

Curriculum Vitae

Personal Information

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Designation: Associate Professor

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Educational Qualification

Doctor of Philosophy (Nuclear Engineering) 2008
University of Illinois at Urbana-Champaign, USA.

Master of Technology (Nuclear Engg. & Tech,) 2000
Indian Institute of Technology Kanpur, India.

Bachelor of Engineering (Electrical Engineering) 1998
Maulana Azad National Institute of Technology, India

Work Experience

1. Associate Professor Mar. 2015-present
IIT Bombay, India
2. Assistant Professor Oct 2009-Mar 2015
IIT Bombay, India
3. Post Doctoral Research Associate Mar 2008-Sep 2009
Idaho National Lab USA
4. Project Associate Jul 2000-Aug 2001
IIT Kanpur

Awards and Honors

1. **Bhaskara Advanced Solar Energy Fellowship** 2014
Indo-US Science and Technology Forum
2. **Young Faculty Award** 2009
Indian Institute of Technology Bombay, Powai, Mumbai, India

Research Interests

1. Advanced Numerical Methods for neutron diffusion and fluid flow
2. Nuclear reactor thermal hydraulics and safety
3. Analytical solution of multilayer heat conduction problems
4. Solar Thermal Heat Transfer

List of Publications

REFEREED JOURNALS

1. Rahman, M. E. and Singh, S., "Flow excursions and pressure drop oscillations in boiling two-phase channel", International Journal of Heat and Mass Transfer, (Accepted), 2019
2. Saxena, A., Kishor, V., Srivastava, A., and Singh, S., "Whole field measurements to identify the critical Rayleigh number for the onset of natural convection in top open cavity", Experimental Heat Transfer, (Accepted), 2019.
3. Chakraborty, A. and Singh, S., An improved reduced order model for nonlinear stability analysis of spatial xenon oscillations, Progress in Nuclear Energy, Vol. 116, pp. 62-75, 2019.
4. Narayan, S., Singh, T., Singh, S., and Srivastava, A., "Experiments on the effects of varying subcooled conditions on the dynamics of single vapor bubble and heat transfer rates in nucleate pool boiling regime", International Journal of Heat and Mass Transfer, Vol. 134, pp. 85-100, 2019.
5. Biswas, P., Singh, S. and Bindra, H., "A Closed Form Solution of Dual-Phase Lag Heat Conduction Problem with Time Periodic Boundary Conditions", Journal of Heat Transfer, Vol. 141 (3), p. 031302, 2019.
6. Paul, D., Singh, S., Mishra, S., "Impact of system pressure on the characteristics of stability boundary for a single-channel flow boiling system", Nonlinear Dynamics, pp. 1-10, 2019.
7. Singh, Munendra P., Paul, S. & Singh, S., "Development of a novel nodalized reduced order model for stability analysis of supercritical fluid in a heated channel", International Journal of Thermal Sciences, Vol. 137, pp. 650-664, 2019.
8. Biswas, P., Singh, S. and Bindra, H., "Homogenization of time dependent boundary conditions for multi-layer heat conduction problem in cylindrical polar coordinates", International Journal of Heat and Mass Transfer, Vol. 129, pp. 721-734, 2019.
9. Saxena, A., Singh, S. and Srivastava, A., "Flow and heat transfer characteristics of an open cubic cavity with different inclinations", Physics of Fluids, Vol. 30(8), p. 087101, 2018.
10. Emadur Rahman, M. and Singh, S., "Non-linear stability analysis of pressure drop oscillations in a heated channel", Chemical Engineering Science, Vol. 192, pp. 176-186, 2018.
11. Kishor, V., Singh, S. and Srivastava, A., "Investigation of convective heat transfer phenomena in differentially-heated vertical closed cavity: Whole field experiments and numerical simulations", Experimental Thermal and Fluid Science, Vol. 99, pp. 71-84, 2018.
12. Majumdar, R., Singh, S. and Saha, S.K. , "Quasi-steady state moving boundary reduced order model of two-phase flow for ORC refrigerant in solar-thermal heat exchanger", Renewable Energy, Vol. 126, pp. 830-843, 2018.
13. Majumdar, R., Saha, S.K. and Singh, S., "Evaluation of transient characteristics of medium temperature solar thermal systems utilizing thermal stratification", Applied Energy, Vol. 224, pp. 69-85, 2018.

