

Curriculum Vitae

I. Personal Data:

Name: Sanjay Puri
Present Position: Professor
Address: School of Physical Sciences (SPS)
Jawaharlal Nehru University (JNU)
New Delhi – 110067, INDIA.
Date and Place of Birth: 23 November 1961, Rampur, INDIA
Nationality: Indian
Marital Status: Married

II. Educational Qualifications:

1. **Degree:** M.S. Physics from IIT Delhi, New Delhi.
Year: 1982
Thesis Title: *Theoretical Investigations of Soliton Dynamics.*
Thesis Advisor: Professor K.P. Jain
2. **Degree:** M.S. Physics from University of Illinois at Urbana-Champaign, Urbana, USA.
Year: 1983
3. **Degree:** Ph.D. Physics from University of Illinois at Urbana-Champaign, Urbana, USA.
Year: 1987
Thesis Title: *Some Problems in the Dynamics of Spatially Extended Systems.*
Thesis Advisor: Professor Y. Oono

III. Employment History:

1. December 1987 – May 1993
Assistant Professor, SPS, JNU, New Delhi.
2. June 1993 – May 2001
Associate Professor, SPS, JNU, New Delhi.
3. June 2001 – Present
Professor, SPS, JNU, New Delhi.

IV. Other Qualifications, Awards, Degrees:

1. Recipient of *Silver Medal* for topping class in IIT Delhi (1982).
2. Recipient of *INSA Young Scientist Medal* from the Indian National Science Academy, New Delhi (1993).
3. January 1994 – December 1999
Associate Member, International Centre for Theoretical Physics, Trieste, ITALY.

4. Recipient of *N. Satyamurthy Award* from the Indian Physics Association, Mumbai (1995).
5. June 2000 – December 2009 (Editor)
January 2010 – Present (Associate Editor)
Phase Transitions, Taylor and Francis, London, U.K.
6. Recipient of *B.M. Birla Science Award for 1999* from the B.M. Birla Science Centre, Hyderabad (2001).
7. Recipient of *Homi Bhabha Fellowship* from the Homi Bhabha Fellowships Council, Mumbai (2003).
8. Elected *Fellow* of the Indian Academy of Sciences, Bangalore (2006).
9. Recipient of *S.S. Bhatnagar Prize* from the Council of Scientific and Industrial Research, New Delhi (2006).
10. June 2010 – Present
Adjunct Professor, Special Centre for Nano Sciences, JNU, New Delhi.
11. Elected *Fellow* of the Indian National Science Academy, New Delhi (2012).
12. Recipient of *J.C. Bose National Fellowship* from the Department of Science and Technology, New Delhi
July 2012 – July 2017
July 2017 – July 2022
August 2022 – Present
13. Recipient of *Distinguished Alumni Award* from IIT Delhi, New Delhi (2013).
14. January 2015 – December 2018 (Sectional Editor)
January 2019 – January 2023 (Editor-in-Chief)
Proceedings of INSA, INSA, Springer, New Delhi.
15. January 2017 – Present
Adjunct Professor, Department of Physics, Doon University, Dehradun.
16. Recipient of *Visitor's Award for Research in Physical Sciences* from the President of India, New Delhi (2019).
17. Elected *Vice President* of the Indian National Science Academy, New Delhi (2022).
18. January 2024 – Present
Adjunct Professor, Department of Physics, IIT Delhi, New Delhi.

V. List of Publications:

(a) In Journals:

1. S. Puri, *Persistence of Soliton-Like Solutions of the Perturbed Sine-Gordon Equation*, Phys. Lett. A **105**, 443 (1984).
2. S. Puri, *Painleve Analysis of the Perturbed Sine-Gordon Equation*, Phys. Lett. A **107**, 359 (1985).
3. S. Puri, *Generalization of the Painleve Test*, J. Phys. A (Letters) **19**, L381 (1986).
4. S. Puri, B. Schaub and Y. Oono, *Effect of Weak Flow on a Polymer Chain with Hydrodynamic Interactions*, Phys. Lett. A **114**, 399 (1986).
5. S. Puri, B. Schaub and Y. Oono, *Self-Avoiding Walk with a Topological Obstacle*, Phys. Rev. A **34**, 541 (1986).
6. S. Puri, B. Schaub and Y. Oono, *Renormalization Group Analysis of Weak-Flow Effects on Dilute Polymer Solutions*, Phys. Rev. A **34**, 3362 (1986).
7. S. Puri and E.A. Jackson, *Effective Suppression of Period-Doubling in Two Diffusively Coupled Logistic Maps*, Pramana **27**, 717 (1986).
8. Y. Oono and S. Puri, *Computationally Efficient Modeling of Ordering of Quenched Phases*, Phys. Rev. Lett. **58**, 836 (1987).
9. S. Puri, *Dynamic Scattering Factor for Labeled Molecules of a Gaussian Chain*, Phys. Lett. A **121**, 430 (1987).
10. Y. Oono and S. Puri, *Study of Phase-Separation Dynamics by Use of Cell Dynamical Systems. I. Modeling*, Phys. Rev. A **38**, 434 (1988).
11. S. Puri and Y. Oono, *Study of Phase-Separation Dynamics by Use of Cell Dynamical Systems. II. Two-Dimensional Results*, Phys. Rev. A **38**, 1542 (1988).
12. S. Puri and Y. Oono, *Effect of Noise on Spinodal Decomposition*, J. Phys. A (Letters) **21**, L755 (1988).
13. Y. Oono and S. Puri, *Large Wave Number Features of Form Factors for Phase Transition Kinetics*, Mod. Phys. Lett. B **2**, 861 (1988).
14. S. Puri, *Phase Separation in an Off-Critical Quench*, Phys. Lett. A **134**, 205 (1988).
15. Y. Oono, S. Puri, C. Yeung and M. Bahiana, *Cell Dynamical System Study of Phase Separation Dynamics*, J. Appl. Cryst. **21**, 883 (1988).
16. S. Puri, *Asymptotic Behaviour of Spinodal Decomposition*, Phase Transitions **16**, 407 (1989).
17. S. Puri, K.R. Elder and R.C. Desai, *Approximate Asymptotic Solutions to the d-Dimensional Fisher Equation*, Phys. Lett. A **142**, 357 (1989).

18. S. Puri, *Complete Integrability and the Painleve Property*, Int. J. Mod. Phys. B **4**, 1483 (1990).
19. N. Parekh and S. Puri, *A New Numerical Scheme for the Fisher Equation*, J. Phys. A (Letters) **23**, L1085 (1990).
20. S. Puri and C. Roland, *Approximate Solutions of the Two-Component Ginzburg-Landau Equation*, Phys. Lett. A **151**, 500 (1990).
21. S. Puri, *Cell Dynamical Modelling of Vortex Dynamics*, J. Phys. A **24**, 3323 (1991).
22. S. Puri, R.C. Desai and R. Kapral, *Coupled Map Model with a Conserved Order Parameter*, Physica D **50**, 207 (1991).
23. S. Puri, *Singular Perturbation Analysis of the Fisher Equation*, Phys. Rev. A **43**, 7031 (1991).
24. S. Puri, D. Chowdhury and N. Parekh, *Nonalgebraic Domain Growth in Random Magnets: A Cell Dynamical Approach*, J. Phys. A **24**, L1087 (1991).
25. S. Puri and K. Binder, *Phenomenological Theory for the Formation of Interfaces via the Interdiffusion of Layers*, Phys. Rev. B (Rapid) **44**, 9735 (1991).
26. A.J. Bray and S. Puri, *Asymptotic Structure Factor and Power-Law Tails for Phase Ordering in Systems with Continuous Symmetry*, Phys. Rev. Lett. **67**, 2670 (1991).
27. S. Puri and K. Binder, *Surface Effects on Kinetics of Ordering*, Z. Phys. B **86**, 263 (1992).
28. S. Sengupta, Y.J. Marathe and S. Puri, *A Cell-Dynamical Simulation of Magnetic Hysteresis in the 2-d Ising System*, Phys. Rev. B **45**, 7828 (1992).
29. S. Puri, K. Binder and S. Dattagupta, *Dynamical Scaling in Anisotropic Phase Separating Systems in a Gravitational Field*, Phys. Rev. B **46**, 98 (1992).
30. S. Puri, *Asymptotic Structure Factor for the Two-Component Ginzburg-Landau Equation*, Phys. Lett. A **164**, 211 (1992).
31. S. Puri and B. Dunweg, *Temporally Linear Domain Growth in the Segregation of Binary Fluids*, Phys. Rev. A (Rapid) **45**, R6977 (1992).
32. S. Puri and N. Parekh, *Nonalgebraic Domain Growth in Binary Alloys with Quenched Disorder*, J. Phys. A **25**, 4127 (1992).
33. S. Puri and K. Binder, *Surface-Directed Spinodal Decomposition: Phenomenology and Numerical Results*, Phys. Rev. A (Rapid) **46**, R4487 (1992).

