
347. Excited State Chemistry of New Capsular Assemblies in Aqueous Solution and on Silica Surfaces,  
E. Ramasamy, N. Jayaraj, M. Porel and V. Ramamurthy, *Langmuir*, **2012**, *28*, 10-16.
348. Photoinduced Electron Transfer Across a Molecular Wall: Coumarin Dyes as Donors and Methyl  
viologen and TiO<sub>2</sub> as Acceptors  
M. Porel, A. Klimczak, M. Freitag, E. Galoppini and V. Ramamurthy, *Langmuir*, **2012**, *28*, 3355-  
3359.
349. Dynamic Internal Cavities of Dendrimers as Constrained Media. A Study of Photochemical  
Isomerizations of Stilbene and Azobenzene Using Poly(Alkyl Aryl Ether) Dendrimers  
B. Natarajan, S. Gupta, N. Jayaraj, V. Ramamurthy, N. Jayaraman, *J. Org. Chem.*, **2012**, *77*, 2219-  
2224.
350. Cucurbituril Adamantanediazirine Complexes and Consequential Carbene Chemistry  
S. Gupta, R. Choudhury, D. Krois, U. H. Brinker and V. Ramamurthy, *J. Org. Chem.*, **2012**, *77*,  
5150–5160.
351. Gold Nanoparticles Functionalized With Deep-cavity Cavitands: Synthesis, Characterization and  
Photophysical Studies  
S. R. Samanta, R. Kulasekharan, R. Choudhury, P. Jagadesan, N. Jayaraj and V. Ramamurthy,  
*Langmuir*, **2012**, *28*, 11920-11928
352. Supramolecular Control During Triplet Sensitized Geometric Isomerization of Stilbenes  
Encapsulated in a Water Soluble Organic Capsule  
S. R. Samanta, A. Parthasarathy and V. Ramamurthy, *Photochemical & Photobiological Sciences*,  
**2012**, *11*, 1652-1660 (special issue dedicated to J. P. Desvergne)
353. Ultrafast Photoinduced Electron Transfer Between an Incarcerated Donor and a Free Acceptor in  
Aqueous Solution  
M. Porel, C. H. Chuang, C. Burda and V. Ramamurthy, *J. Am. Chem. Soc.*, **2012**, *134*, 14718-14721.

354. Regioselective photodimerization of pyridyl-butadienes within cucurbit[8]uril cavities.  
M. V. S. N. Maddipatla, M. Pattabiraman, A. Natarajan, K. Srivastav, J. T. Mague, V. Ramamurthy, *Org. Biomol. Chem.*, **2012**, *10*, 9219-9222.
355. Control of spin-spin exchange interactions in polynitroxides through inclusion within  $\gamma$ -cyclodextrin,  
M. Porel, M. F. Ottaviani, S. Jockusch, N. J. Turro and V. Ramamurthy, *RSC Advances*, **2013**, *3*, 427.
356. Photodimerization of Hydrophobic Guests within a Water Soluble Nanocapsule  
A. Parthasarathy, S. R. Samanta and V. Ramamurthy, *Res. Chem. Intermed.*, **2013**, *39*, 73-87  
(special issue dedicated to K. Mizuno)
357. Hydrocarbons depending on the chain length and head group adopt different conformations within a water-soluble nanocapsule:  $^1\text{H}$  NMR and molecular dynamics studies  
R. Choudhury, A. Barman, R. Prabhakar and V. Ramamurthy, *J. Phys. Chem. B*, **2013**, *117*, 398-407.
358. Chloride sensing *via* suppression of excited state intramolecular proton transfer in squaramides  
M. Porel, V. Ramalingam, M.E. Domaradzki, V. G. Young, V. Ramamurthy and R. S. Muthyala, *Chem. Commun.*, **2013**, *49*, 1633-1635.
359. Deep- Cavity Cavitand Octa Acid as a Hydrogen donor: Photofunctionalization with Nitrenes Generated from Azidoadamantanes  
R. Choudhury, S. Gupta, J. P. Da Silva, U. Brinker and V. Ramamurthy, *J. Org. Chem.*, **2013**, *78*, 1824-1832.
360. Role of free space and conformational control on photoproduct selectivity of optically pure  $\alpha$ -alkyldeoxybenzoins within a water-soluble organic capsule  
R. Kulasekharan; M. Maddipatla; A. Parthasarathy and V. Ramamurthy, *J. Org. Chem.*, **2013**, *78*, 942-949.
361. Efficient Singlet-Singlet Energy Transfer in a Novel Host-Guest Assembly Composed of an Organic Cavitand, Aromatic Molecules and Clay Nano-sheet  
Y. Ishida, R. Kulasekharan, T. Shimada, S. Takagi, and V. Ramamurthy, *Langmuir*, **2013**, *29*, 1748-1753.
362. Photochemical Reaction Containers as Energy and Electron Transfer Agents  
P. Jagadesan, B. Mondal, A. Parthasarathy, V. Jayathirtha Rao and V. Ramamurthy, *Org. Letters*, **2013**, *15*, 1326-1329.
363. Release of guests from encapsulated masked hydrophobic precursors by a phototrigger