14. Garg, H., Pandey, B., Saha, S.K., Singh, S. and Banerjee, R., "Design and analysis of PCM based radiant heat exchanger for thermal management of buildings", *Energy and Buildings*, Vol. 169, pp. 84-96, 2018.
15. Saxena, A., Kishor, V., Singh, S. and Srivastava, A., "Experimental and numerical study on the onset of natural convection in a cavity open at the top", *Physics of Fluids*, Vol. 30(5), pp. 057102, 2018.
16. Narayan, S., Srivastava, A. and Singh, S., "Rainbow schlieren-based investigation of heat transfer mechanisms during isolated nucleate pool boiling phenomenon: Effect of superheat levels", *International Journal of Heat and Mass Transfer*, Vol. 120, pp. 127-143, 2018.
17. Biswas, P. and Singh, S., "Orthogonal eigenfunction expansion method for one-dimensional dual-phase lag heat conduction problem with time-dependent boundary conditions", *Journal of Heat Transfer*, Vol. 140, p. 034501, 2018.
18. Chakraborty, A., Singh, S. & Fernando, M.P.S., "A novel approach for bifurcation analysis of out of phase xenon oscillations using multipoint reactor kinetics", *Nuclear Engineering and Design*, Vol. 328, pp. 333-344, 2018.
19. Solanki, R.B., Kulkarni, H.D., Singh, S., Verma, A.K. and Varde, P.V., "Optimization of regression model using principal component regression method in passive system reliability assessment", *Progress in Nuclear Energy*, Vol. 139, pp. 126-134, 2018.
20. S. Mohan & A. Saxena & S. Singh, "Heat loss analysis from a trapezoidal cavity receiver in LFR system using conduction-radiation model" *Solar Energy*, Vol. 159, pp. 37-43, 2018.
21. Mathur, A.K., Khan, S.A., Jagannathan, V., Thilagam, L., Singh, S., "Analysis of long life LWR fuel benchmark by CP based interface current methods", *International Journal of Nuclear Energy Science and Technology*, Vol. 12 (3), pp. 446-458, 2018.
22. Pandey, V. & Singh, S., "The analysis of global stability boundary and multistability in the nonlinear dynamical system of an advanced heavy water reactor", *Nuclear Science and Engineering*, Vol. 188(2), pp. 187-197, 2017.
23. Pandey, V. & Singh, S., "Bifurcation analysis of density wave oscillations in natural circulation loop", *International Journal of Thermal Sciences*, Vol. 120, pp. 446-458, 2017.
24. Sreeram, T.S., Dheer, D.K., Doolla, S. & Singh, S., "Hopf bifurcation analysis in droop controlled islanded microgrids", *International Journal of Electrical Power and Energy Systems*, Vol. 90, pp. 208-224, 2017.
25. Pandey, V. & Singh, S., "Characterization of stability limits of Ledinegg instability and density wave oscillations for two-phase flow in natural circulation loops", *Chemical Engineering Science*, Vol. 168, pp. 204-224, 2017.
26. Raj, M. & Singh, S., "Solution of neutron diffusion equation in 2d polar (r, θ) coordinates using Nodal Integral Method", *Annals of Nuclear Energy*, Vol. 105, pp. 69-78, 2017.
27. Paul, S. & Singh, S., "On nonlinear dynamics of density wave oscillations in a channel with non-uniform axial heating", *International Journal of Thermal Sciences*, Vol. 116, pp. 172-198, 2017.
28. Paul, S. & Singh, S., "Analysis of local bifurcations in a channel subjected to non-uniform axial heating", *International Journal of Heat and Mass Transfer*, Vol. 108, pp. 2143-2157, 2017.
29. Patidar, S., Kumar, S., Srivastava, A. & Singh, S., "Lattice Boltzmann method-based solution of radiative transfer equation for investigating light propagation through laser-