34. N. Parekh and S. Puri, *Velocity Selection in Coupled Map Lattices*, Phys. Rev. E **47**, 1415 (1993).
35. S. Puri and N. Parekh, *Non-Algebraic Domain Growth for Phase Ordering Dynamics in a Random Field*, J. Phys. A **26**, 2777 (1993).
36. A.J. Bray, S. Puri, R. Blundell and A. Somoza, *Structure Factor for Phase Ordering in Nematic Liquid Crystals*, Phys. Rev. E (Rapid) **47**, R2261 (1993).
37. S. Puri and H.L. Frisch, *Dynamics of Surface Enrichment: Phenomenology and Numerical Results above the Bulk Critical Temperature*, J. Chem. Phys. **99**, 5560 (1993).
38. S. Puri and A.J. Bray, *Asymptotic Linearisation of the Fisher Equation for a Class of Initial Conditions*, J. Phys. A **27**, 453 (1994).
39. O. Schornborn, S. Puri and R.C. Desai, *Singular Perturbation Analysis for Unstable Systems with Convective Nonlinearity*, Phys. Rev. E **49**, 3480 (1994).
40. S. Puri and K. Binder, *Surface Effects on Spinodal Decomposition in Binary Mixtures and the Interplay with Wetting Phenomena*, Phys. Rev. E **49**, 5359 (1994).
41. S. Puri and K. Binder, *Surface-Directed Spinodal Decomposition in a Thin Film Geometry: A Computer Simulation*, J. Stat. Phys. **77**, 145 (1994).
42. S. Puri, N. Parekh and S. Dattagupta, *Phase Ordering Dynamics in a Gravitational Field*, J. Stat. Phys. **77**, 839 (1994).
43. S. Puri and H.L. Frisch, *Segregation Dynamics of Binary Mixtures with Simple Chemical Reactions*, J. Phys. A **27**, 6027 (1994).
44. V. Banerjee and S. Puri, *Time-Dependent Properties for Neural Networks with Continuous Spin Variables*, Int. J. Mod. Phys. B **9**, 1159 (1995).
45. S. Puri, R.C. Desai and R. Kapral, *Collision Dynamics of Fronts in the Korteweg-de Vries-Burger Equation*, Physica D **89**, 15 (1995).
46. S. Puri, A.J. Bray and F. Rojas, *Ordering Kinetics of Conserved XY Models*, Phys. Rev. E **52**, 4699 (1995).
47. J. Filipe, A.J. Bray and S. Puri, *Phase Ordering Kinetics with External Fields and Biased Initial Conditions*, Phys. Rev. E **52**, 6082 (1995).
48. R. Ahluwalia and S. Puri, *Phase Ordering Dynamics in Binary Mixtures with Surfactants*, J. Phys. Condensed Matter **8**, 227 (1996).
49. S. Puri, *Phase Separation Kinetics in Anisotropic Systems*, Physica A **224**, 101 (1996).

50. B. Biswal, S. Puri and D. Chowdhury, *Domain Growth in Weakly Disordered Random Magnets*, Physica A **229**, 72 (1996).
51. S. Puri and H.L. Frisch, *Surface-Directed Spinodal Decomposition: Modelling and Numerical Simulations*, J. Phys. Condensed Matter **9**, 2109 (1997).
52. S. Puri, *Dynamics of Vacancy-Mediated Phase Separation*, Phys. Rev. E **55**, 1752 (1997).
53. S. Puri, R. Ahluwalia and A.J. Bray, *Dynamical Crossover in the Clock Model with a Conserved Order Parameter*, Phys. Rev. E **55**, 2345 (1997).
54. S. Puri, A.J. Bray and J.L. Lebowitz, *Segregation Dynamics in Systems with Order-Parameter Dependent Mobilities*, Phys. Rev. E **56**, 758 (1997).
55. S. Puri, K. Binder and H.L. Frisch, *Surface Effects on Spinodal Decomposition in Binary Mixtures: The Case with Long-Ranged Surface Fields*, Phys. Rev. E **56**, 6991 (1997).
56. S. Puri, *Some Recent Applications of Cell Dynamical Modelling to Phase Ordering Dynamics*, Pramana **48**, 737 (1997).
57. V.B. Lal, S. Puri and Karmeshu, *Travelling Wave Solutions in Innovation Diffusion*, Socio-Economic Planning Sciences **32**, 233 (1998).
58. S. Puri and R. Sharma, *Phase Ordering Dynamics in Binary Mixtures with Annealed Vacancies*, Phys. Rev. E **57**, 1873 (1998).
59. S. Puri and H.L. Frisch, *Phase Separation in Binary Mixtures with Chemical Reactions*, Int. J. Mod. Phys. B **12**, 1623 (1998).
60. A. Onuki and S. Puri, *Spinodal Decomposition in Gels*, Phys. Rev. E (Rapid) **59**, R1331 (1999).
61. H.L. Frisch, S. Puri and P. Nielaba, *Enrichment of Surfaces in Contact with Stable Binary Mixtures: The Case with Long-Ranged Surface Fields*, J. Chem. Phys. **110**, 10514 (1999).
62. S. Puri, *Kinetics of Phase Separation Near Surfaces*, Comp. Phys. Comm. **121-122**, 312 (1999).
63. S. Puri and H. Hayakawa, *Dynamical Behaviour of Rotated Granular Mixtures*, Physica A **270**, 115 (1999).
64. K. Binder, S. Puri and H.L. Frisch, *Surface-Directed Spinodal Decomposition versus Wetting Phenomena: Computer Simulations*, Faraday Discussions **112**, 103 (1999).

65. S. Puri and H. Hayakawa, *Segregation of Granular Mixtures in a Rotating Drum*, Physica A **290**, 218 (2001).
66. V. Banerjee and S. Puri, *Hysteresis Effects in Spin Systems with Quenched Disorder*, Phys. Rev. E **63**, 026106 (2001).
67. S. Bastea, S. Puri and J.L. Lebowitz, *Surface-Directed Spinodal Decomposition in Binary Fluid Mixtures*, Phys. Rev. E **63**, 041513 (2001).
68. S. Puri and K. Binder, *Power Laws and Crossovers in Off-Critical Surface-Directed Spinodal Decomposition*, Phys. Rev. Lett. **86**, 1797 (2001).
69. K. Tafa, S. Puri and D. Kumar, *Kinetics of Domain Growth in Systems with Local Barriers*, Phys. Rev. E **63**, 046115 (2001).
70. F. Rojas, S. Puri and A.J. Bray, *Kinetics of Phase Ordering in the $O(n)$ Model with a Conserved Order Parameter*, J. Phys. A **34**, 3985 (2001).
71. J. Sharma and S. Puri, *Kinetics of Phase Separation in Polymer-Solvent Mixtures*, Phys. Rev. E **64**, 021513 (2001).
72. S.K. Das, S. Puri and M.C. Cross, *Nonequilibrium Dynamics of the Complex Ginzburg-Landau Equation: Analytical Results*, Phys. Rev. E **64**, 046206 (2001).
73. S. Puri and H. Hayakawa, *Radial and Axial Segregation of Granular Mixtures in the Rotating-Drum Geometry*, Advances in Complex Systems **4**, 469 (2001).
74. K. Tafa, S. Puri and D. Kumar, *Kinetics of Phase Separation in Ternary Mixtures*, Phys. Rev. E **64**, 056139 (2001).
75. S. Puri, S.K. Das and M.C. Cross, *Nonequilibrium Dynamics in the Complex Ginzburg-Landau Equation*, Phys. Rev. E **64**, 056140 (2001).
76. S.K. Das and S. Puri, *Dynamics of Phase Separation in Multicomponent Mixtures*, Phys. Rev. E **65**, 026141 (2002).
77. S.K. Das and S. Puri, *Nonequilibrium Dynamics of the Complex Ginzburg-Landau Equation: Numerical Results in Two and Three Dimensions*, Phys. Rev. E **65**, 046123 (2002).
78. S. Puri and K. Binder, *Surface-Directed Phase Separation with Off-Critical Composition: Analytical and Numerical Results*, Phys. Rev. E **66**, 061602 (2002).
79. S. Puri and S.K. Das, *Phase Ordering Dynamics in the Complex Ginzburg-Landau Equation*, Recent Research Developments in Chemical Physics **3**, 627 (2002).
80. S. Puri, *Kinetics of Wetting for Phase-Separating Binary Mixtures*, Comp. Phys. Comm. **147**, 286 (2002).

