RESUME

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Present Position: HAL Chair Professor

Areas of Interest: Aerodynamics, CFD, Turbulence, Aeroacoustics, Flow-induced vibration and Fluid-Structure interaction, Reacting flows

Educational Qualifications:

Degree	University/Board	Year of passing	% Marks
Higher Secondary	W. B. B. S. E.	1976	78.90 (National scholarship)
B. Tech. (Aeronautical Engineering)	IIT, Kharagpur	1982	84.13 *Institute Silver Medal* for best Aeronautical Engineering graduate
Ph. D. (Aerospace Engineering) Thesis title: Viscous-inviscid interaction on aerofoils and wings at low speeds	IIT, Kharagpur	1988	-----

Research and Professional Experiences:

Period	Position	Employer	Field of Work
13.07.82-19.09.84	Senior Research Assistant	IIT, Kharagpur	Research in Computational & Experimental Aerodynamics
20.09.84-07.11.91	Junior Scientific Officer	- Do –	Research in Computational Fluid Dynamics
07.11.91-16.02.98	Senior Scientific Officer	- Do –	Research in Computational Fluid Dynamics, Unsteady Aerodynamics
16.02.98 – 12.06.02	Assistant Professor	- Do –	Teaching, research and administrative work
12.06.02 – 08.07.10	Associate Professor	- Do –	- Do –
09.08.10 – till date	Professor	- Do –	- Do –
01.09.10 – 12.09.13	Head of Aerospace Engineering IIT, Kharagpur		Teaching, research and Administrative responsibilities of the department
18.02. 15 – till date	HAL Chair Professor		Teaching, research and industrial collaboration

- Developed Web and Video lectures for one semester course on High-Speed Aerodynamics
- Developed Video lectures for one semester course on Introduction to Aerodynamics

Research Guidance:

- Completed eight (8) doctoral guidance
- Three (3) doctoral guidance ongoing
- Completed two (2) MS by research guidance
- Supervised large number of graduate and undergraduate research projects

Other Institute Activities

1. Served as Head of department during 1.9.2010 to 12.9.2013
2. Served as departmental representative in Undergraduate Program Evaluation Committee (UGPEC) for 10 years

3. Served in several UGPEC sub-committees
4. Served as departmental representative in Postgraduate Program Evaluation Committee (PGPEC) for 4 years
5. Served as departmental examination-in-charge for 10 years
6. Framed the new curriculum and syllabi, adopted from 2006-2007 session and 2009-2010 session for B. Tech., DD and M. Tech. in Aerospace Engineering
7. Served as Assistant Warden for 3 years
8. Participating in HAL training program (organized 3 semesters)

External Responsibilities

1. Member, Aerodynamics Panel of AR&DB, Ministry of Defence
2. Member, Resource Panel of AR&DB, Ministry of Defence
3. Member, Review Committees in Research Centre Imarat (RCI), Gas Turbine Research Establishment (GTRE), Aeronautical Development Agency (ADA), Interim Test Range (ITR)
4. Member of Faculty selection committees in IIT Bombay, IIT Kanpur, IIST Shibpur, BIT Mesra
5. Selection committee member in MHRD, UPSC (DGCA)
6. Member/Chair of NBA expert teams for accreditation of Aeronautical/Aerospace Engineering programs in some colleges
7. Reviewer and Editorial board member in several journals
8. Member, Advisory Council of **Trust for Advancement of Aerodynamics in India** (TAAI)

Sponsored Research Projects:

In addition to teaching and research guidance, I have been actively involved in sponsored research in the areas of aerodynamics, computational fluid dynamics, grid generation, flow-induced vibration and fluid-structure interaction, reactive flows, large eddy simulation of turbulence, aeroacoustics and wind engineering. I am/have been responsible for the research work carried out in the following sponsored research projects in the Aerospace Engineering Department at IIT Kharagpur. I have acted as the principal investigator or a co-investigator for these projects.