- N. Jayaraj, P. Jagadesan, S. R. Samanta, J. P. Da Silva and V. Ramamurthy, *Org. Letters*, **2013**, 15, 4374-4377.
364. Synthesis, Characterization, Guest Inclusion and Photophysical Studies of Gold Nanoparticles Stabilized with Carboxylic Acid Groups of Organic Cavitands  
B. Mondal, N. Kamatham, S. R. Samanta, P. Jagadesan, J. He and V. Ramamurthy, *Langmuir*, **2013**, 29, 12703 - 12709.
  365. Photophysical studies of an encapsulated neutral guest intercalated into the 2-dimensional space of  $\alpha$ -Zr(IV) phosphate  
E. Ramasamy, I. K. Deshapriya, R. Kulasekharan, C. V. Kumar and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2014**, 13, 301 – 309.
  366. The Turro Legacy, F. D. Lewis, V. Ramamurthy, Y. Inoue and J. Mattay, *Photochem. Photobiol. Sci.*, **2014**, 13, 138 - 140. (editorial for a special issue dedicated to the memory of N. J. Turro).
  367. ACS on Campus in India – 2013, P. Kamat, K. Bhattacharyya, K. S. Schanze, D. G. Whitten and V. Ramamurthy, *J. Phys. Chem. Letters*, **2014**, 5, 495.
  368. Supramolecular-Surface Photochemistry: Supramolecular Assembly Organized on a Clay Surface Facilitates Energy Transfer Between an Encapsulated Donor and a Free Acceptor  
Y. Ishida, R. Kulasekharan, T. Shimada, S. Takagi and V. Ramamurthy, *J. Phys. Chem., C*, **2014**, 118, 10198-10203.
  369. Excited State Chemistry of Flavone Derivatives in a Confined Medium: ESIPT emission in aqueous medium  
F. S. Santos, E. Ramasamy, V. Ramamurthy and F. Rodembusch, *Photochem. Photobiol. Sci.*, **2014**, 13, 301–309.
  370. Synthetic versus Natural Receptors: Supramolecular Control of Chemical Sensing in Fish  
José P. Da Silva, R. Choudhury, M. Porel, U. Pischel, S. Jockusch, P. C. Hubbard, V. Ramamurthy, A. V. M. Canário, *ACS Chemical Biology*, **2014**, 9, 1432-1436.
  371. A latent reaction in a model GFP chromophore revealed upon confinement: Photohydroxylation of *ortho*-halo benzylidene-3-methylimidazolidiones *via* an electrocyclization process  
S. R. Samanta, J. P. Da Silva, A. Baldrige, L. M. Tolbert and V. Ramamurthy, *Org. Letters*, **2014**, 16, 3304-3307
  372. Role of Hydrogen Bonds in Molecular Packing of Photoreactive Crystals: Templating Photodimerization of Protonated Stilbazoles in Crystalline State with a Combination of Water Molecules and Chloride Ions

- B. Mondal, T. Zhang, R. Prabhakar, B. Captain and V. Ramamurthy, *Photochem. Photobiol. Sci.*, **2014**, *13*, 1509-1520.
373. Photoisomerization and Photooxygenation of 1,4-Diaryl-1,3-dienes in a Confined Space  
S. R. Samanta, R. Choudhury and V. Ramamurthy, *J. Phys. Chem. A.*, **2014**, *118*, 10554-10562.
  374. Supramolecular photochemistry: From molecular crystals to water-soluble capsules  
V. Ramamurthy and S. Gupta, *Chem. Soc. Rev.*, **2015**, *44*, 119 -135
  375. Photorelease of Incarcerated Guests in Aqueous Solution with Phenacyl Esters as the Trigger  
P. Jagadesan, José P. Da Silva, R. S. Givens and V. Ramamurthy, *Organic Letters*, **2015**, *17*, 1276-1279.
  376. Comparison of Templating Abilities of Urea and Thioruea During Photodimerization of Bipyridylethylene and Stilbazole Crystals  
B. R. Bhogala, B. Captain and V. Ramamurthy, *Photochem. Photobiol.*, **2015**, *91*, 696-704. (*Special Issue Dedicated to the Memory of Michael Kasha*)
  377. Supramolecular Photochemistry Concepts Highlighted with Select Examples  
V. Ramamurthy and B. Mondal *J. Photochem. Photobiol. C: Photochem. Rev.*, **2015**, *23*, 68-102.
  378. Supramolecular Photochemistry in Solution and on Surfaces: Encapsulation and Dynamics of Guest Molecules, and Communication Between Encapsulated and Free Molecules  
V. Ramamurthy, S. Jockusch and M. Porel, *Langmuir*, **2015**, *31*, 5554-5570 (Invited Feature article)
  379. Identification of Guest–Host Inclusion Complexes in the Gas Phase by Electrospray Ionization–Mass Spectrometry  
D. C. Mendes, V. Ramamurthy and J. P. Da Silva, *J. Chem. Edu.*, **2015**, *92*, 1091-1094.
  380. Photochemistry within a water-soluble organic capsule, V. Ramamurthy, *Acc. Chem. Res.* **2015**, *48*, 2904-2917.
  381. A dendrimer facilitates resonance energy transfer between hydrophobic aromatic guest molecules in water  
Y. Singh, A. Mohan Raj, B. M. Kiran, J. Nithyanandhan, V. Ramamurthy and N. Jayaraman, *J. Photochemistry and Photobiology A: Chemistry*, **2016**, *317*, 125–131.
  382. Excited state behaviour of benzoxazole derivatives in a confined environment afforded by a water soluble octa acid capsule  
F. Santos, E. Ramasamy, V. Ramamurthy and F. S. Rodembusch, *J. Photochemistry and Photobiology A: Chemistry*, **2016**, *317*, 175-185. (Invited Feature Article)