81. S.K. Das and S. Puri, *Inhomogeneous Cooling in Inelastic Granular Fluids*, Physica A **318**, 55 (2003).
82. S. Ghosh, A. Pandey, S. Puri and R. Saha, *Non-Gaussian Random Matrix Ensembles with Banded Spectra*, Phys. Rev. E (Rapid) **67**, 025201 (2003).
83. S. Puri and K. Wiese, *Perturbative Linearization of Reaction-Diffusion Equations*, J. Phys. A **36**, 2043 (2003).
84. S.K. Das and S. Puri, *Pattern Formation in the Inhomogeneous Cooling State of Granular Fluids*, Europhys. Lett. **61**, 749 (2003).
85. B. Aichmayer, P. Fratzl, S. Puri and G. Saller, *Surface-Directed Spinodal Decomposition on a Macroscopic Scale in a Nitrogen and Carbon Alloyed Steel*, Phys. Rev. Lett. **91**, 015701 (2003).
86. S.K. Das and S. Puri, *Kinetics of Inhomogeneous Cooling in Granular Fluids*, Phys. Rev. E **68**, 011302 (2003).
87. S. Puri, *Kinetics of Phase Transitions*, Phase Transitions **77**, 407 (2004).
88. S. Puri, *Ordering Dynamics in Disordered Systems*, Phase Transitions **77**, 469 (2004).
89. S. Puri and D. Kumar, *Aging and Equilibrium Fluctuations for Domain Growth in Ternary Mixtures*, Phys. Rev. Lett. **93**, 025701 (2004).
90. S. Puri and D. Kumar, *Autocorrelation Functions for Phase Separation in Ternary Mixtures*, Phys. Rev. E **70**, 051501 (2004).
91. R. Paul, S. Puri and H. Rieger, *Domain Growth in Random Magnets*, Europhys. Lett. **68**, 881 (2004).
92. S. Puri, *Surface-Directed Spinodal Decomposition*, J. Phys. Condensed Matter **17**, R101 (2005).
93. V. Banerjee, S.K. Das and S. Puri, *Hysteresis and Magnetization Jumps in the $T = 0$ Dynamics of Spin Glasses*, Phys. Rev. E **71**, 026105 (2005).
94. A. Pandey, S. Puri and S. Kumar, *Long-Range Correlations in Quantum-Chaotic Spectra*, Phys. Rev. E **71**, 066210 (2005).
95. R. Paul, S. Puri and H. Rieger, *Domain Growth in Ising Systems with Quenched Disorder*, Phys. Rev. E **71**, 061109 (2005).
96. S. Puri, *Kinetics of Phase Separation in Confined Geometries*, Mod. Phys. Lett. B **19**, 919 (2005).

97. S. van Gemmert, G.T. Barkema and S. Puri, *Phase Separation Driven by Surface Diffusion: A Monte Carlo Study*, Phys. Rev. E **72**, 046131 (2005).
98. S.K. Das, S. Puri, J. Horbach and K. Binder, *Kinetics of Phase Separation in Thin Films: Simulations for the Diffusive Case*, Phys. Rev. E **72**, 061603 (2005).
99. S.K. Das, S. Puri, J. Horbach and K. Binder, *Molecular Dynamics Study of Phase Separation Kinetics in Thin Films*, Phys. Rev. Lett. **96**, 016107 (2006).
100. S.K. Das, S. Puri, J. Horbach and K. Binder, *Spinodal Decomposition in Thin Films: Molecular Dynamics Simulations of a Binary Lennard-Jones Fluid Mixture*, Phys. Rev. E **73**, 031604 (2006).
101. S.R. Ahmad and S. Puri, *Velocity Distributions in a Freely-evolving Granular Gas*, Europhys. Lett. **75**, 56 (2006).
102. J.K. Wolterink, G.T. Barkema and S. Puri, *Spinodal Decomposition in Polymer Mixtures via Surface Diffusion*, Phys. Rev. E **74**, 011804 (2006).
103. S.R. Ahmad and S. Puri, *Velocity Distributions and Aging in a Cooling Granular Gas*, Phys. Rev. E **75**, 031302 (2007).
104. S. Puri, *Interplay of Wetting and Phase Separation at Surfaces*, Physica A **384**, 100 (2007).
105. K. Binder, S.K. Das, J. Horbach and S. Puri, *Simulation of Surface-Controlled Phase Separation in Slit Pores: Diffusive Ginzburg-Landau Kinetics versus Molecular Dynamics*, Comp. Phys. Comm. **179**, 1 (2008).
106. G.P. Shrivastav, V. Banerjee and S. Puri, *Mass-Transport Models with Fragmentation and Aggregation*, Phase Transitions **83**, 140 (2010).
107. K. Binder, S. Puri, S.K. Das and J. Horbach, *Phase Separation in Confined Geometries*, J. Stat. Phys. **138**, 51 (2010).
108. E. Lippiello, A. Mukherjee, S. Puri and M. Zannetti, *Scaling Behavior of Response Functions in the Coarsening Dynamics of Disordered Ferromagnets*, Europhys. Lett. **90**, 46006 (2010).
109. R. Khanna, N.K. Agnihotri, M. Vashishtha, A. Sharma, P.K. Jaiswal and S. Puri, *Kinetics of Spinodal Phase Separation in Unstable Thin Liquid Films*, Phys. Rev. E **82**, 011601 (2010).
110. M. Vashishtha, P.K. Jaiswal, R. Khanna, S. Puri and A. Sharma, *Spinodal Phase Separation in Liquid Films with Quenched Disorder*, Phys. Chem. Chem. Phys. **12**, 12964 (2010).

111. P.K. Jaiswal, S. Puri and S.K. Das, *Kinetics of Surface Enrichment: A Molecular Dynamics Study*, J. Chem. Phys. **133**, 154901 (2010).
112. R. Krishnan, S. Puri and A.M. Jayannavar, *Reliability of Fluctuation-induced Transport in a Maxwell-Demon-Type Engine*, Eur. Phys. J. B **78**, 193 (2010).
113. S. Ahmad, S.K. Das and S. Puri, *Kinetics of Phase Separation in Fluids: A Molecular Dynamics Study*, Phys. Rev. E (Rapid) **82**, 040107 (2010).
114. G.P. Shrivastav, V. Banerjee and S. Puri, *Mass-Transport Models with Multiple-Chipping Processes*, Eur. Phys. J. B **78**, 217 (2010).
115. A. Singh, A. Mukherjee, H.M. Vermeulen, G.T. Barkema and S. Puri, *Control of Structure Formation in Phase-Separating Systems*, J. Chem. Phys. **134**, 044910 (2011).
116. F. Corberi, E. Lippiello, A. Mukherjee, S. Puri and M. Zannetti, *Growth Law and Superuniversality in the Coarsening of Disordered Ferromagnets*, J. Stat. Mech., P03016 (2011).
117. P.K. Jaiswal, M. Vashishtha, R. Khanna and S. Puri, *Amplification of Fluctuations in Unstable Systems with Disorder*, J. Phys. Chem. B **115**, 4399 (2011).
118. A.S. Mehrotra, S. Puri and D.V. Khakhar, *Gradient Monte Carlo Simulations: Hard Spheres in Spatially-Varying Temperature and Gravitational Fields*, Phys. Rev. E **83**, 061306 (2011).
119. P.K. Jaiswal, M. Vashishtha, S. Puri and R. Khanna, *Morphological Phase Separation in Unstable Thin Films: Pattern Formation and Growth*, Phys. Chem. Chem. Phys. **13**, 13598 (2011).
120. A. Singh, S. Puri and H. Mishra, *Domain Growth in Chiral Phase Transitions*, Nucl. Phys. A **864**, 176 (2011).
121. G.P. Shrivastav, S. Krishnamoorthy, V. Banerjee and S. Puri, *Scattering Properties of Paramagnetic Ground States in the Three-Dimensional Random-field Ising Model*, Europhys. Lett. **96**, 36003 (2011).
122. P.K. Jaiswal, S. Puri and S.K. Das, *Hydrodynamic Crossovers in Surface-Directed Spinodal Decomposition and Surface Enrichment*, Europhys. Lett. **97**, 16005 (2012).
123. F. Corberi, E. Lippiello, A. Mukherjee, S. Puri and M. Zannetti, *Crossover in Growth Law and Violation of Superuniversality in the Random Field Ising Model*, Phys. Rev. E **85**, 021141 (2012).
124. S. Ahmad, S.K. Das and S. Puri, *Crossover in Growth Laws for Phase-Separating Binary Fluids: Molecular Dynamics Simulations*, Phys. Rev. E **85**, 031140 (2012).