Ongoing

1. Aerodynamic design of traction rolling stock with speed potential of 250 km/h – Co-PI (CRR, Indian Railways, with Professor S. Roy of ME as PI)
2. Numerical Study on Electro-Hydrodynamics of Immiscible or Miscible Fluids with Conductivity Gradient (DST, with Prof. S. Bhattacharya of Mathematics as PI)
3. Development of a Numerical Scheme to Study the Aerodynamics of Chaff Cloud (AR&DB, with Dr. A. Roy as PI)

4. LES of Shock-Turbulence Interaction in Supersonic Pipe & Diffuser Flows (AR&DB, with Dr. S. Ghosh as PI)

Completed

5. Numerical Prediction of flow field, fountain flow and associated noise in supersonic twin impinging jets (AR&DB)
6. Analysis and Development of Conceptual Design Methodologies for Air Collection and Enrichment System of Air-breathing Propulsion – Phase II (IIT-ISRO KCSTC, with Professor S. S. Bandyopadhyay of Cryogenics as PI)
7. Estimation of Acoustic Loads in AMCA Weapon Bay and Hinge Moment on Doors (ADA)
8. Large Eddy Simulation of AURA-type Flying Wing Configurations with Dragerons at Operating Speed Range (ADA, with Professor S. Sarkar, IIT Kanpur as Co-PI)
9. Study of Flow Structure and Associated Acoustics in a Weapon Bay Cavity using LES (ADA, with Professor S. Sarkar, IIT Kanpur as PI)
10. Aerodynamic Modeling of Chaff Bloom (DLJ, DRDO) – includes consultancy component
11. Wind Tunnel Testing of Scaled Down Models of Railway Locomotives (Consultancy, HEWPL)
12. Upgrading of the AR&DB's Associate Centre for CFD at IIT Kharagpur (AR&DB).
13. Research activities in computational fluid dynamics (HyPerComp, Inc., USA)
14. Large Eddy Simulation of Transonic and Supersonic Cavity Flow Fields (AR&DB)
15. Development of a three-dimensional unsteady implicit hypersonic viscous turbulent flow solver on an unstructured grid (DRDL).
16. Analysis and Development of Conceptual Design Methodologies for Air Collection and Enrichment System of Air-breathing Propulsion (IIT-ISRO KCSTC, with Professor S. S. Bandyopadhyay of Cryogenics as PI)
17. Axisymmetric and Non-Axisymmetric, Subsonic and Supersonic Jet Aerodynamics-Aeroacoustics using the Three-Dimensional Navier-Stokes/Euler Coupled Simulation (AR&DB).
18. Three-dimensional unstructured grid generation for viscous flow computation about complex configurations using computational geometric technique (DRDL).
19. Setting Up of AR&DB's Associate Centre of CFD at IIT Kharagpur (AR&DB).
20. Analysis of High Temperature Hypersonic Flows Using Real Gas Flux Splitting Algorithm Considering Equilibrium and Non-equilibrium Air Chemistry (AR&DB).
21. Direct computation of supersonic jet noise using fluid/acoustic coupled simulation (AR&DB).
22. Determination of aerodynamic coefficients and detailed flow computations using CFD technique (DRDL)
23. Computation of Aeroacoustic fields using finite volume method (AR&DB).
24. Flow-induced vibration of heat exchanger tube arrays and fluid-structure interaction under seismic excitation (BRNS).
25. LES of High Speed Reacting Flows for Scramjet Combustor Flow Field (DRDL)
26. Implicit Euler Code for unsteady transonic flow calculations (AR&DB).
27. Unsteady transonic calculation of realistic aircraft configurations of fighter aircraft (ADA).
28. Computation of transonic flow about multi-element airfoils (AR&DB).
29. Computation of three-dimensional boundary layers and viscous-inviscid interaction on a transport aircraft (Aeronautical Development Agency -- ADA).
30. Transonic Flow about Wing and Wing-Body Combinations (AR&DB).