383. Water-soluble octaacid capsule as a reaction container: Templated photodimerization of indene in water  
A. Parthasarathy and V. Ramamurthy, *J. Photochem and Photobio A: Chemistry*, **2016**, *317*, 132-139.
384. Confinement effect on the photophysics of ESIPT fluorophores  
F. S. Santos, E. Ramasamy, a V. Ramamurthy and F. S. Rodembusch, *J. Materials Chem. C*. **2016**, *4*, 2820-2827.
385. Sequential Energy and Electron Transfer in a Three-component System Aligned on a Clay Nanosheet  
T. Fujimura, E. Ramasamy, Y. Ishida, T. Shimada, S. Takagi, V. Ramamurthy, *Phys. Chem. Chem. Phys.*, **2016**, *18*, 5404-5411.
386. Supramolecular-Surface Photochemistry: Cascade Energy Transfer Between Encapsulated Dyes Aligned on Clay Nano-sheet Surface  
T. Tsukamoto, E. Ramasamy, T. Shimada, S. Takagi and V. Ramamurthy, *Langmuir* **2016**, *32*, 2920–2927.
387. Reversible Disassembly-Assembly of Octa acid-Guest Capsule in Water Triggered by a Photochromic Process  
A. Mohan Raj, F. Raymo and V. Ramamurthy, *Org. Lett.*, **2016**, *18*, 1566-1569.
388. pH Induced cucurbit[7]uril hydrogels: Understanding microenvironment of the aggregates through excited state reactivity of dibenzyl ketones  
M. Pattabiraman, M. V. S. N. Maddipatla, and V. Ramamurthy, *J. Photochemistry and Photobiology A: Chemistry*, **2016**, *324*, 53-61.
389. Room Temperature Phosphorescence from a Guest Molecule Confined in Restrictive Space of an Organic–Inorganic Supramolecular Assembly  
Y. Ishida, T. Shimada, E. Ramasamy, V. Ramamurthy and S. Takagi, *Photochem. Photobiol. Sci.*, **2016**, *15*, 959-963.
390. Solid-state photochemistry of *cis*-cinnamic acids: A competition between [2+2] addition and *cis-trans* isomerization  
G. B. Veerakanellore, B. Captain and V. Ramamurthy, *CrystEngComm.*, **2016**, *18*, 4708-4712.
391. Supramolecular Photochemistry as a Synthetic Tool: Photocycloaddition  
V. Ramamurthy and J. Sivaguru, *Chem. Rev.*, **2016**, *116*(17), 9914-9993.
392. Volume demanding geometric isomerization of *cis*-4-stilbazole.HCl salts in the crystalline state: Probing the role of a metastable dimer

- B. Mondal, B. Captain and V. Ramamurthy, *J. Photochem. Photobiol. A: Chemistry*, **2016**, *331*, 224-232. (Special Issue Dedicated to Yoshihisa Inoue)
393. Zeolite matrix assisted decomposition of singlet oxygen sensitizers during photooxidation  
J. Shailaja, J. Sivaguru and V. Ramamurthy, *J. Photochemistry and Photobiology A: Chemistry*, **2016**, *331*, 197-205. (Special Issue Dedicated to Yoshihisa Inoue)
394. Photorelease of Incarcerated Caged Acids from Hydrophobic Coumaryl Esters into Aqueous Solution  
N. Kamatham, D. C. Mendes, José P. Da Silva, R. S. Givens and V. Ramamurthy, *Org. Letters*, **2016**, *18*, 5480-5483
395. A phosphorescent platinum(II) bipyridyl supramolecular polymer based on quadruple hydrogen bonds.  
Fang-Wei Liu, Li-Ya Niu, Yong, Chen, Vaidhyathan Ramamurthy, Li-Zhu Wu, Chen-Ho Tung, Yu-Zhe Chen and Qing-Zheng Yang, *Chemistry - A European Journal*, **2016**, *22*, 18132-18139.
396. Photocatalysis with Quantum Dots and Visible Light: Selective and Efficient Oxidation of Alcohols to Carbonyl Compounds Through a Radical Relay Process in Water  
Lei-Min Zhao, Qing-Yuan Meng, Xiang-Bing Fan, Chen Ye, V. Ramamurthy, Chen-Ho Tung, Bin Chen and Li-Zhu Wu, *Angew. Chem. Int. Ed.*, **2017**, *56*, 3020-3024.
397. On the origin of chloride-induced emission enhancement in ortho substituted squaramides  
A. Danao, V. Ramalingam, V. Ramamurthy and R. S. Muthyala, *J. Photochem. Photobiol. A*, **2017**, *344*, 108-113.
398. Photoinduced electron transfer across an organic molecular wall: Octaacid encapsulated ESIPT dyes as electron donors  
F. S. Santos, E. Ramasamy, V. Ramamurthy and F. S. Rodembusch, *Photochem. Photobiol. Sci.*, **2017**, *16*, 840-844.
399. Melding Caged Compounds with Supramolecular Containers: The Photogeneration and Miscreant Behavior of the Coumarylmethyl Carbocation  
N. Kamatham, José P. Da Silva, R. S. Givens and V. Ramamurthy, *Org. Lett.* **2017**, *19*, 3588-3591
400. What is the Opto-Electronic Effect of the Capsule on the Guest Molecule in Aqueous Host/Guest Complexes? A Combined Computational and Spectroscopic Perspective  
S. Bhandari, Z. Zheng, C-H. Chuang, M. Porel, Z-Q. You, V. Ramamurthy, C. Burda, J. M. Herbert, and B. D. Dunietz, *J. Phys. Chem. C* **2017**, *121*, 15481-15488
401. A Green Synthesis of Indolines under Visible Light Irradiation  
C-J. Wu, W-X. Cao, T. Lei, Z-H Li, Q-Y. Meng, X-L. Yang, B. Chen; V. Ramamurthy, C-H Tung and L-Z Wu, *Chem. Commun.*, **2017**, *53*, 8320-8323.