125. A.S. Mehrotra, S. Puri and D.V. Khakhar, *Field Induced Gradient Simulations: A High Throughput Method for Computing Chemical Potentials in Multicomponent Systems*, J. Chem. Phys. **136**, 134108 (2012).
126. P.K. Jaiswal, K. Binder and S. Puri, *Phase Separation of Binary Mixtures in Thin Films: Effects of an Initial Concentration Gradient across the Film*, Phys. Rev. E **85**, 041602 (2012).
127. A. Singh, S. Puri and C. Dasgupta, *Growth Kinetics of Nanoclusters in Solution*, J. Phys. Chem. B **116**, 4519 (2012).
128. P.K. Jaiswal, S. Puri and S.K. Das, *Surface-directed Spinodal Decomposition: A Molecular Dynamics Study*, Phys. Rev. E **85**, 051137 (2012).
129. P.K. Jaiswal, K. Binder and S. Puri, *Formation of Metastable Structures by Phase Separation Triggered by Initial Composition Gradients in Thin Films*, J. Chem. Phys. **137**, 064704 (2012).
130. A. Bodrova, A.K. Dubey, S. Puri and N. Brilliantov, *Intermediate Regimes in Granular Brownian Motion: Superdiffusion and Subdiffusion*, Phys. Rev. Lett. **109**, 178001 (2012).
131. A. Singh, S. Ahmad, S. Puri and S. Singh, *Ordering Dynamics of Nematic Liquid Crystals: Monte Carlo Simulations*, Europhys. Lett. **100**, 36004 (2012).
132. S. Ahmad, F. Corberi, S.K. Das, E. Lippiello, S. Puri and M. Zannetti, *Aging and Crossovers in Phase-Separating Fluid Mixtures*, Phys. Rev. E **86**, 061129 (2012).
133. A. Singh, S. Ahmad, S. Puri and S. Singh, *Reply to Comment on Ordering Dynamics of Nematic Liquid Crystals: Monte Carlo Simulations*, Europhys. Lett. **101**, 36002 (2013).
134. A. Singh, S. Puri and H. Mishra, *Domain Growth in Chiral Phase Transitions: Role of Inertial Dynamics*, Nucl. Phys. A **908**, 12 (2013).
135. A. Singh, S. Puri and H. Mishra, *Kinetics of Phase Transitions in Quark Matter*, Europhys. Lett. **102**, 52001 (2013).
136. A.K. Dubey, A. Bodrova, S. Puri and N. Brilliantov, *Velocity Distribution Function and Effective Constant Restitution Coefficient for a Granular Gas of Viscoelastic Particles*, Phys. Rev. E **87**, 062202 (2013).
137. P.K. Jaiswal, S. Puri and K. Binder, *Phase Separation in Thin Films: Effect of Temperature Gradients*, Europhys. Lett. **103**, 66003 (2013).
138. F. Corberi, E. Lippiello, A. Mukherjee, S. Puri and M. Zannetti, *Scaling in the Aging Dynamics of the Site-diluted Ising Model*, Phys. Rev. E **88**, 042129 (2013).

139. R. Krishnan, P.K. Jaiswal and S. Puri, *Phase Separation in Antisymmetric Films: A Molecular Dynamics Study*, *J. Chem. Phys.* **139**, 174705 (2013).
140. P. Das, M.K. Roy, S. Puri and S. Dattagupta, *Domain Kinetics in Ferroelectric Films*, *Europhys. Lett.* **104**, 66005 (2013).
141. A. Singh, S. Ahmad, S. Puri and S. Singh, *Ordering Kinetics in Liquid Crystals with Long-ranged Interactions*, *Eur. Phys. J. E* **37**, 2 (2014).
142. N. Katyal, V. Banerjee and S. Puri, *Fractal Signatures in Analogs of Interplanetary Dust Particles*, *J. of Quantitative Spectroscopy and Radiative Transfer* **146**, 290 (2014).
143. A. Singh, S. Puri and C. Dasgupta, *Kinetics of Phase Separation in Polymer Mixtures: A Molecular Dynamics Study*, *J. Chem. Phys.* **140**, 244906 (2014).
144. G.P. Shrivastav, M. Kumar, V. Banerjee and S. Puri, *Ground-State Morphologies in the Random-field Ising Model: Scaling Properties and Non-Porod Behavior*, *Phys. Rev. E* **90**, 032140 (2014).
145. S. Mishra, S. Puri and S. Ramaswamy, *Aspects of the Density Field in an Active Nematic*, *Phil. Trans. R. Soc. A* **372**, 20130364 (2014).
146. S. Ahmad, S. Puri and S.K. Das, *Phase Separation of Fluids in Porous Media: A Molecular Dynamics Study*, *Phys. Rev. E (Rapid)* **90**, 040302 (2014).
147. G.P. Shrivastav, V. Banerjee and S. Puri, *Non-Porod Behavior in Systems with Rough Morphologies*, *Eur. Phys. J. E* **37**, 98 (2014).
148. A. Singh, R. Krishnan and S. Puri, *Kinetics of Microphase Separation in Block Copolymers: A Molecular Dynamics Study*, *Europhys. Lett.* **109**, 26006 (2015).
149. A. Singh and S. Puri, *Phase Separation in Ternary Fluid Mixtures: A Molecular Dynamics Study*, *Soft Matter* **11**, 2213 (2015).
150. R. Krishnan and S. Puri, *Molecular Dynamics Study of Phase Separation in Fluids with Chemical Reactions*, *Phys. Rev. E* **92**, 052316 (2015).
151. A. Bupathy, V. Banerjee and S. Puri, *Random Field Ising Model on Isometric Lattices: Ground States and Non-Porod Scattering*, *Phys. Rev. E* **93**, 012104 (2016).
152. N. Katyal, R. Botet and S. Puri, *Robustness of the Fractal Regime for the Multiple-scattering Structure Factor*, *J. of Quantitative Spectroscopy and Radiative Transfer* **179**, 11 (2016).
153. P. Das, S. Puri and M. Schwartz, *Clustering and Velocity Distributions in Granular Gases Cooling by Solid Friction*, *Phys. Rev. E* **94**, 032907 (2016).

154. N. Shankaraiah, A.K. Dubey, S. Puri and S.R. Shenoy, *Dynamical Scaling for Under-damped Strain Order Parameters Quenched below First-order Phase Transitions*, Phys. Rev. B **94**, 224101 (2016).
155. A. Bupathy, R. Verma, V. Banerjee and S. Puri, *Non-Porod Scattering and Non-Integer Scaling of Resistance in Rough Films*, J. Phys. Chem. Solids **103**, 33 (2017).
156. M. Kumar, V. Banerjee and S. Puri, *Random Field Ising Model with Conserved Kinetics: Super-universality Violation, Logarithmic Growth Law and the Generalized Tomita Sum Rule*, Europhys. Lett. **117**, 10012 (2017).
157. C. Narayananam, A. Kumar, S. Puri and R. Khanna, *Coarsening Dynamics of True Morphological Phase Separation in Unstable Thin Films*, Langmuir **33**, 3341 (2017).
158. P. Das, S. Puri and M. Schwartz, *Single Particle Brownian Motion with Solid Friction*, Eur. Phys. J. E **40**, 60 (2017).
159. A. Bupathy, V. Banerjee and S. Puri, *Columnar Domains and Anisotropic Growth Laws in Dipolar Systems*, Phys. Rev. E (Rapid) **95**, 060103 (2017).
160. F. Corberi, M. Kumar, S. Puri and E. Lippiello, *Equilibrium Structure and Off-equilibrium Kinetics of a Magnet with Tunable Frustration*, Phys. Rev. E **95**, 062136 (2017).
161. M. Kumar, S. Chatterjee, R. Paul and S. Puri, *Ordering Kinetics in the Random Bond XY Model*, Phys. Rev. E **96**, 042127 (2017).
162. P. Das, T. Saha-Dasgupta and S. Puri, *Universality of Domain Growth in Antiferromagnets with Spin-Exchange Kinetics*, Eur. Phys. J. E **40**, 94 (2017).
163. M. Kumar, V. Banerjee and S. Puri, *Random-field Ising Model in a Uniform Magnetic Field: Ground States, Pinned Clusters, and Scaling Laws*, Eur. Phys. J. E **40**, 96 (2017).
164. A. Pandey, A. Kumar and S. Puri, *Finite-Range Coulomb Gas Models of Banded Random Matrices and Quantum Kicked Rotors*, Phys. Rev. E **96**, 052211 (2017).
165. A. Kumar, C. Narayananam, R. Khanna and S. Puri, *Coarsening and Pattern Formation during True Morphological Phase Separation in Unstable Thin Films under Gravity*, Phys. Rev. E **96**, 062804 (2017).
166. P. Das, S. Puri and M. Schwartz, *Granular Fluids with Solid Friction and Heating*, Granular Matter **20**, 15 (2018).
167. R. Das, S. Mishra and S. Puri, *Ordering Dynamics of Self-Propelled Particles in an Inhomogeneous Medium*, Europhys. Lett. **121**, 37002 (2018).