Interaction with Industrial & Research Organizations:

- Active collaboration with ADA, DRDL, ITR, RCI, BARC, ISRO, DLJ and RDSO through sponsored research and consultancy projects in the fields of computational fluid dynamics, large eddy simulation of turbulence, aeroacoustics, reactive flows, flow-induced vibration and fluid-structure interaction.
- Served as a member of review committees for internal evaluation of projects undertaken by several national organizations
- Collaborative research and development work with several Indian and foreign companies

Membership of Professional Societies

1. Fellow, Institution of Engineers (India)
2. Life Member, Aeronautical Society of India
3. Life Member, Society of Wind Engineers

Publications

1. Bej Nilotpala, Sinhamahapatra K.P., 2015, CFD study on the effects of viscous shear in a hot cascade Ranque-Hilsch vortex tube, IOP Conf. Series: Materials Science and Engineering 101 (2015) 012066
2. Singha S. and Sinhamahapatra K.P. (2015), Vortex-Induced Vibration of a Circular Cylinder at Low and Subcritical Reynolds Numbers – Part 1: Low Reynolds Numbers, Journal of Aerospace Engineering and Technology, vol. 5(2), pp. 35-60.
3. Singha S. and Sinhamahapatra K.P. (2015), Vortex-Induced Vibration of a Circular Cylinder at Low and Subcritical Reynolds Numbers – Part II: Subcritical Reynolds Number, Journal of Aerospace Engineering and Technology, vol. 5(2), pp. 61-71.
4. Data Abanti, Sinhamahapatra K.P. (2015), Investigation of the influence of co-flow velocity ratio on a compressible plane jet exhausting into parallel streams, Aerospace Science and Technology 45, 186-195, 2015; Available online on June 2, 2015 at http://www.elsevier.com, 10.1016/j.ast.2015.05.012
5. Kumar Arun, Sinhamahapatra K.P. (2014), Dynamics of Partially Filled Rectangular Rigid Tank with Surface Piercing Elements, International Journal of Fluid Mechanics Research, Vol. 41, No. 5, 379-408, 2014
6. Das K.K., Ghosh, A.K., Sinhamahapatra K.P. (2014), Numerical and Experimental Investigation of Dry Thunderstorm Downburst using 3D LES, Int. J. of Appl. Math and Mech. **10** (6): 35-55, 2014
7. Das K.K., Ghosh, A.K., Sinhamahapatra K.P. and Baruah B. (2014), Physical Simulations of Downburst and Tornado, Int. J. of Appl. Math and Mech. **10** (6): 1-34, 2014
8. Bej Nilotpala, Sinhamahapatra K.P. (2014), Exergy analysis of a hot cascade type Ranque-Hilsch vortex tube using turbulence model, *International Journal of Refrigeration* 45, pp. 13-24, Sept 2014