- irradiated tissue phantoms", *International Communications in Heat and Mass Transfer*, Vol. 84, pp. 144-149, 2017.
30. Pandey, V. & Singh, S., "Bifurcation analysis of the simplified models of boiling water reactor and identification of global stability boundary", *Nuclear Engineering and Design*, Vol. 315, pp. 93-103, 2017.
 31. Ashish M. Mishra & Suneet Singh, "Non linear stability analysis of parallel channels with natural circulation", *Nuclear Engineering and Design*, Vol. 309, pp. 136-150, 2016.
 32. Ashish Saxena, Niyati Jhamaria, Suneet Singh & Sudhansu Sekhar Sahoo, "Numerical Analysis of Convective and Radiative heat losses from Trapezoidal Cavity Receiver in LFR Systems", *Solar Energy*, Vol. 137, pp. 308-316, 2016.
 33. Suneet Singh, Jain, P.K., Rizwan-Uddin, "Analytical solution for three-dimensional, unsteady heat conduction in a multilayer sphere", *Journal of Heat Transfer*, Vol. 138 (10), pp. 101301 (1-11), 2016.
 34. Vikas Pandey & Suneet Singh, "A bifurcation analysis of boiling water reactor on large domain of parametric spaces", *Communications in Nonlinear Science and Numerical Simulation*, Vol. 38, pp. 30-44, 2016.
 35. Sourav Khanna, Vashimant Sharma, Shireesh B. Kedare & Suneet Singh, "Explicit expression for temperature distribution of receiver of parabolic trough concentrator considering bimetallic absorber tube", *Applied Thermal Engineering*, Vol. 103, pp. 323-332, 2016.
 36. Shashank Patidar, Sumit Kumar, Atul Srivastava & Suneet Singh, "Dual phase lag model-based thermal analysis of tissue phantoms using lattice Boltzmann method", *International Journal of Thermal Sciences*, Vol. 103, pp. 41-56, 2016.
 37. Ashish M. Mishra & Suneet Singh, "Non-linear stability analysis of uniformly heated parallel channels for different inclinations", *Applied Thermal Engineering*, Vol. 98, pp. 1189-1200, 2016.
 38. Ashish M. Mishra & Suneet Singh, "Subcritical and supercritical bifurcations for two-phase flow in a uniformly heated channel with different inclinations", *International Journal of Heat and Mass Transfer*, Vol. 93, pp. 235-249, 2016.
 39. Sudhansu S. Sahoo, Suneet Singh & Rangan Banerjee, "Thermal hydraulic simulation of absorber tubes in linear Fresnel reflector solar thermal system using RELAP", *Renewable Energy*, Vol. 86, pp. 507-516, 2016.
 40. Sourav Khanna, Vashimant Sharma, Shireesh B. Kedare & Suneet Singh, "Experimental investigation of the bending of absorber tube of solar parabolic trough concentrator and comparison with analytical results", *Solar Energy*, Vol. 125, pp. 1-11, 2016.
 41. Subhanker Paul and Suneet Singh, "Linear stability analysis of flow instabilities with a nodalized reduced order model in heated channel", *International Journal of Thermal Sciences*, Vol. 98, pp. 312-331, 2015.
 42. Sourav Khanna, Suneet Singh and Shireesh B. Kedare, "Explicit expressions for temperature distribution and deflection in absorber tube of solar parabolic trough concentrator", *Solar Energy*, Vol. 114, pp. 289-302, 2015.
 43. Vikas Pandey & Suneet Singh, "Detailed bifurcation analysis with a simplified model for advance heavy water reactor system", *Communications in Nonlinear Science and Numerical Simulation*, Vol. 20(1), pp. 186-198, 2015.