168. M. Kumar, R. Kumar, M. Weigel, V. Banerjee, W. Janke and S. Puri, *Approximate Ground States of the Random-field Potts Model from Graph Cuts*, Phys. Rev. E **97**, 053307 (2018).
169. A. Bupathy, V. Banerjee and S. Puri, *Disordered Dipolar Solids: Anisotropic Growth Laws and their Slowing Down*, Europhys. Lett. **122**, 36002 (2018).
170. T. Bar, S.K. Choudhary, M.A. Ashraf, K.S. Sujith, S. Puri, S. Raj and B. Bansal, *Kinetic Spinodal Instabilities in the Mott Transition in V_2O_3 : Evidence from Hysteresis Scaling and Dissipative Phase Ordering*, Phys. Rev. Lett. **121**, 045701 (2018).
171. S. Chatterjee, S. Puri and R. Paul, *Ordering Kinetics in the q -state Clock Model: Scaling Properties and Growth Laws*, Phys. Rev. E **98**, 032109 (2018).
172. F. Corberi, M. Kumar, E. Lippiello and S. Puri, *Effects of Frustration on Fluctuation-dissipation Relations*, Phys. Rev. E **99**, 012131 (2019).
173. A. Tripathi, D. Kumar and S. Puri, *Coarsening Dynamics in the Swift-Hohenberg Equation with an External Field*, Phys. Rev. E **99**, 022136 (2019).
174. P. Bhandari, V. Malik and S. Puri, *Logarithmic Coarsening in the Coulomb Glass*, Phys. Rev. E **99**, 052113 (2019).
175. C. Narayananam, A. Kumar, S. Puri and R. Khanna, *Emergence of Complex Structures by Spontaneous Cessation of Diffusion in Self-Organizing Systems*, J. Phys. Chem. C **123**, 13958 (2019).
176. A. Kumar, C. Narayananam, R. Khanna and S. Puri, *Localization in Liquid Phase Separation: Coarsening and Stable Structures*, Phys. Rev. E **100**, 062803 (2019).
177. A. Vats, V. Banerjee and S. Puri, *Slaved Coarsening in Ferronematics*, Europhys. Lett. **128**, 66001 (2019).
178. N. Katyal, S. Dey, D. Das and S. Puri, *Coarsening Dynamics in the Vicsek Model of Active Matter*, Eur. Phys. J. E **43**, 10 (2020).
179. A. Pandey, A. Kumar and S. Puri, *Finite-Range Coulomb Gas Models I: Some Analytical Results*, Phys. Rev. E **101**, 022217 (2020).
180. A. Kumar, A. Pandey and S. Puri, *Finite-Range Coulomb Gas Models II: Applications to Quantum Kicked Rotors and Banded Random Matrices*, Phys. Rev. E **101**, 022218 (2020).
181. S. Chatterjee, S. Sutradhar, S. Puri and R. Paul, *Ordering Kinetics in a q -state Random-bond Clock Model: Role of Vortices and Interfaces*, Phys. Rev. E **101**, 032128 (2020).

182. A. Kumar, C. Narayananam, R. Khanna and S. Puri, *Slow Coarsening in Unstable Liquid Films under Gravity on a Disordered Substrate*, Phys. Rev. E **101**, 042801 (2020).
183. M. Kumar, F. Corberi, E. Lippiello and S. Puri, *Growth Kinetics and Aging Phenomena in a Frustrated System*, Eur. Phys. J. B **93**, 88 (2020).
184. P. Das, P.K. Jaiswal and S. Puri, *Surface-Directed Spinodal Decomposition on Chemically Patterned Substrates*, Phys. Rev. E **102**, 012803 (2020).
185. P. Das, P.K. Jaiswal and S. Puri, *Surface-directed Spinodal Decomposition on Morphologically Patterned Substrates*, Phys. Rev. E **102**, 032801 (2020).
186. P. Das, S. Puri and M. Schwartz, *Intruder Dynamics in a Frictional Granular Fluid: A Molecular Dynamics Study*, Phys. Rev. E **102**, 042905 (2020).
187. N. Birdi, V. Banerjee and S. Puri, *Ordering Kinetics of Canted and Uniform States in Nematic Liquid Crystals*, Europhys. Lett. **132**, 66002 (2020).
188. R. Agrawal, F. Corberi, E. Lippiello, P. Politi and S. Puri, *Kinetics of the Two-dimensional Long-range Ising Model at Low Temperatures*, Phys. Rev. E **103**, 012108 (2021).
189. A.K. Singh, A. Chauhan, S. Puri and A. Singh, *Photo-induced Bond Breaking during Phase Separation Kinetics of Block Copolymer Melts: A Dissipative Particle Dynamics Study*, Soft Matter **17**, 1802 (2021).
190. A. Vats, V. Banerjee and S. Puri, *Domain Growth in Ferronematics: Slaved Coarsening, Emergent Morphologies and Growth Laws*, Soft Matter **17**, 2659 (2021).
191. S. Pattanayak, S. Mishra and S. Puri, *Ordering Kinetics in the Active Model B*, Phys. Rev. E **104**, 014606 (2021).
192. S. Kumari, S. Puri and V. Banerjee, *Dipolar Ising Model: Phases, Growth Laws and Universality*, Phys. Rev. E **104**, 024126 (2021).
193. S. Pattanayak, S. Mishra and S. Puri, *Domain Growth in the Active Model B: Critical and Off-critical Composition*, Soft Materials **19**, 286 (2021).
194. R. Agrawal, M. Kumar and S. Puri, *Domain Growth and Aging in the Random Field XY model: A Monte Carlo Study*, Phys. Rev. E **104**, 044123 (2021).
195. R. Agrawal, A. Pandey and S. Puri, *Enhancement in Breaking of Time-reversal Invariance in the Quantum Kicked Rotor*, Phys. Rev. E **104**, 064202 (2021).
196. N. Birdi, T. Underwood, N. Wilding, S. Puri and V. Banerjee, *Equilibrium Phases and Domain Growth Kinetics of Calamitic Liquid Crystals*, Phys. Rev. E **105**, 024706 (2022).