9. Das K.K., Sinhamahapatra K.P., Ghosh A.K., (2014), Interference Effect between Prismatic Buildings Subjected to Microburst Wind, Journal of Industrial Safety Engineering, vol. 1(1), pp. 19-22
10. Bej Nilotpala, Sinhamahapatra K.P. (2014), CFD Study on the Effects of Nozzle Number on Turbulent Flow and Energy Separation in a Ranque-Hilsch Vortex Tube, Applied Mechanics and Materials, vol. 465-466, pp. 505-509, Trans Tech Publication, Switzerland, online in November 2013, *doi:10.4028/www.scientific.net/AMM.465-466.505*
11. Singha S. and Sinhamahapatra K.P. (2013), Numerical Simulation of Low Reynolds Number Incompressible Flow over Two Side-by-Side Circular Cylinders, Journal of Aerospace Engineering and Technology, vol. 3(3), pp. 22-54
12. Dutta T., Sinhamahapatra K.P. and Bandyopdhyay S.S. (2013), CFD Analysis of Energy Separation in Ranque – Hilsch Vortex Tube at Cryogenic Temperature, Journal of Fluids, vol. 2013, Article ID 562027, 14 pages, 2013. doi:10.1155/2013/562027.
13. Kumar A., Sinhamahapatra K.P., (2013), Effects of Porous Internal Components on Liquid Slosh Dynamics, Journal of Porous Media, 16 (8): 725–747 (2013)
14. Halder Pabitra, De Sudipta, Sinhamahapatra K.P., Singh N., (2013), Numerical Simulation of Shock-Vortex Interaction in Schardin's Problem, *Shock Waves*, DOI 10.1007/s00193-013-0448-5, June 2013, vol. 23, No. 5, September 2013, pp. 495-504
15. Poonkodi S, Srinivasan G., Sinhamahapatra K. P., (2013), Numerical Investigation of Three Dimensional Cavity Flow, with a Curved Base, using Space-Time Conservation and Solution Element Method, Advances in Aerospace Science and Applications, ISSN 2277-3223 vol. 2, No. 2, pp. 156-159
16. Halder Pabitra, Sinhamahapatra K.P., Singh N., (2010), Type-VI and Type-V Shock-Shock Interactions on Double-Wedge Geometries Using *AUSM+* on Unstructured Grid. *International Journal of Hypersonics* 1 (4), pp. 225-245.
17. Halder Pabitra, Sinhamahapatra K.P., Singh N., (2011), Numerical Investigations of Supersonic Wake of a Wedge Using *AUSM+* Scheme on Unstructured Grid. *International Journal of Applied Mathematics and Mechanics* 7 (11), pp. 46-68.
18. Dutta T., Sinhamahapatra K.P. and Bandyopdhyay S.S. (2011), Numerical investigation of gas species and energy separation in the Ranque – Hilsch vortex tube using real gas model, *International Journal of Refrigeration* 34 (16), pp. 2118-2128.
19. Das K.K., Sinhamahapatra K.P. and Ghosh, A.K. (2011), Development of a numerical code for simulation of dry downburst using the impinging jet model, *International Journal of Applied Mathematics and Mechanics* 7 (16), pp. 56-71
20. Das K.K., Sinhamahapatra K.P., Ghosh, A.K. and Das, H.R. (2011), Simulation of dry downburst wind using ANSYS, *International Journal of Advances in Science and Technology*, vol. 2, No. 6, pages 11.
21. Das K.K., Sinhamahapatra K.P. and Ghosh, A.K. (2011), Experimental and Numerical simulation of the translational downburst using impinging jet model, *International Journal of Engineering Science and Technology*, vol. 3, No. 6, pp. 4656-4667.
22. Das K.K., Sinhamahapatra K.P. and Ghosh, A.K. (2011), Experimental and Numerical investigation of the downburst wind profiles on different surfaces, *International Journal of Engineering Science and Technology*, vol. 3, No. 6, pp. 4668-4682.
23. Das K.K., Sinhamahapatra K.P. and Ghosh A.K. (2011), Physical simulation of dry microburst using impinging jet model with swirl, *International Journal of Engineering Science and Technology*, vol. 3, No. 5, pp. 20-29