402. Ultrafast Electron Transfer from Upper Excited State of Encapsulated Azulene to Acceptors Across an Organic Molecular Wall  
A. Mohan Raj, M. Porel, P. Mukherjee, X. Ma, R. Choudhury, E. Galoppini, P. Sen and V. Ramamurthy, *J. Phys. Chem. C*, **2017**, 121, 20205–20216.
403. Container Chemistry: Manipulating excited state behavior of organic guests within cavitands that form capsules in water  
P. Jagadesan, S. R. Samanta, R. Choudhury and V. Ramamurthy, *J Phys. Org. Chem.* **2017**, 30, e3728; DOI: 10.1002/poc.3728
404. ESI-MS of cucurbituril complexes under negative ESI  
Maria A. A. Rodrigues, Débora C. Mendes, V. Ramamurthy and José P. Da Silva, *J. Am. Soc. Mass Spectrom*, **2017**, 28, 2508-2514.
405. General and Efficient Intermolecular [2+2] Photodimerization of Chalcones and Cinnamic Acid Derivatives in Solution through Visible Light Catalysis  
T. Lei, C. Zhou, M. Y. Huang, L.M. Zhao, C. Ye, Q. Y. Meng, V. Ramamurthy, C. H. Tung, and L. Z. Wu, *Angew. Chem. Int. Ed.* **2017**, 56, 15407–15410
406. Volume conserving geometric isomerization of encapsulated azobenzenes in ground- and excited states and as radical ion  
A. Mohan Raj and V. Ramamurthy, *Org. Lett.* **2017**, 19, 6116–6119
407. Photochemistry in a capsule: Ultrafast electron transfer across an organic nanocapsular wall  
C-H. Chuang, M. Porel, R. Choudhury, C. Burda and V. Ramamurthy, *J. Phys. Chem. B*, **2018**, 122, 328–337
408. Probing the pH Dependent Assembly-Disassembly of Water-Soluble Organic Capsules with Coumarins and Anthracene  
A. Mohan Raj, S. G. Talluri, M. Dubus, S. Gupta, B. Mondal and V. Ramamurthy, *J. Photochem. Photobiol. A*, **2018**, 355, 398–407.
409. Selective Photocycloaddition of Alkenes in Confined Spaces: A Comparison between Cucurbiturils, Cyclodextrins, and Calixarenes as Reaction Containers  
M. Pattabiraman, J. Sivaguru and V. Ramamurthy, *Israel J. Chem.* **2018**, 58, 264-275
410. Understanding the Complexation of Aliphatic and Aromatic acids Guests with Octa acid  
R. Choudhury and V. Ramamurthy, *J. Phys. Org. Chem.*, **2018**, DOI: 10.1002/poc.3795
411. Competitive binding of organic dyes between cucurbiturils and octaacid  
S. Gupta, Y. Zhao, R. Varadharajan and V. Ramamurthy, *ACS Omega*, **2018**, 3, 5083-5091.

412. Characterization and singlet oxygen oxidation of 1-alkyl cyclohexenes encapsulated within a water-soluble organic capsule  
S. Gupta and V. Ramamurthy, *ChemPhotoChem.*, **2018**, 2, 655-666.
413. Supramolecular-Surface Photochemistry: Assembly and photochemistry of host-guest capsules on silica surface  
E. Ramasamy and V. Ramamurthy, *Org. Lett.*, **2018**, 20, 4187-4190.
414. Luminescent supramolecular polymer nanoparticles for ratiometric hypoxia sensing, imaging and therapy  
Y-Y Huang, Y. Tian, F-W Liu, X-Q Liu, Z. Niu, J. Gao, Q-Z. Yang, V. Ramamurthy, C-H. Tung, Y-Z. Chen, L-Z. Wu, *Mater. Chem. Front*, **2018**, 2, 1893-1899.
415. In Search of Stable Visible Light Absorbing Photocatalysts: Gold Nanoclusters  
B. Mondal, M. Anthony Raj and V. Ramamurthy, *J. Chem. Sci.*, **2018**, 130: 139, 1-10.  
(<https://doi.org/10.1007/s12039-018-1553-x>)
416. Efficient Chemo- and Regioselective Synthesis of Alkynyl Cyclobutanes by Visible Light Photocatalysis  
C. Zhou, T. Lei, X-Z. Wei, Z. Liu, B.Chen, V. Ramamurthy, C-H. Tung, and L-Z. Wu, *Org. Lett.*, **2018**, 20, 6808-6811.
417. Ultrafast Dynamics of Encapsulated Molecules Reveals New Insight on the Photoisomerization Mechanism for Azobenzenes  
C. J. Otolski, M. Anthony Raj, V. Ramamurthy, and C. G. Elles, *J. Phys. Chem. Lett*, **2019**, 10, 121-127.
418. Ultrafast Trans→Cis Photoisomerization Dynamics of Alkyl Substituted Stilbenes in a Supramolecular Capsule,  
C. J. Otolski, M. Anthony Raj, V. Ramamurthy, and C. G. Elles, *J. Phys. Chem. A* **2019**, 123, 5061–5071.
419. Space constrained stereoselective geometric isomerization of 1,2 diphenylcyclopropane and stilbenes in an aqueous medium  
A. Mohan Raj, Gaurav Sharma, Rajeev Prabhakar and V. Ramamurthy, *Org. Lett.* **2019**, 21, 5243–5247.
420. Modulation of Reduction Potentials of Bis(pyridinium)alkane Dications Through Encapsulation Within Cucurbit[7]uril  
N. A. Tcyrulnikov<sup>†</sup>, R. Varadharajan<sup>‡</sup>, A. A. Tikhomirova, M. Pattabiraman, V. Ramamurthy, and R. M. Wilson, *J. Org. Chem.* **2019**, 84, 8759–8765.

421. Visible Light Triggered Selective Intermolecular [2+2] Cycloaddition of Extended Enones: 2-Oxo-3-enoates and 2,4-Dien-1-ones with Olefins  
Lei-Min Zhao, Tao Lei, Rong-Zhen Liao, Hongyan Xiao, Bin Chen V. Ramamurthy, Chen-Ho Tung, and Li-Zhu Wu, *J. Org. Chem.* **2019**, *84*, 9257–9269.
422. Ultrafast solvation dynamics reveal the octa acid capsule's interior dryness depends on the guest  
A. Das, G. Sharma, N. Kamatham, R. Prabhakar, Pratik Sen and V. Ramamurthy, 2019, *J. Phys. Chem. A*, **2019**, *123*, 5928–5936.
423. Supramolecular Photochemistry of Encapsulated Caged *ortho*-Nitrobenzyl Triggers  
N. Kamatham, A. Mohan Raj, Richard S. Givens, José P. Da Silva and V. Ramamurthy, *Photochem. Photobiol. Sci.* **2019**, (2019), *18*(10), 2411-2420
424. Reversal of Regioselectivity During Photodimerization of 2-Anthracene carboxylic acid in a water-soluble organic cavitand  
X. Wei, A. Mohan Raj, J. Ji, W. Wu, G. Veerakanellore, C. Yang and V. Ramamurthy, *Org. Lett.* **2019**, *21*, 7868-7872
425. Achiral Zeolites as Reaction Media in Chiral Photochemistry, V. Ramamurthy, *Molecules*, **2019**, *24*, 3570; doi:10.3390/molecules24193570
425. Xenon Triggers Phosphorescence at Room Temperature from Encapsulated Pyrene  
A. Mohan Raj, Gaurav Sharma, Rajeev Prabhakar, and V. Ramamurthy, *J. Phys. Chem. A*, **2019**, *123*, 9123-9131