197. R. Agrawal, F. Corberi, F. Insalata and S. Puri, *Asymptotic States of Ising Ferromagnets with Long-range Interactions*, Phys. Rev. E **105**, 034131 (2022).
198. A. Vats, S. Puri and V. Banerjee, *Emergence of Biaxiality in Nematic Liquid Crystals with Magnetic Inclusions: Some Theoretical Insights*, Phys. Rev. E **106**, 044701 (2022).
199. S.S.H. Zaidi, P.K. Jaiswal, M. Priya and S. Puri, *Universal Fast Mode Regime in Wetting Kinetics*, Phys. Rev. E (Letters) **106**, L052801 (2022).
200. M. Kumar, V. Banerjee, S. Puri and M. Weigel, *Critical Behavior of the Three-state Random-field Potts Model in Three Dimensions*, Phys. Rev. Research (Letters) **4**, L042041 (2022).
201. R. Singh and S. Puri, *Strain Fields and Critical Phenomena in Manganites I: Spin-Lattice Hamiltonians*, J. Stat. Mech. 033205 (2023).
202. R. Singh and S. Puri, *Strain Fields and Critical Phenomena in Manganites II: Spin-Lattice-Energy Hamiltonians*, J. Stat. Mech. 033206 (2023).
203. M.K. Verma, R. Agrawal, P.K. Yadav and S. Puri, *Nonlinear Energy Dissipation and Transfers in Coarsening Systems*, Phys. Rev. E **107**, 034207 (2023).
204. A. Vats, P.K. Yadav, V. Banerjee and S. Puri, *Symbiotic Dynamics in Living Liquid Crystals*, Phys. Rev. E **108**, 024701 (2023).
205. D. Gogoi, A. Chauhan, S. Puri and A. Singh, *Segregation of Fluids with Polymer Additives at Domain Interfaces: A Dissipative Particle Dynamics Study*, Soft Matter **19**, 6433 (2023).
206. R. Agrawal, F. Corberi, E. Lippiello and S. Puri, *Phase Ordering Dynamics of the Random Field Long-range Ising Model in One Dimension*, Phys. Rev. E **108**, 044131 (2023).
207. A. Chauhan, D. Gogoi, S. Puri and A. Singh, *Effect of Amphiphilic Polymers on Phase Separating Binary Mixtures: A DPD Simulation Study*, J. Chem. Phys. **159**, 204901 (2023).
208. P. Bhandari, V. Malik and S. Puri, *Phase Ordering Kinetics of the Asymmetric Coulomb Glass Model*, to appear in Physical Review E.

(b) In Books and Proceedings of Conferences and Workshops:

209. S. Puri, *Numerical Simulation of Phase Ordering Dynamics*, in *Proc. of DAE Symposium on Solid State Physics*, DAE Press, Bombay (1989).
210. S. Puri, *Complete Integrability and the Painleve Property*, in *Proc. of Workshop on Chaos and Nonlinear Systems*, edited by M.H. Engineer (1989).

211. S. Puri, *A New Numerical Scheme for Reaction-Diffusion Equations*, in *Proc. of Workshop on Chaos and Nonlinear Systems*, edited by M.H. Engineer (1989).
212. S. Puri, *Painleve Property in Hamiltonian and Non-Hamiltonian Systems*, in *Proc. of Conference on Symmetries and Singularity Structures*, edited by M. Lakshmanan and M. Daniel, pp. 92-103, Springer-Verlag, Berlin (1990).
213. S. Puri, R. Kapral and R.C. Desai, *Conserved Order Parameter Dynamics and Chaos in One Dimensional Discrete Model*, in *Proc. of Workshop on Computational Physics and Cellular Automata*, edited by A. Pires, D.P. Landau and H. Herrmann, pp. 187-195, World Scientific, Singapore (1990).
214. S. Puri, *Renormalization Group Analysis of the Dynamics of Dilute Polymer Solutions*, in *Proc. of Workshop on Polymer Physics*, edited by S.M. Bhattacharjee, pp. 97-126, World Scientific, Singapore (1992).
215. K. Binder, S. Puri and S. Dattagupta, *Anisotropic Segregation in a Gravitational Field*, in *From Phase Transitions to Chaos*, edited by G. Gyorgyi, I. Kondor, L. Sasvari and T. Tel, World Scientific, Singapore (1992).
216. S. Puri, *Some Recent Advances in Our Understanding of Phase Ordering Dynamics*, in *Proc. of Discussion Meeting on Dynamical Aspects of Fluid Phases*, edited by S. Dattagupta, S. Puri and V.K. Wadhawan, *Phase Transitions* **50**, 83 (1994).
217. H.L. Frisch and S. Puri, *Dynamics of Surface Enrichment in Binary Mixtures*, in *Proc. of Discussion Meeting on Dynamical Aspects of Fluid Phases*, edited by S. Dattagupta, S. Puri and V.K. Wadhawan, *Phase Transitions* **50**, 105 (1994).
218. N. Parekh, S. Puri and D. Chowdhury, *Phase Ordering Dynamics in Disordered Systems*, in *Proc. of Conference on Computational Aspects in Chaos and Nonlinear Dynamics*, edited by G. Ambika and V. Nandakumaran, pp. 163-173, Wiley-Eastern, New Delhi (1994).
219. S. Puri, *Singular Perturbation Approach to Phase Ordering Dynamics*, in *Proc. of International Colloquium on Modern Quantum Field Theory II*, edited by S.R. Das, G. Mandal, S. Mukhi and S.R. Wadia, pp. 159-169, World Scientific, Singapore (1995).
220. S. Puri, *Numerical Methods in Statistical Physics*, in *Proc. of Winter School on Models and Techniques of Statistical Physics*, edited by S.M. Bhattacharjee, pp. 126-143, Narosa, Delhi (1997).
221. S. Puri, *Cell Dynamical System Models of Phase Ordering Dynamics*, in *Proc. of Discussion Meeting on Nonlinearities in Complex Systems*, edited by S. Puri and S. Dattagupta, pp. 137-154, Narosa, Delhi (1997).

222. S. Puri, *Dynamics of Phase Separation in Binary Alloys with Vacancies*, in *Proc. of Royal Society-Unilever Indo-UK Forum Meeting on Structure and Dynamics of Materials in the Mesoscopic Domain*, edited by M. Lal, R.A. Mashelkar, B.D. Kulkarni and V.M. Naik, pp. 82-93, Imperial College Press, London (1999).
223. S. Puri, *Kinetics of Phase Ordering*, in *Special Issue of Current Science on Nonequilibrium Statistical Systems*, edited by M. Barma, *Current Science* **77**, 376 (1999).
224. J. Sharma and S. Puri, *Effects of Thermal Fluctuations on Phase Separation in Polymer-Solvent Mixtures*, in *Proc. of Conference on Slow Dynamics and Freezing in Condensed Matter Systems*, edited by S. Puri, S.P. Das and V.K. Wadhawan, *Phase Transitions* **75**, 401 (2002).
225. K. Tafa, S. Puri and D. Kumar, *Autocorrelation Function for Domain Growth with Local Barriers*, in *Proc. of Conference on Slow Dynamics and Freezing in Condensed Matter Systems*, edited by S. Puri, S.P. Das and V.K. Wadhawan, *Phase Transitions* **75**, 413 (2002).
226. S. Puri and K. Binder, *Wetting and Phase Separation at Surfaces*, in *Proc. of STATPHYS 22, 22nd International Conference on Statistical Physics of the IUPAP*, edited by S. Dattagupta, H.R. Krishnamurthy, R. Pandit, T.V. Ramakrishnan and D. Sen, *Pramana* **64**, 881 (2005).
227. S. Puri and S.R. Ahmad, *Velocity Distributions in a Cooling Granular Gas*, in *Proc. of International Conference on Statistical Mechanics of Plasticity and Related Instabilities*, edited by S. Dattagupta, A. El-Azab, S.B. Krupanidhi, S. Noronha, S.A. Shivashankar and M. Zaiser, PoS(SMPRI2005)049 (2006).
228. K. Binder, S.K. Das, J. Horbach and S. Puri, *Molecular Dynamics Simulations of Surface-Controlled Phase Separation of Binary Fluid Mixtures Confined in Slit Pores*, in *Proc. of International Workshop on Dynamics in Confinement: CONFIT-2006*, edited by M. Koza, B. Frick and R. Zorn, *Eur. Phys. J. Special Topics* **141**, 235 (2007).
229. S. Puri, *Kinetics of Phase Separation and Wetting at Surfaces*, in *Proc. of Recent Developments in Nonlinear Dynamics*, edited by M. Daniel and S. Rajasekar, pp. 183-190, Narosa, New Delhi (2009).
230. S. Puri, *Kinetics of Phase Transitions*, in *Kinetics of Phase Transitions*, edited by S. Puri and V.K. Wadhawan, pp. 1-61, CRC Press (Taylor and Francis), Boca Raton (2009).
231. S. Puri, *Phase Separation and Wetting at Surfaces*, in *Proc. of Synthesis and Characterization of Smart Materials*, edited by A. Agarwal, R. Kumar and S. Saxena, pp. 24-33, Bareilly (2009).