44. Sourav Khanna, Suneet Singh & Shireesh B. Kedare, "Effect of angle of incidence of sun rays on the bending of absorber tube of solar parabolic trough concentrator", *Energy Procedia*, Vol. 48, pp. 123-129, 2014.
45. Subhanker Paul & Suneet Singh, "Analysis of sub- and supercritical Hopf bifurcation with a reduced order model in natural circulation loop", *International Journal of Heat and Mass Transfer*, Vol. 77, pp. 344-358, 2014.
46. Subhanker Paul & Suneet Singh, "A density variant drift flux model for density wave oscillations", *International Journal of Heat and Mass Transfer*, Vol. 69, pp. 151-163, 2014.
47. Sourav Khanna, Shireesh B. Kedare & Suneet Singh, "Deflection and stresses in absorber tube of solar parabolic trough due to circumferential and axial flux variations on absorber tube supported at multiple points", *Solar Energy*, Vol. 99, pp. 134-151, 2014.
48. Sourav Khanna, Shireesh B. Kedare & Suneet Singh, "Analytical expression for circumferential and axial distribution of absorbed flux on a bent absorber tube of solar parabolic trough concentrator." *Solar Energy*, Vol. 92, pp. 26-40, 2013.
49. Sudhansu S. Sahoo, Suneet Singh & Rangan Banerjee, "Steady state hydrothermal analysis of the absorber tubes used in Linear Fresnel Reflector solar thermal system", *Solar Energy*, Vol. 87, pp. 84-95, 2013.
50. Sudhansu S. Sahoo, Shinu M. Varghese, C. Suresh Kumar, S.P. Viswanathan, Suneet Singh & Rangan Banerjee, "Experimental investigation and computational validation of heat losses from the cavity receiver used in linear Fresnel reflector solar thermal system", *Renewable Energy*, Vol. 55, pp. 18-23, 2013.
51. Neeraj Kumar, Suneet Singh & J. B. Doshi, " Nodal integral method using quadrilateral elements for transport equations: Part 1-convection-diffusion equation", *Numerical Heat Transfer, Part B: Fundamentals*, Vol. 64(1), pp. 1-22, 2013.
52. Neeraj Kumar, Suneet Singh & J. B. Doshi, " Nodal integral method using quadrilateral elements for transport equations: Part 2-navier-stokes equations", *Numerical Heat Transfer, Part B: Fundamentals*, Vol. 64(1), pp. 22-47, 2013.
53. Neeraj Kumar, Suneet Singh & J. B. Doshi, "Pressure correction based iterative scheme for Navier-Stokes equation using Nodal Integral Method" *Numerical Heat Transfer Part B : Fundamentals*, Vol. 62(4), pp.264-288, 2012.
54. Sudhansu S. Sahoo, Suneet Singh & Rangan Banerjee, "Analysis of heat losses from a trapezoidal cavity used for Linear Fresnel Reflector system" *Solar Energy*, Vol. 86(5) , pp. 1313-1322, 2012.
55. Suneet Singh, Prashant K. Jain & Rizwan-uddin, "Finite Integral Transform Method to Solve Asymmetric Heat Conduction in a Multilayer Annulus with Time-dependent Boundary Conditions" *Nuclear Engineering and Design*, Vol. 241(1) , pp. 144-154, 2011.
56. Suneet Singh & Rizwan-uddin, "Parallel Modified Nodal Integral Method for 3D Time-dependent Incompressible Navier-Stokes & Energy Equations". *Progress in Computational Fluid Dynamics*, Vol. 10(2), pp. 100-112, 2010.
57. Prashant K. Jain, Suneet Singh & Rizwan-uddin, "An exact analytical solution for two-dimensional, unsteady, multilayer heat conduction in spherical coordinates" *International Journal of Heat and Mass Transfer*, Vol. 53, pp. 2133-2142, 2010.
58. Suneet Singh & Rizwan-uddin, "k- epsilon Modeling using Modified Nodal integral Method" *Nuclear Engineering and Design*, Vol. 239(7), pp. 1314-1322, 2009.

59. E. G. Nezami, Suneet Singh, N. Sobh & Rizwan-uddin, "A Nodal Integral Method for Quadrilateral Elements", International Journal for Numerical Methods in Fluids, Vol. 61(2), pp.144-164, 2009.
60. Prashant K. Jain, Suneet Singh, & Rizwan-uddin, "Transient Analytical Solution to Asymmetric Heat Conduction in a Multilayer Annulus." Journal of Heat Transfer Vol. 131(1), 011304, 2008.
61. Suneet Singh, Prashant K. Jain & Rizwan-uddin, "Analytical solution to transient heat conduction in polar coordinates with multiple layers in radial direction" International Journal of Thermal Sciences, Vol. 47(3), pp. 261-273, 2008.
62. Suneet Singh, K. Muralidhar & P. Munshi, "Image Reconstruction from Incomplete Projection Data using Combined ART-CBP Algorithm", Defence Science Journal, Vol. 52(3), pp. 303-316, 2002.