#### Edited Monographs/Journal Special Issues/Books

*Organic Chemistry in Anisotropic Media*, (Tetrahedron Symposia in Print), Guest Eds., V. Ramamurthy, J. R. Scheffer and N. J. Turro, Pergamon Press, London, 1987.

*Photochemistry in Organized and Confined Media*, Ed., V. Ramamurthy, VCH Publishers, New York, 1991.

*Photochemistry-Special issue*, Chemical Reviews, (January/February, 1993), Guest Eds. V. Ramamurthy and N. J. Turro, American Chemical Society, Washington, D.C., 1993

*Molecular and Supramolecular Photochemistry, Volume I, 'Organic Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 1997.

*Journal of Physical Chemistry, Special Issue on Photochemistry*, Guest Eds., V. Ramamurthy, M. Garcia Garibay and R. Schmehl, July, 9 1998.

*Molecular and Supramolecular Photochemistry, Volume 2, 'Organic and Inorganic Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 1998.

*Molecular and Supramolecular Photochemistry, Volume 3, 'Organic Molecular Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 1999.

*Molecular and Supramolecular Photochemistry, Volume 4, 'Multimetallic and Macromolecular Inorganic Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 1999.

*Molecular and Supramolecular Photochemistry, Volume 5, 'Solid State and Surface Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2000.

*Molecular and Supramolecular Photochemistry, Volume 6, 'Organic, Physical and Materials Photochemistry'*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2000.

*Molecular assembly and Reactivity of Organic Crystals and Related Structures*, (Tetrahedron Symposia in Print), Guest Eds., V. Ramamurthy, J. R. Scheffer and M. Garcia-Garibay, Pergamon Press, London, 56, issue 36 (September 1), 2000.

*Molecular and Supramolecular Photochemistry, Volume 7, Photochemistry of Sensors and Optical Switches*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2001.

*Molecular and Supramolecular Photochemistry, Volume 8, Understanding and Manipulating Excited State Processes*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2001.

*Molecular and Supramolecular Photochemistry, Volume 9, Photochemistry of Organic Molecules in Isotropic and Anisotropic Media*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2003.

*Molecular and Supramolecular Photochemistry, Volume 10, Semiconductor Photochemistry and Photophysics*, Editors, V. Ramamurthy and K. Schanze, Marcel Dekker: New York, 2003.

*Molecular and Supramolecular Photochemistry, Volume 11, Chiral Photochemistry*, Editors, Y. Inoue and V. Ramamurthy, Marcel Dekker: New York, 2004.

*Molecular and Supramolecular Photochemistry, Volume 14, Organic Photochemistry and Photophysics*, Editors, V. Ramamurthy and K. Schanze, Taylor and Francis: Boca Raton, 2006.

*Photochemistry and Photobiological Sciences (RSC publication), Special Issue dedicated to Professor N. J. Turro*, December 2008, Guest Editor, V. Ramamurthy.

Supramolecular Photochemistry: Controlling Photochemical Processes, Editors, V. Ramamurthy and Y. Inoue, John Wiley & Sons: New York, 2011.

*Photochemistry and Photobiological Sciences (RSC publication), N. J. Turro Memorial Special Issue*, Guest Editors, V. Ramamurthy, F. D. Lewis, Y. Inoue, J. Mattay (13, issue 2, 2014).

#### **Authored text books**

*Principles of Molecular Photochemistry: An Introduction*, N. J. Turro, V. Ramamurthy and J. C. Scaiano, University Science Books: Sausalito, CA, 2008.

*Modern Molecular Organic Photochemistry*, N. J. Turro, V. Ramamurthy and J. C. Scaiano, University Science Books: Sausalito, 2010.

#### **Ph.D Thesis Guided**

##### **(a) Indian Institute of Science, Bangalore, India**

1. N. Ramasubbu (1982)#  
"X-Ray Crystallographic Investigations of Strained Small Rings and some Photoreactive Coumarins"
2. K. Muthuramu (1983)  
"Norrish Type I  $\alpha$ -Cleavage Reactions of Cyclobutanethiones and Photochemical Studies in Micellar Media"
3. V. Ramesh (1983)  
"Quenching and Generation of Singlet Oxygen by Thioketones and Micellar Effects on Selectivity in Photochemical Reactions"
4. N. Ramnath Iyer (1983)  
"Mechanism of Photooxidation of Thioketones and Limitations of Micellar Alignment Effect on Regioselectivity of Photodimerizations"
5. V. Jayathirtha Rao (1984)  
"Oxidation of Thioketones and Thioketenes by Singlet Oxygen"
6. K. Bhagavathi Sundari (1984)  
"Photochemical Studies on Thiocarbonyl Compounds"
7. Sharat Singh (1985)  
"Excited State Behaviour of Substituted Cyclopropanethiones and Thioketenes and Photochemical Investigations in Cyclodextrins"