232. S. Puri, *Kinetics of Phase Transitions: Numerical Techniques and Simulations*, in *Proc. of SERC School on Computational Statistical Physics*, edited by S.B. Santra and P. Ray, pp. 123-160, Hindustan Book Agency, New Delhi (2011).
233. A. Singh, S. Puri and H. Mishra, *Kinetics of Chiral Phase Transitions in Quark Matter*, in *Proc. of Gribov-80 Memorial Workshop on Quantum Chromodynamics and Beyond*, edited by Y.L. Dokshitzer, P. Levai and J. Nyiri, pp. 527-540, World Scientific, Singapore (2011).
234. A. Singh, S. Puri and H. Mishra, *Domain Growth and Ordering Kinetics in Dense Quark Matter*, in *Proc. of 6th Workshop on Critical Point and Onset of Deconfinement*, edited by D. Blaschke, A. Friesen, A. Khvorostukhin and A. Sorin, *Yadernaya Fizika* **75**, 739 (2012).
235. S. Puri, P.K. Jaiswal and S.K. Das, *Surface-Directed Spinodal Decomposition and Enrichment in Fluid Mixtures: Molecular Dynamics Simulations*, in *Proc. of 7th National Conference on Nonlinear Systems and Dynamics*, edited by G. Ambika and S. Banerjee, *Eur. Phys. J. Special Topics* **222**, 961 (2013).
236. S. Puri, P.K. Jaiswal and S.K. Das, *Surface-Directed Phase Separation and Surface Enrichment in Fluid Mixtures*, in *Simulation and Characterization of the Advanced Materials*, edited by S. Kumar, pp. 27-46, Research Signpost, Trivandrum (2013).
237. A. Singh, S. Puri and H. Mishra, *Kinetics of Chiral Transitions and Domain Growth in Quark Matter*, in *Proc. of 8th Workshop on Critical Point and Onset of Deconfinement*, PoS(CPOD2013)022.
238. N. Shankaraiah, S. Puri and S.R. Shenoy, *Underdamped Strain Dynamics of a Martensitic Model with Power-Law Interactions*, in *Proc. of DAE-SSPS 2013*, AIP Conf. Proc. **1591**, 145 (2014).
239. V. Banerjee, S. Puri and G.P. Shrivastav, *Fractal Domain Morphologies: Signatures and Implications*, in *Special Issue on 125th Birth Anniversary of Sir C.V. Raman*, Ind. J. Phys. **88**, 1005 (2014).
240. P. Das, T. Saha-Dasgupta and S. Puri, *Kinetics of Order-Disorder Transitions in Binary Mixtures: A Monte Carlo Study*, in *Proc. of CCP2015*, J. Phys.: Conf. Series **759**, 012010 (2016).
241. A. Bupathy, M. Kumar, V. Banerjee and S. Puri, *Random Field Ising Models: Fractal Interfaces and their Implications*, in *Proc. of CCP2016*, J. Phys.: Conf. Series **905**, 012025 (2017).
242. P. Das, M. Schwartz and S. Puri, *Frictional Cooling of Granular Gases: A Molecular Dynamics Study*, in *Proc. of CCP2016*, J. Phys.: Conf. Series **905**, 012035 (2017).

243. A. Pandey, A. Kumar and S. Puri, *Quantum Chaotic Systems and Random Matrix Theory*, in *21st Century Nanoscience: A Handbook*, Vol. 1, edited by K.D. Sattler, Chapter 12, CRC Press (Taylor and Francis), Boca Raton (2020).

(c) Books:

244. S. Puri and S. Dattagupta (eds.), *Nonlinearities in Complex Systems*, Narosa, Delhi (1997).
245. S. Dattagupta and S. Puri, *Dissipative Phenomena in Condensed Matter: Some Applications*, Springer Series in Materials Science **71**, Springer-Verlag, Heidelberg (2004).
246. S. Puri and V.K. Wadhawan (eds.), *Kinetics of Phase Transitions*, CRC Press (Taylor and Francis), Boca Raton (2009).

(d) Edited Journal Issues:

247. Editor (with S. Dattagupta and V.K. Wadhawan), *Proc. of Discussion Meeting on Dynamical Aspects of Fluid Phases*, Phase Transitions **50** (1994).
248. Editor (with S. Dattagupta and D. Dhar), *Proc. of Satellite Meeting to STATPHYS-19 on Dynamics of Complex Systems*, Physica A **224** (1996).
249. Editor (with D. Kumar), *Proc. of International Symposium on Quantum Many-Body Physics*, Int. J. Mod. Phys. B **14** (2000).
250. Editor (with S.P. Das and V.K. Wadhawan), *Proc. of Conference on Slow Dynamics and Freezing in Condensed Matter Systems*, Phase Transitions **75** (2002).
251. Editor (with V.K. Wadhawan), *Kinetics of Phase Transitions: Mesoscale Structure, Pattern Formation and Disordered Systems*, Phase Transitions **77** (2004); and *Nonequilibrium Statistical Physics: Far-from-Equilibrium Systems, Slow Dynamics, Granular Materials*, Phase Transitions **77** (2004).

(e) Preprints:

252. P. Das, A.K. Dubey and S. Puri, *Pattern Dynamics of Density and Velocity Fields in Segregation of Fluid Mixtures*.
253. A. Vats, V. Banerjee and S. Puri, *Surface-directed Dynamics in Living Liquid Crystals*.

VI. Research Supervision:

(a) Post-Doctoral Fellows:

1. Devesh Srivastava
December 1999 - December 2001
2. Raishma Krishnan
July 2009 - April 2016

3. Anupam Mukherjee
September 2010 - May 2012
4. Awadhesh Kumar Dubey
May 2012 - March 2013
5. Naddi Shankaraiah
September 2012 - July 2016
6. Awaneesh Kumar Singh
September 2013 - November 2014
7. Arindam Jana
August 2015 - December 2016
8. Subha Singh
September 2015 - July 2017
9. Rohit Singh
June 2019 - August 2022
10. Shikha Kumari
September 2020 - July 2022

(b) Ph.D. Fellows:

1. Nita Parekh
December 1988 - February 1994
Thesis Title: *Pattern Formation in Spatially Extended Systems.*
2. Rajeev Ahluwalia
December 1992 - October 1997
Thesis Title: *Some Problems in the Kinetics of Phase Transitions.*
3. Radhika Sharma
December 1992 - January 1998
Thesis Title: *Kinetic and Thermodynamic Properties of Three-Phase Mixtures.*
4. Jitendra Sharma (jointly with H. Bohidar, SPS)
July 1995 - March 2001
Thesis Title: *Static and Dynamical Properties of Cross-Linked Networks and Gels.*
5. Kumela Tafa Kolobo (jointly with D. Kumar, SPS)
August 1996 - May 2001
Thesis Title: *Relaxation Kinetics of Lattice Models with Local Constraints.*

6. Subir Kumar Das (jointly with R. Mehrotra, NPL, New Delhi)
August 1996 - December 2001
Thesis Title: *Pattern Formation in Nonequilibrium Systems.*
7. Syed Rashid Ahmad
August 2001 - July 2007
Thesis Title: *Dynamical Properties of Granular Materials.*
8. Anupam Mukherjee
August 2003 - July 2009
Thesis Title: *Clustering and Aggregation in Far-from-equilibrium Systems.*
9. Awaneesh Kumar Singh
August 2004 - July 2010
Thesis Title: *Kinetics of Phase Transitions: From Quark Matter to Polymers.*
10. Prabhat Kumar Jaiswal
August 2004 - July 2010
Thesis Title: *Fluid Mixtures at Surfaces: Kinetics of Enrichment, Spinodal Decomposition, and Dewetting.*
11. Anuja Seth Mehrotra (jointly with D. Khakhar, IITB, Mumbai)
August 2004 - April 2011
Thesis Title: *Density and Temperature Inhomogeneities in Granular Matter.*
12. Gaurav P. Shrivastav (jointly with V. Banerjee, IITD, Delhi)
August 2006 - July 2012
Thesis Title: *Aggregates and Interfaces in Nonequilibrium Systems.*
13. Awadhesh Kumar Dubey
August 2006 - July 2012
Thesis Title: *Clustering and Aggregation in Far-from-equilibrium Systems.*
14. Shaista Ahmad (jointly with S.K. Das, JNCASR, Bangalore)
August 2006 - July 2012
Thesis Title: *Phase Transition Dynamics: From Fluids to Liquid Crystals.*
15. Nisha Katyal (jointly with R. Gupta, IUCAA, Pune)
August 2012 - December 2015
Thesis Title: *Irregular and Rough Morphologies: From Astrophysics to Active Matter.*
16. Prasenjit Das
July 2011 - May 2017
Thesis Title: *Kinetics of Clustering and Growth in Nonequilibrium Systems.*