REFEREED CONFERENCES

1. Munendra Pal Singh, Md. Emadur Rahman & Suneet Singh, "Nodalized Reduced Order Model for Stability Analysis of Supercritical Fluid in a Single Heated Channel", ASME Power and Energy Conference and Exhibition, Lake Buena Vista, Florida, USA, June 2018.
2. S Singh, A Saxena, A Gairola & H Bindra, "POD-ROM model for analyzing the onset of natural convection and stability in a differentially heated top open cavity", Bulletin of the American Physical Society, Georgia, Atlanta, Nov-2018.
3. A Saxena, S Singh and A Srivastava, "Comparison of local heat transfer distribution between closed and open cavity for different Rayleigh number and inclination angles", Bulletin of the American Physical Society, Georgia, Atlanta, Nov-2018.
4. Munendra Pal Singh, Md. Emadur Rahman & Suneet Singh, "Three Zone Reduced Order Model for Stability Analysis of Supercritical Fluid in a Heated Channel", 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS-Pilani, Hyderabad Campus, India, Dec-2017.
5. Abhishek Chakraborty & Suneet Singh, "Linear Stability Analysis of Spatial Xenon Oscillations Including Thermal Hydraulic Feedbacks", 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS-Pilani, Hyderabad Campus, India, Dec-2017.
6. Ashish Saxena & Suneet Singh, "Effect of External Heat Transfer and Thermal Boundary Conditions in Rigid-Free Top Facing Cavity", 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS-Pilani, Hyderabad Campus, India, Dec-2017.
7. Biswas, P. and Singh, S., "Comparative Study of Different Eigenfunction Based Approaches for 1D Multilayer Heat Conduction Problem with Time Dependent Boundary Conditions", 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference, Hyderabad, India, 27-30 December 2017.
8. Md. Emadur Rahman, Munendra Pal Singh & Suneet Singh, "Bifurcation Analysis of Pressure Drop Oscillations in Two-Phase Flow System Using Different Model", M&C 2017 - International Conference on Mathematics & Computational Methods Applied to Nuclear Science & Engineering, Jeju, Korea, April-2017.

9. Munendra Pal Singh, Md. Emadur Rahman & Suneet Singh, "Reduced Order Model for Stability Analysis of Supercritical Fluid in a Heated Channel", 6th International Conference on Fluid Mechanics and Fluid Power, Allahabad, India, Dec-2016.
10. Om Singh, Suneet Singh & Shireesh B. Kedare, "A Numerical Study of Natural Convection and Thermal Radiation using Two Different Computational Domains in a Square Open Cavity", 6th International Conference on Fluid Mechanics and Fluid Power, Allahabad, India, Dec-2016.
11. Md. Emadur Rahman, Munendra Pal Singh & Suneet Singh, "Stability Analysis of Pressure Drop Oscillations using Numerical Continuation", 6th International Conference on Fluid Mechanics and Fluid Power, Allahabad, India, Dec-2016.
12. Ashish Saxena & Suneet Singh, "Numerical Investigation on the Onset of Natural Convection in a Finite Sized Cavity with Rigid-Free Surface", 6th International Conference on Fluid Mechanics and Fluid Power, Allahabad, India, Dec-2016.
13. Vimal Kishor, Suneet Singh & Atul Srivastava, "Transient Study of Differentially Heated Rectangular Cavity in Transition Region", 6th International Conference on Fluid Mechanics and Fluid Power, Allahabad, India, Dec-2016.
14. Gairola, A., Bindra, H., Agarwal, G. & Singh, S., "Lattice Boltzmann method for solving time-dependent radiation transport and reactor criticality problems", International Conference on Nuclear Engineering, Proceedings, Vol. 1, Article number V001T02A005, 2016.
15. Biswas, P. and Singh, S., "Analytical Solution of 1-D Multiple Layer Dual Phase Lag Heat Conduction Problem with Generalized Time Dependent Boundary Conditions", 12th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Costa del Sol, Malaga, Spain, 10-14 July 2016.
16. Niteen kumar & Suneet Singh, "Numerical Solution of Burgers-Huxleys Equation using Improved Nodal Integral Method" In International Conference on computational Fluid Dynamics - 09, Istanbul, Turkey, July-2016.
17. Ashish Saxena & Suneet Singh, "Analysis of the Radiative and Convective Heat Losses from a Two Dimensional Open Square Cavity", ISHMT-ASFTE Heat and Mass Transfer, Thiruvananthapuram, India, Dec. 17-20, 2015.
18. Pranay Biswas & Suneet Singh, "Analytical Solution of Multilayer Heat Conduction Problem with Time Varying Ambients", ISHMT-ASFTE Heat and Mass Transfer, Thiruvananthapuram, India, Dec. 17-20, 2015.
19. Neeraj Kumar, Suneet Singh & J. B. Doshi "Nodal Integral Method for Inflow-Outflow boundary conditions", ISHMT-ASFTE Heat and Mass Transfer, Thiruvananthapuram, India, Dec. 17-20, 2015.
20. Arvind Mathur, Suneet Singh, Suhail A. Khan, V. Jagannathan & L. Thilagam, "Analysis of LEU Pincell and Assembly Benchmark using VISWAM Code", American Nuclear Society Winter Meeting, Washington, DC, USA, Nov. 8-12, 2015.
21. Gaurav Agarwal, Suneet Singh, Hitesh Bindra & Surendra Mishra, "Solution of Neutron Transport Equation for Criticality Estimation Using Lattice Boltzmann Method", American Nuclear Society Winter Meeting, Washington, DC, USA, Nov. 8-12, 2015.
22. Abhisek Chakraborty, Suneet Singh & M. P. S. Fernando, "In Phase Xenon Oscillations-A Non Linear Study", American Nuclear Society Winter Meeting, Washington, DC, USA, Nov. 8-12, 2015.