8. K. Gnanaguru (1985)#  
"Photochemical and X-Ray Crystallographic Studies on Coumarins in the Crystalline State"
9. P. Arjunan (1985)#  
"Photochemical Oxidation of Thioketones in the Crystalline State and Photochemical Behaviour of Polyenes in Cyclodextrin Media"
10. V. Pushkara Rao (1986)  
"Excited State Behaviour of  $\alpha,\beta$ -Unsaturated Thiones"
11. B. Nageshwer Rao (1986)  
" $\alpha$ -Cleavage Reactions of Cyclobutanethiones and Selectivity in Photochemical Reactions using Cyclodextrin"
12. K. Padmanabhan (1986)#  
"Structure-Reactivity Correlations in Organic Solid State Chemistry: Photochemical Hydrogen Abstraction"
13. G. Satyanarayana Murthy (1986)#  
"Structure-Reactivity Correlations in Solid State Thermal and Photochemical Reactions"
14. G. Dasaratha Reddy (1987)  
"Modification of Photochemical Reactivity of Carbonyl Compounds by Cyclodextrins"
15. S. Devanathan (1987)  
"Modification of Photochemical Reactivity by Incorporation of Organic Molecules in Organized Media and Photocycloaddition Reactions of Thiocoumarin"
16. M. S. Syamala (1987)  
"Selectivity in Photoreactions in Cyclodextrin Media"

**(b) Tulane University, New Orleans, LA**

17. A. Joy (2000)  
"Studies on Asymmetric Photoreactions in Zeolites"
18. M. Warrier (2000)  
"Selectivity in Photochemical Reactions Carried out Within Zeolites"
19. N. T. Prevost (2000)

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# Jointly guided in collaboration with Professor K. Venkatesan (Crystallographer)

“Photochemical and photophysical Studies of Organic Molecules in Zeolites: Energy and Electron Transfer”

20. P. Lakshminarasimhan (2001)  
"Photochemical Reactions in Zeolites–Effect of Acidity, Confinement and Non-Bonded Interactions"
21. S. Uppili (2002)  
"Selectivity in Photochemical Reactions within Zeolites"
22. S. Koodenjeri (2002)  
"Controlling Photochemical Reactions Through Well Structured Hosts (Cyclodextrins and Dilol Hosts)"
23. J. Shailaja (2002)  
“Selective Phototransformations in Constrained Media and Theoretical Insight into the Photophysics of Acetophenones”
24. K. J. Ponchot (2003)  
“The Influence of Zeolite Environment on Selectivity of Photochemical Reactions”
25. J. Sivaguru (2003)  
“Selective Phototransformations in Organized Media”
26. Arunkumar Natarajan (2004)  
“Selectivity in Organic Photochemical Reactions within Zeolites and in the Crystalline State”
27. L. S. Kaannumalle (2004)  
“Controlling Photochemical Reactions Through Confined Spaces and Cations”

**(c) University of Miami, Miami, FL**

28. M. Pattabiraman (2006)  
“Controlling Photochemistry of Organic Molecules Using Water-Soluble Hosts”
29. S. Arumugam (2006)  
“Controlling Photochemistry Within Polymeric and Oligomeric Organic Hosts”
30. S. Kartikeyan (2007)  
“Controlling Selectivity in Photochemical Reactions Through Confinement and Non-bonded Interactions”
31. R. Kaliappan (2008)

“Selectivity in Photochemical Reactions Within Water Soluble Calixarenes and Cyclodextrins”

32. A. Sundaresan (2008)  
“Photochemical Transformations in a Water-soluble Supramolecular Assembly: Spatial and Temporal Effects on Product Selectivity”
33. S. N. M. Venkata (2008)  
“Influence of Confined Media on Photophysical and Photochemical Transformations of Organic Guest Molecules: Water Soluble Supramolecules as Confined Media”
34. Anand Parthasarathy (2009)  
“Photochemical Reactions in a Water Soluble Supramolecular System: Influence of Confinement on Guest Reactivity and Product Selectivity”
35. Mintu Porel (2012)  
“Understanding the interior characteristics of a deep cavity cavitand and its role in modulating photophysical processes of organic molecules”
36. Shampa R. Samanta (2012)  
“Controlling Photochemical and Photophysical Behavior of Organic Molecules within a Water-soluble Host”
37. Revathy Kulasekharan (2012)  
“Dynamic and reactivity of guests within a water soluble host and synthesis of cationic water soluble cavitands”
38. Rajib Choudhury (2012)  
“Structure and Dynamics of Small Molecules within Water-soluble Hosts: A Thermodynamic, Nuclear Magnetic Resonance Spectroscopic and Computational Study”
39. Shipra Gupta (2013)  
“Understanding the Influence of Confinement on the Excited State Properties of Small Organic Molecules”
40. Barnali Mondal (2014)  
“Controlling Photoreactions in Crystals and Through Confinement in Water-Soluble Supramolecules”
41. Pradeepkumar Jagadesan (2015)  
“A study of influence of supramolecular confinement on the photochemistry of organic guest molecules.”
42. Elamparuthy Ramasamy (2015)



“Formation and Intercalation of supramolecular capsular assemblies on surfaces and their excited state properties”

43. Nareshbabu Kamatham (2018)  
“Caged Molecules Released from Capsules: Photochemical and Photophysical Studies of Coumarin Triggers”
44. Giri Babu Veerakanellore (2018)  
“Photodimerization of *cis*-Cinnamic Acids and *cis*-Cinnamides in Crystalline State and in Aqueous Solution”
45. Ashwini Dano (2018)  
“Studies on the photophysical properties of aromatics and dyes in isotropic solvents and confined spaces”
46. Mohan Raj Anthony Raj (2018)  
“Controlling Photoprocesses within a Confined Space: Switches, Triggers and Electron Transfer”

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Ashwini Dano

K. Srivastav

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Fabiano da Silveira Santos, (fabiano@ufrgs.br)

UNESC/CELESC, Brazil

M. Dubus (marie.dubus@hotmail.com)

Post-doctorate, BIOS laboratory (EA 4691), University of Reims, Reims, France.

S. G. Talluri (gayathri@uvic.ca)

Graduate student, Uni. Victoria, Victoria, BC

## Conferences Organized

Member, Organizing Committee, 3rd Winter Conference of the Inter-American Photochemical Society, 1991, Clearwater Beach.

Member, Organizing Committee, 10th International Conference on Organic Solid State, 1991, Vancouver.