17. Manoj Kumar (jointly with V. Banerjee, IITD, Delhi)
July 2011 - July 2017
Thesis Title: *Disordered Spin Systems: Ground States and Ordering Kinetics.*
18. Avanish Kumar (jointly with A. Pandey, SPS)
July 2012 - July 2018
Thesis Title: *Some Problems in Dewetting Kinetics and Random Matrix Theory.*
19. Ramgopal Agrawal (jointly with A. Pandey, SPS)
July 2015 - September 2021
Thesis Title: *Kinetics of Complex Spin Systems and Quantum Kicked Rotors.*
20. Aditya (jointly with V. Banerjee, IITD, Delhi)
July 2017 - September 2023
Thesis Title: *Liquid Crystals with Inclusions: Ferronematics and Living Liquid Crystals.*

VII. Projects Undertaken:

1. **Funding Agency:** Department of Science and Technology, INDIA.
Project Title: *Phase Ordering Dynamics in Systems with Long-Ranged Interactions.*
Duration: July 1995 - July 1997
2. **Funding Agency:** Indian National Science Academy, INDIA.
Project Title: *Phase Ordering Kinetics in Multi-Component Systems.*
Duration: May 1996 - April 1999
3. **Funding Agency:** Department of Science and Technology, INDIA.
Project Title: *Pattern Formation in Granular Materials.*
Duration: January 2006 - January 2009
4. **Funding Agency:** Department of Science and Technology, INDIA.
Project Title: *Multi-Scale Modeling of Domain Growth in Fluid Mixtures.*
Duration: March 2010 - March 2013
5. **Funding Agency:** University Grants Commission, INDIA.
Project Title: *Indo-Israel Project – Towards a Continuum Description of Dense Granular Flow.*
Duration: November 2014 - September 2018
6. **Funding Agency:** Jawaharlal Nehru University UPE-II, INDIA.
Project Title: *Wetting and Phase Separation in Nano-Systems on Patterned Substrates.*
Duration: January 2015 - December 2017

VIII. Administrative Experience:

1. Member, *DST Expert Panel on Fast-track Scheme for Young Scientists in Physical and Mathematical Sciences.*
June 2005 – December 2008
January 2009 – June 2012
2. Dean, SPS, JNU.
December 2005 – December 2007
3. Member, *Scientific Council of Indo-French Centre for the Promotion of Advanced Research.*
October 2009 – October 2013
4. Chairperson, Special Centre for Nano Sciences, JNU.
June 2010 – June 2012
5. Member, *IUSTR Expert Panel for Science, Medicine and Engineering.*
May 2012 – July 2015
6. Member, *SERB Program Advisory Committee on Condensed Matter Physics and Materials Sciences.*
June 2012 – May 2015
7. Member, *CSIR Committee for Physical Sciences Research.*
August 2011 – December 2014
January 2015 – January 2018
8. Member, *DST International Bilateral Cooperation Division Program Advisory Committee on Physics, Astrophysics and Lasers.*
May 2012 – April 2015
February 2020 – August 2022
August 2022 – Present
9. Member, *Governing Council of Indian Association for the Cultivation of Science, Kolkata.*
June 2013 – June 2016
10. Member, *DST FIST Committee for Physical Sciences.*
June 2013 – June 2016
September 2020 – May 2022
May 2022 – Present
11. Member, *SERB Empowered Committee.*
June 2013 – June 2016
12. Member and Convener (for 2017), *INSA Sectional Committee for Physics.*
January 2015 – December 2017

13. Member, *CSIR Committee for Emeritus Scientist and One-time Grant*.
January 2015 – January 2018
August 2018 – August 2021
October 2023 – Present
14. Chairman, *Sectional Committee for Physical Sciences for GIAN Initiative of MHRD*.
September 2015 – March 2020
September 2023 – Present
15. Member, *DST Internal Committee on Scientific Ethics and Plagiarism*.
January 2019 – January 2022
16. Member, *DST FIST Committee for Post-graduate Colleges*.
July 2019 – July 2022
17. Member, *CSIR Committee for Travel Grant and Symposia Management*.
July 2019 – Present
18. Member, *SERB Program Advisory Committee on Scientific and Useful Profound Research Advancement*.
August 2019 – July 2022
July 2022 – Present
19. Member, *SERB Expert Committee on Mathematical Research Impact-centric Support Scheme*.
October 2019 – October 2022
20. Chairman, *SERB Committee for Project Completion Report Evaluation for Physical Sciences*.
January 2020 – Present
21. Member, *DST Programme Management Board for PURSE Program*.
July 2020 – September 2022
September 2022 – Present
22. Member, *SERB Selection Committee for VAJRA Faculty Scheme*.
March 2021 – Present
23. Chairman, *SERB Programme Advisory Committee on Physics-I (Condensed Matter Physics and Materials Science)*.
July 2021 – Present
24. Member, *SERB Expert Committee on SERB Research Scientists Scheme*.
February 2022 – Present
25. Member, *CSIR ASPIRE Inter/Trans Disciplinary Sciences Research Committee*.
October 2023 – Present

IX. Teaching Experience (Courses Taught):

Taught approximately 60 courses on Equilibrium and Nonequilibrium Statistical Physics, Phase Transitions and Critical Phenomena, Stochastic Phenomena, Mathematical Physics, Nonlinear Dynamics, Classical Mechanics, Quantum Mechanics, Subatomic Physics, Atoms and Molecules.

X. Lectures and Seminars Delivered:

Invited Lectures at Conferences and Symposia: ~ 190
Seminars at Universities and Institutes: ~ 145

XI. Organisation of Conferences, Workshops and Symposia:

1. Organiser, *One-Day Interdisciplinary Meeting* in SPS, JNU, New Delhi (October 1988).
2. Organiser, *One-Day Interdisciplinary Meeting* in SPS, JNU, New Delhi (6 March 1992).
3. Secretary, Discussion Meeting on *Dynamical Aspects of Fluid Phases* in SPS, JNU, New Delhi (4-8 January 1993).
4. Secretary, Satellite Meeting to STATPHYS-19 on *Dynamics of Complex Systems* in S.N. Bose National Centre for Basic Sciences, Calcutta (6-11 August 1995).
5. Co-Organiser, Study Group Meeting on *Nonlinearities in Complex Systems* in Indian Institute of Advanced Studies, Shimla (14-15 August 1995).
6. Co-Organiser, Indo-Israeli Symposium on *Current Issues of Condensed Matter and Materials Physics* in Indian National Science Academy, New Delhi (22-25 January 1999).
7. Co-Organiser, Symposium on *Quantum Many-Body Physics* in SPS, JNU, New Delhi (5-7 March 1999).
8. Convener, Discussion Meeting on *Slow Dynamics and Freezing in Condensed Matter Systems* in SPS, JNU, New Delhi (9-10 March 2000).
9. Convener, Satellite Meeting to STATPHYS-22 on *Pattern Formation in Nonequilibrium Systems* in S.N. Bose National Centre for Basic Sciences, Kolkata (11-13 July 2004).
10. Convener, Conference on *Nonequilibrium Phenomena in Condensed Matter* in Indian National Science Academy, New Delhi (21-23 February 2008).
11. Convener, *JNU Science Festival 2008* in School of Life Sciences, JNU, New Delhi (29 February - 1 March 2008).

12. Co-Organiser, *Third Indian National Frontiers of Science Symposium* in Indian National Science Academy, New Delhi (21-22 January 2009).
13. Convener, *JNU Science Festival 2009* in School of Life Sciences, JNU, New Delhi (27-28 February 2009).
14. Co-Organiser, *Third Indo-American Frontiers of Science Symposium* in Jaypee Palace, Agra (2-4 March 2009).
15. Convener, *JNU Science Festival 2010* in School of Life Sciences, JNU, New Delhi (22-23 February 2010).
16. Co-Organiser, *Symposium on Pattern Formation and Dynamics of Complex Fluids* in 7th National Conference on Nonlinear Systems and Dynamics, held in IISER, Pune (12 July 2012).
17. Convener, *INSA Young Scientist Conclave* in Indian National Science Academy, New Delhi (20-21 November 2012).
18. Co-Organiser, *Mathematics, Mechanics and Physics for Tomorrow's Materials* in International Centre for Mathematical Sciences, Edinburgh, U.K. (26-30 October 2015).