23. Mohit Prabhakar, Suneet Singh & Sandip K. Saha, "Heat Transfer Enhancement in Latent Heat Thermal Energy Storage System Using Fins for Solar Thermal Power Plant" Third South African Solar Energy Conference, Skukuza, South Africa, May 11-13, 2015.
24. Saurav Halder, Suneet Singh & Sandip K. Saha, "Effect of Metal Matrix and Foam Porosity on Thermal Performance of Latent Heat Thermal Storage for Solar Thermal Power Plant" 3rd South African Solar Energy Conference, Skukuza, South Africa, May 11-13, 2015.
25. Ashish Mani Mishra, Subhanker Paul, Vikas Pandey & Suneet Singh, "Two-Phase Flow Instability and Bifurcation Analysis of Multiple Uniformly Heated Horizontal Channels", International Congress on Advances in Nuclear Power Plants, Nice France, May 3-6, 2015.
26. Subhanker Paul, Vikas Pandey, Ashish Mani Mishra & Suneet Singh, "Analysis of Density Wave Oscillations for Non-uniform Axial Heat Flux with a Nodalized Reduced Order Model", International Congress on Advances in Nuclear Power Plants, Nice, France, May 3-6, 2015.
27. Ashish Mani Mishra, Subhanker Paul, Vikas Pandey & Suneet Singh, "Two Phase Flow Stability Analysis of Multiple Horizontal Uniformly Heated Channels", 5th International and 41st National Conference of fluid Mechanics and Fluid Power 12-14 December, 2014, Kanpur, India; 2014.
28. Vikas Pandey, Ashish Mani Mishra, Subhanker Paul & Suneet Singh, "Non-Linear Stability Analysis of Mathematical Models of BWR Structure", 5th International and 41st National Conference of fluid Mechanics and Fluid Power 12th-14th December, 2014, Kanpur, India; 12/2014.
29. Subhanker Paul, Ashish Mani Mishra, Vikas Pandey & Suneet Singh, "An N-Node Weighted Residual Procedure for Analysis of Density Wave Oscillation in Heated Channel", 5th International and 41st National Conference of fluid Mechanics and Fluid Power 12th-14th December, 2014, IIT Kanpur, Uttar Pradesh, India; 12/2014.
30. Subhanker Paul, Vikas Pandey, Ashish Mani Mishra & Suneet Singh, "Weighted Residual Procedure with Nodalization Scheme to Analyze Flow Instabilities in Natural Circulation Loop", 10th International Topical Meeting on Nuclear Thermal Hydraulics, Operation and Safety (NUTHOS-10), Okinawa, Japan, Dec. 14-18, 2014.
31. Vikas Pandey, Subhanker Paul, Ashish Mani Mishra & Suneet Singh, "Non Linear Dynamics of Boiling Water Reactor Dynamical System", 10th International Topical Meeting on Nuclear Thermal Hydraulics, Operation and Safety (NUTHOS-10), Okinawa, Japan, Dec. 14-18, 2014.
32. Ashish Mani Mishra, Subhanker Paul, Vikas Pandey & Suneet Singh, "A Comparative study of Two-Phase Flow Instability analysis of Uniformly Heated Channel having different Inclinations", 10th International Topical Meeting on Nuclear Thermal Hydraulics, Operation and Safety (NUTHOS-10), Okinawa, Japan, Dec. 14-18, 2014.
33. Clifford Ho, Thomas Conboy, Jesus Ortega, Samia Afrin, Allison Gray, Joshua Christian, Sandia Santanu Bandyopadhyay, S.B. Kedare, Suneet Singh & Prasad Wani, "High-Temperature Receiver Designs for Supercritical CO₂ Closed-Loop Brayton Cycles", ASME 8th International Conference on Energy Sustainability, Boston, MA, USA, June 30-July 2, 2014.
34. Avinash H. Kolekar, Sagar Laddha, Suneet Singh, Anuradda Ganesh & Sudarshan Kumar, "Development and validation of power performance prediction chart for conversion of diesel engine to dual fuel engine", SAE 2014 World Congress, Detroit, MI, USA, April 8-10, 2014.