Member, Organizing Committee, 6th International Cyclodextrin Symposium, Chicago, 1992.

Member, Organizing Committee, 11th International Conference on Organic Solid State, 1993, Jerusalem.

Member, Organizing Committee, 12th International Conference on Organic Solid State, 1995, Japan.

Co-Chair, 7th Winter Conference of the Inter-American Photochemical Society, 1995, Clearwater Beach.

Symposium on Supramolecular Organic photochemistry at ACS National meeting in New Orleans, March 1996.

Member, Organizing Committee, 8th Winter Conference of the Inter-American Photochemical Society, 1996, Brazil.

Member, Organizing Committee, 13th International Conference on Organic Solid State, 1997, Stony Brook, USA.

Chair, Organizing Committee, A Symposium on Molecular and Supramolecular Photochemistry, ACS National meeting, Boston, 1998.

Co-Organizer, US-Japan Workshop on "Supramolecular Photochemistry", December 1999, New Orleans, LA.

Co-Organizer, A Symposium on Molecular and Supramolecular Photochemistry, PACIFICHEM 2000, December 2000, Honolulu, HI.

Member, Organizing Committee, International Symposium on Asymmetric Photochemistry, Osaka, Japan, 2001.

Co-Chair, International Symposium on Asymmetric Photochemistry, Nara, Japan, 2003

Member, Advisory Committee, 3rd International Symposium on Recent Trends in Photochemical Sciences, Trivandrum, India, 2004.

Co-Chair, Gordon Conference on Photochemistry, 2005.

Co-Chair, A Symposium on Supramolecular Photochemistry, PACIFICHEM 2005, December 2005, Honolulu, HI.

Member, Organizing Committee, IUPAC Symposium on Photochemistry, Japan, 2006.

Organizer, Exploring the New Frontiers of Modern Photochemistry and Physical Organic Chemistry, Miami, 2007.

Co-Organizer, Symposium on Newer Trends in Photochemistry, Columbia University, New York, 2008.

Co-Organizer, A Symposium on Supramolecular Photochemistry, PACIFICHEM 2010, December 2010, Honolulu, HI.

Co-Organizer, A Symposium on Molecular and Supramolecular Photochemistry, PACIFICHEM 2015, December 2015, Honolulu, HI.

Co-Organizer, A Symposium on Molecular and Supramolecular Photochemistry, PACIFICHEM 2020, December 2015, Honolulu, HI.

### **Invited Talks Presented at National and International Conferences**

Symposium on "Organic Phototransformations in Non-homogeneous Media, ACS National Meeting, Philadelphia, 1984.

XII International Conference on Photochemistry, Tokyo, Japan, 1985.

Tables Ronde Roussel Uclaf on "Organic Reactions in Organized Media", Paris, France, 1986

Vth International Symposium on Inclusion Phenomena and Molecular Recognition, Orange Beach, 1988.

IIInd Winter Conference of the Inter American Photochemical Society, Clearwater beach, 1989.

Gordon Conference on Organic Photochemistry, Andover, 1989.

VIIth Great Lakes Symposium on Photochemistry, London, Canada. 1990.

Gordon Conference on Radical Ions, Wolfboro, 1990.

18th Annual Meeting of the American Society for Photobiology, Vancouver, Canada, 1990.

Mid-Atlantic Regional Meeting of the ACS, Newark, 1991.

10th International Conference on the Chemistry of the Organic Solid State, Vancouver, Canada, 1991.

IIIrd National Organic Symposium, Bhubaneswar, India, 1992.

National Photochemistry Conference, Trivandrum, 1992.

9th International Zeolite Conference, Montreal, Canada, 1992.

11th International Conference on the Chemistry of the Organic Solid State, Jerusalem, Israel, 1993.

10th International Conference on Photochemical Conversion and Storage of Solar Energy, Interlaken, Switzerland, 1994.

U.S.-Japanese Binational Workshop on "Future Prospects of Solar Energy Conversion", January, 1995, Honolulu.

Symposium on "Organic Photochemistry, ACS National Meeting, Chicago, 1995.

International Chemical Congress of Pacific Basin Societies—PACIFICHEM 95, Honolulu, 1995.

7th Annual Symposium of the Center for Photoinduced Charge Transfer, University of Rochester, 1996.

US-Japan Workshop on Photoresponsive Materials, Catalina Islands, 1996.

International Workshop on Cluster Chemistry, Tsukuba, Japan, 1997.

Florida ACS Symposium on Photochemistry, Orlando, 1997.

80th Canadian Society for Chemistry Conference, Symposium on Supramolecular Chemistry, Winsor, 1997.

International Conference on Chemistry and Physics of Matrices, Austria, 1997.

Gordon Conference on the Chemistry of Supramolecular Assemblies, 1997.

International Conference on the Reaction of Crystalline State, Matsuyama, Japan, 1997.

Workshop on Recent Trends in Photochemical Sciences, Trivandrum, India, 1998.

12<sup>th</sup> International Zeolite Conference, Baltimore, 1998.

22nd Solar Photochemistry Research Conference, Chantilly, 1998.

US-Japan Workshop on Organic Solid State, Lake Arrowhead, 1998.

Gordon Research Conference on Zeolites and Layered Materials, Plymouth, 1999.

Gordon Research Conference on Organic Photochemistry, Connecticut, 1999.

2nd Asian Photochemistry Conference, Seoul, 1999.

ELAFOT-6, (Latin-American Photochemical Association 6th Annual Conference) Teresopolis, Brazil, 1999.