24. Upadhyay P.P., and Sinhamahapatra K.P. (2011), Numerical Simulation of Axisymmetric Cold Jets Using k-ε Turbulence Model, *Journal of the Institution of Engineers* (India), vol. 92, pp. 3-8.
25. Singha S. and Sinhamahapatra K.P. (2011), Control of Vortex Shedding from a Circular Cylinder using Imposed Transverse Magnetic Field, *International Journal of Numerical Methods for Heat and Fluid Flow*, vol. 21, issue 1, pp. 32-45.
26. Mitra S., Kumar A. Khoo B.C. and Sinhamahapatra, K.P. (2010) Influence of various internal components on liquid slosh dynamics by finite element method, *International Journal of Fluid Mechanics Research*, vol. 37, No. 4, pp 359-381
27. Das K.K., Sinhamahapatra K.P. and Ghosh A.K. (2010), Investigation of the Axisymmetric Microburst Flow Field, *Journal of Wind and Engineering*, vol. 7, No. 1 (2010), pp. 1-15
28. Singha S. and Sinhamahapatra K.P. (2010), Flow past a circular cylinder between parallel walls at low Reynolds number, *Ocean Engineering*, vol. 37 (2010), pp. 757-769, online on March 3, 2010, doi: 10.1016/j.oceaneng.2010.02.012
29. Dutta T., Sinhamahapatra K.P. and Bandyopdhyay S.S. (2010), Comparison of different turbulence models in predicting the temperature separation in a Ranque – Hilsch vortex tube, *International Journal of Refrigeration*, vol. 33 (2010), pp. 783-792, doi: 10.1016/j.ijrefrig.2009.12.014
30. Singha S. and Sinhamahapatra K.P. (2009/2010), High-resolution numerical simulation of the flow about two cylinders in tandem at low Reynolds numbers, ASME *Journal of Fluids Engineering*, Volume 132, Issue 1, pp. 1-10, published online on December 15, 2009, http://link.aip.org/link/?JFG/132/011101, DOI: 10.1115/1.4000649
31. Mitra S. and Sinhamahapatra K.P. (2008), 2D simulation of fluid-structure interaction using finite element method, *Finite Elements in Analysis and Design*, Volume 45, Issue 1, Pages 52-59, December 2008, published online on August 26, 2008 at http://www.elsevier.com, doi:10.1016/j.finel.2008.07.006
32. Mitra S. and Sinhamahapatra K.P. (2008), Dynamics of Liquid inside a Container in Three Dimensions by Pressure Based Finite Element Method, *International Journal of Dynamics of Fluids*, Volume 4, No. 1, pp. 43-55, June 2008.
33. Mitra S., Upadhyay P.P., and Sinhamahapatra K.P. (2007/2008). Slosh dynamics of inviscid fluids in 2-dimensional tanks of various geometries using finite element method, *International Journal for Numerical Methods in Fluids*, published online on August 7, 2007 at http://www.interscience.wiley.com, Volume 56, Issue 9, Pages 1625-1651, March 2008.
34. Mitra S. and Sinhamahapatra K.P. (2007). Slosh dynamics of liquid filled containers with submerged components using pressure based finite element method, *Journal of Sound and Vibration*, vol. 304, 1-2, pp 361-381.
35. Singha S., Sinhamahapatra K.P., and Mukharjea S.K. (2007). Control of separation and vortex shedding from a bluff body using imposed magnetic field, ASME *Journal of Fluids Engineering*, vol. 129, No. 5, pp. 517-523.
36. Sengupta S. and Sinhamahapatra K.P. (2006). A parallel computing framework and a modular collaborative CFD workbench in Java, *Transaction of the Wessex Institute*, *Advances in Fluid Mechanics VI*, pp. 21-29, WIT Press, Editors – M. Rahman and C. A. Brebbia
37. Mitra S., Kumar A., and Sinhamahapatra K.P. (2006). A Fluid-Solid Finite Element Method for the Analysis of Reactor Safety Problems, *Annals of Nuclear Energy*, 33, 8, pp. 692-699, May 2006.

38. Sinhamahapatra K.P. (2002). Unsteady aerodynamic calculations using three-dimensional Euler equations on unstructured dynamic grids, *The Aeronautical Journal of the Royal Aeronautical Society*, U.K., vol. 106, No. 1059, pp. 269-277, May 2002.
39. Sinhamahapatra K.P., Laha M.K., Singh N.S., Bandyopadhyay G.B., and Ghosh A.K. (1998). Status of CFD activities at IIT Kharagpur, *The Journal of Aeronautical Society of Indi*a, vol. 50, No. 4, pp. 229-234, Nov. 1998.
40. Sinhamahapatra K.P. and Singh N. (1997). Two-dimensional implicit flux-split steady and unsteady Euler calculations using Unstructured moving grids, *The Aeronautical Journal of the Royal Aeronautical Society*, U.K., pp. 131-139, March 1997.
41. Sinhamahapatra K.P. (1993). The Solution of the Navier-Stokes Equations for Two Dimensional Compressible Flows Using a Simple Second Order Accurate Algorithm, *The Aeronautical Journal of the Royal Aeronautical Society*, vol. 97, pp. 131-137, April 1993.
42. Singh N. and Sinhamahapatra K.P. (1992). Incompressible Potential Flow Calculation about Harmonically Oscillating Three-dimensional Configurations, *The Journal of the Aeronautical Society of India*, vol. 44, No. 3, pp. 259-264, August 1992.
43. Sinhamahapatra K.P. and Basu B.C. (1990). Viscous Corrections on Wings in Incompressible Flow, *The Aeronautical Journal of the Royal Aeronautical Society*, Vol. 94, No. 932, pp. 67-72, February 1990.
44. Sinhamahapatra K.P., Singh N. and Basu B.C. (1990). Incompressible Viscous Flow about Aircraft Configurations, *Journal of Aircraft*, Vol. 27, No. 2, pp. 187-190, February 1990.
45. Sinhamahapatra K.P. and Basu B.C. (1990). Multi-Element Aerofoils in Viscous Flow, *AIAA Journal*, Vol. 28, No. 5, pp. 769-770, May 1990.
46. Sinhamahapatra K.P. and Basu B.C. (1990). Lift and Pitching Moment Measurement on a Swept Tapered Wing under Oscillatory Vertical Gusts, *The Journal of the Aeronautical Society of India*, Vol. 42, No. 2, pp. 181-185, May 1990.