35. Ashish M. Mishra, Subhanker Paul, Vikas Pandey & Suneet Singh, "Two-phase Flow Instability Analysis of Horizontal Channel Using Weighted Residual Procedure", International Congress on Advances in Nuclear Power Plants, Jeju Island, South Korea, April 14-18, 2013.
36. Vikas Pandey, Subhanker Paul, Ashish M. Mishra & Suneet Singh, "Detailed Parametric Bifurcation Analysis of Advanced Heavy Water Reactor", International Congress on Advances in Nuclear Power Plants, Jeju Island, South Korea, April 14-18, 2013.
37. Subhanker Paul, Ashish M. Mishra, Vikas Pandey & Suneet Singh, "A Density Fit Model For Stability Analysis Of Heated Channel", International Congress on Advances in Nuclear Power Plants, Jeju Island, South Korea, April 14-18, 2013.
38. Sudhansu S. Sahoo, Shinu M. Varghese, C. Suresh Kumar, S. P. Viswanathan, Suneet Singh & Rangan Banerjee, "Experimental investigation of convective flow boiling in the absorber tube of the linear Fresnel reflector solar thermal system", SOLARIS, Varanasi, India, Feb 7-9, 2012.
39. Neeraj Kumar, Suneet Singh & J. B. Doshi, "Nodal integral method for navier-stokes equations using quadrilateral elements " 39th National Conference on Fluid Mechanics and Fluid Power, SVNIT, Surat, Dec. 13-15, 2012.
40. Sudhansu S. Sahoo, Suneet Singh & Rangan Banerjee, "Thermal hydraulic simulation of absorber tubes used in linear fresnel reflector system" 39th National Conference on Fluid Mechanics and Fluid Power, SVNIT, Surat, Dec 13-15, 2012.
41. Neeraj Kumar, Suneet Singh & J B Doshi, "A novel Nodal Integral Method based Solution for buoyancy driven Flow" European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012), Vienna, Austria, Sept. 10-12, 2012.
42. Neeraj Kumar, Suneet Singh & J B Doshi, "Solution of Convection-diffusion Equation in Complex Geometry by Nodal Integral Method", 14th Annual AeSI CFD Symposium, Indian Institute of Science, Bangalore, India, Aug. 10-11, 2012.
43. Kushal D. Badgujar, Om Pal Singh, Suneet Singh & Shripad T. Rewankar, "Power Coefficient of Reactivity Determination for HTPBR and Its Application for Reactivity Initiated Transients", 20th International Conference on Nuclear Engineering, Anaheim, California, USA, Jul 30-Aug 12, 2012.
44. Sudhansu S. Sahoo, Shinu M. Varghese, C. Suresh Kumar, S. P. Viswanathan, Suneet Singh, Rangan Banerjee, "Experimental investigation of convective flow boiling in the absorber tube of the linear Fresnel reflector solar thermal system", SOLARIS, Varanasi, India, Feb 7-9, 2012.
45. Sudhansu S. Sahoo, Suneet Singh, Rangan Banerjee, "Hydrothermal analysis of absorber tube of Linear Fresnel Reflector for solar thermal applications", 21st national and 9th ISHMT-ASME Heat and Mass Transfer Conference, Chennai, India, Dec 27-30,2011.
46. Suneet Singh, Rizwan-uddin, Neeraj Kumar, "Numerical Study of Natural Convection in Open Inclined Cubic Cavity using Parallel Modified Nodal Integral Method", 21st national and 9th ISHMT-ASME Heat and Mass Transfer Conference, Chennai, India, Dec 27-30, 2011.
47. Sudhansu S. Sahoo, Suneet Singh, Rangan Banerjee "Experimental and Computational investigation into the heat loss from the cavity receiver used in Linear Fresnel Reflector Solar Thermal System",International Conference on Advances in Energy Research, Mumbai, Dec 9-11, 2011.