Symposium on New Reactions and Processes in Organic Chemistry, ACS, El Paso, 1999  
 Photochemistry in the Southwest, Knoxville, 1999.  
 International Conference on Small Scales in Space and Time, Pune, India, 1999  
 US-Japan Workshop on Supramolecular Photochemistry, New Orleans, 1999  
 International Symposium on Zeolites and Microporous Materials, Sendai, Japan, 2000  
 Gordon Research Conference on Chemistry at Interfaces, Plymouth, 2000  
 International Conference on Reactive Intermediates and Unusual Molecules, Vienna, Austria, 2000  
 A Symposium on Molecular and Supramolecular Photochemistry, Pacifichem-2000, Honolulu, HI, 2000  
 A Symposium on Organic Photochemistry, Pacifichem-2000, Honolulu, HI, 2000  
 Inter-American NSF Workshop on Photochemistry in Organized Media, Cardoba, Argentina, 2001  
 First International Conference on Photochirogenesis, Osaka, Japan, 2001.  
 XXI International Conference on Photochemistry, Nara, 2003.  
 16<sup>th</sup> IAPS Conference on Photochemistry, Clearwater Beach, January, 2005  
 81<sup>st</sup> FAME Conference (Florida ACS), Orlando, May, 2005.  
 International Conference on Solid State Chemistry, Los Angeles, 2005  
 A Symposium on Supramolecular Photochemistry—PACIFICHEM-2005, Honolulu, HI, Dec, 2005  
 A Symposium on Geometric Photoisomerization—PACIFICHEM-2005, Honolulu, HI, Dec, 2005  
 IUPAC Symposium on Photochemistry, Kyoto, Japan, April, 2006.  
 19<sup>th</sup> Annual Canadian Symposium on Catalysis, Saskatoon, Canada, May 2006.  
 17<sup>th</sup> IAPS Conference on Photochemistry, Salvador, Brazil, June 2006.  
 A Symposium on Container Molecules, 232<sup>nd</sup> ACS Conference, San Francisco, September 2006.  
 Korea-Japan Joint Symposium on Frontier Photoscience, Seoul, November 2006.  
 83<sup>rd</sup> FAME Conference (Florida ACS), Orlando, May, 2007.  
 CERMACS, A symposium on 'Illuminating Molecules', Covington, KY, May 2007.  
 Gordon Research Conference on Photochemistry, RI, July 2007.  
 NSF Workshop on Cucurbit[n]uril Molecular Containers, College Park, August, 2007.  
 Symposium on Newer Trends in Photochemistry: In honor of N. J. Turro's 70<sup>th</sup> birthday, May 2008.  
 MARM-2008 conference (Mid Atlantic Regional ACS Conference), May 2008  
 5<sup>th</sup> Asian Photochemistry Conference, Beijing, China, November 2008.  
 19<sup>th</sup> Inter-American Photochemical Society Conference, Clearwater Beach, FL, January 2009.  
 JSPS-KOSEF Asian Science Seminar 2009, Kawasaki, March 2009  
 85<sup>th</sup> FAME Conference (Florida ACS), Orlando, May, 2009.  
 International Conference on Photochemistry (ICP-24), Toledo, Spain, July 2009  
 International Conference on Materials for the Millennium, MATCON 2010, January 2010  
 Indian Institute of Technology, Madras Alumni Day Symposium, April 2010  
 International Symposium on Macrocyclic and Supramolecular Chemistry, Japan, June 2010  
 David G. Whitten Symposium, Albuquerque, NM, August 2010  
 A Symposium on Supramolecular Photochemistry—PACIFICHEM-2010, Honolulu, HI, December 2010  
 A Symposium on Mechanistic Organic Photochemistry—PACIFICHEM-2010, Honolulu, HI, December 2010  
 13<sup>th</sup> Chemical Research Society of India National Symposium in Chemistry, Bhubaneswar, India, February 2011.  
 National Seminar on Modern Trends in Spectroscopy: Its Application in Chemistry and Biology, Kolkatha, India, February 2011.



International Conference on Photochemistry (ICP-25), Beijing, China, August 2011  
 5<sup>th</sup> Asian Conference on Colloid and Interface Science, Darjeeling, India, November 2013  
 23<sup>rd</sup> Inter-American Photochemical Society Conference, Clearwater Beach, FL, January 2014  
 Japanese Photochemical Association Annual Symposium, Sapporo, Japan, October 2014  
 13<sup>th</sup> Eurasia Conference in Chemical Sciences, IISc, Bangalore, India, December 2014  
 Symposium on Advances in Spectroscopy and Ultrafast Dynamics, IACS, Kolkatha, India, December, 2014  
 2015 FAME Conference (Florida ACS), Innisbrook, May, 2015  
 27<sup>th</sup> International Conference on Photochemistry (ICP-2015), Jeju island, Korea, June 2015  
 98<sup>th</sup> Canadian Chemistry Conference, June 2015  
 Gordon Research Conference on Photochemistry, RI, July 2015.  
 11<sup>th</sup> National Conference on Physical Organic Chemistry and 2015 International Symposium on Organic Chemistry Frontiers, Tsinghua University, Beijing, China, September, 2015  
 A Symposium on Practical Application of Basic Research on Molecular Recognition—PACIFICHEM-2015, Honolulu, HI, December 2015  
 The First Middle-Eastern Materials Science Conference, Abu Dhabi, March, 2016  
 ACS 251<sup>st</sup> National Meeting 2016, James Flack Norris Award Symposium San Diego, CA, March 2016  
 American Society for Photobiology 2016 Annual Meeting, Tampa, FL, May 2016  
 21<sup>st</sup> International Symposium on Surfactants in Solution, Jinan, China, June 2016  
 30<sup>th</sup> Chinese Chemical Congress, Dalian, China, July 2016  
 SERMACS, ACS local conference, Columbia, SC, October 2016  
 ACS Annual meeting, Symposium honoring Prof. J. Saltiel (J. Michl Award winner), March 2018  
 18<sup>th</sup> Ohio Photochemical Society Meeting, Oregon, OH, June 2018  
 Rathore Memorial Symposium, Marquette Uni, October, 2018  
 Frontiers in Chemical Sciences (FICS) – 2018, IIT-Guwahati, December 2018  
 ACS Great Lakes Local Section Conference, Chicago, IL May 2019  
 Workshop on Physical Chemistry at the Adlayer, Xian, China, June 2019  
 Trombay Symposium on Radiation & Photochemistry Mumbai, January 2020