48. Neeraj Kumar, Suneet Singh, J. B, Doshi, "Formulation of Navier-Stokes Equation by Nodal Integral Method", 13th Annual AeSI CFD Symposium Bangalore, India, Aug 11-12, 2011.
49. Sudhansu S. Sahoo, Suneet Singh & Rangan Banerjee, "Parametric studies on parabolic trough solar collector", World Renewable Energy Congress, Abu Dhabi, UAE, Sep. 25-30, 2010.
50. Suneet Singh, Prashant K. Jain & Rizwan-uddin, "Analytical Solution of Time-dependent Multilayer Heat Conduction for Nuclear Applications", International Nuclear & Renewable Energy Conference, Amman, Jordan, Mar. 21-24, 2010.
51. Suneet Singh & Vincent Mousseau, "Coupling a Homogeneous Equilibrium Model with a Two-phase Two-Fluid Model", Transactions of the American Nuclear Society, Atlanta GA, Jun 14-18, 2009.
52. Suneet Singh & Vincent Mousseau, "Modified Choke Flow Criterion for the Two-Phase Two-Fluid Model", Proceedings Of International Conference on Advances in Mathematics, Computational Methods, and Reactor Physics (M&C), Saratoga Springs, NY, May. 3-7, 2009.
53. Suneet Singh & Vincent Mousseau, "On the Hyperbolicity of a One-Dimensional Two-Phase Flow Model for Nuclear Reactor Safety", Transactions of the American Nuclear Society, Reno NV, Nov 9-13, 2008.
54. Suneet Singh & Rizwan-uddin, "k- epsilon Modeling using Modified Nodal integral Method" Proceedings of International Congress on Advances in Nuclear Power Plants, Anaheim CA, Jun 8-12, 2008.
55. Suneet Singh & Rizwan-uddin, "Direct Numerical Simulation of Chaotic ABC flows using Parallel Modified Nodal Integral Method", Proceedings of Joint Topical Meeting of Mathematics and Computation and Supercomputing in Nuclear Applications (M&C), Berkeley California, Apr. 15-19, 2007.
56. Suneet Singh & Rizwan-uddin, "A Nodal Integral Method for Neutron Diffusion Equation in Polar Coordinates.", Transactions of the American Nuclear Society, Albuquerque NM, Nov. 12-16, Vol. 95, pp 817-819, 2006.
57. Suneet Singh & Rizwan-uddin, "Modeling Natural Convection Heat Transfer in Very High Temperature Gas Cooled Reactor" Proceedings of International Conference of Nuclear Engineering, Miami, Florida, July 17-20, 2006.
58. Suneet Singh & Rizwan-uddin, "Parallel Modified Nodal Integral Method for 3D Time-dependent Incompressible Navier-Stokes & Energy Equations". Proceedings of International Topical Meeting on Mathematics and Computation, Supercomputing, Reactor Physics and Nuclear and Biological Applications (M&C), Avignon, France, Sept. 12-15, 2005.