47. Bej Nilotpala, Sinhamahapatra K.P., 2015, CFD study on the effects of viscous shear in a hot cascade Ranque-Hilsch vortex tube, CEC/ICMC-2015, June 28 – July 2, Tucson, Arizona, USA
48. D. Petkow, A. R. Durairaj, G. Herdrich, K. P. Sinhamahapatra, 2015, Noise Reduction Scheme for Probabilistic Radiation Modelling in DSMC, 8th European Symposium on Aerothermodynamics for Space Vehicles, Lisbon, Portugal, 2-6 March, 2015
49. Bej Nilotpala, Sinhamahapatra K.P., 2014, Thermodynamic study on a counter flow Ranque-Hilsch vortex tube using turbulence model, Proceedings of ICTACEM 2014, Paper No. 462, IIT Kharagpur, India, 29-31 December.
50. Bej Nilotpala, Sinhamahapatra K.P., 2013, CFD study of the effects of nozzles number on turbulent flow and energy separation in a Ranque Hilsch vortex tube, ICME2013, 17-21 December, 2013, Universiti Tun Hussein Onn Malaysia, Putrajaya, Malaysia
51. Bej Nilotpala, Sinhamahapatra K.P., 2013, Exergy Analysis and CFD Study of Counter Flow Ranque-Hilsch Vortex Tube Using Turbulence Models, 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference 2013, IIT Kharagpur, India
52. Poonkodi S., Sinhamahapatra K.P., 2013, Qualitative Analysis of Transonic Flow Past Open Cavity Using Conservation Element and Solution Element Method, 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference 2013, IIT Kharagpur, India

53. Das K.K., Sinhamahapatra K.P., Ghosh A.K., 2013 ," Experimental and Numerical Simulation of Downburst using Impinging Jet Model" Proceedings of the 12th Americas Conference on Wind Engineering", Seattle, USA, June 16-19, 2013.
54. Sinhamahapatra K. P., 2013, Simulation of dry downbursts, International Workshop on 'Wind Engineering – Prospects and Challenges', February 23, Guwahati (**Invited Paper**)
55. Das K. K., Sinhamahapatra K. P., 2013, Development of a 3D numerical code for the simulation of an isolated downburst using rotating impinging jet model, International Workshop on 'Wind Engineering – Prospects and Challenges', February 23, Guwahati, pp. 13 – 22.
56. Poonkodi S., Sinhamahapatra K. P., 2013, An improved algorithm for interprocessor communication in distributed parallel computing, International Conference on Meta Computing, ICOMEC 2013, Bhubaneswar, pp. 0514-1 – 6.
57. Poonkodi S., Srinivasan G., Sinhamahapatra K. P., 2013, Numerical Investigation of Three Dimensional Cavity Flow, with a Curved Base, using Space-Time Conservation and Solution Element Method, WORLD CONGRSS on Frontiers of Mechanical, Aeronautical and Automobile Engineering (WCFMAAE-2013), February 2-3, 2013, Delhi, India
58. Srinivasan G., Sinhamahapatra K. P., Das S., 2012, Flow field studies over V-shaped rear face cavities at supersonic speed, 14th CFD Symposium, 11-12 August, Bangalore, pp. 36 – 39.
59. Bej Nilotpala, Sinhamahapatra K. P., 2012, CFD analysis of the energy separation in a Ranque-Hilsch vortex tube (RHVT), 14th CFD Symposium, 11-12 August, IISc Bangalore, pp. 122 – 124.
60. Dutta T., Sinhamahapatra K. P. and Bandyopadhyay S. S., 2011, Experimental study on the effect of the location of inlet nozzles with respect to cold orifice on temperature separation in Ranque – Hilsch vortex tube, 64th Annual Session of the Indian Institute of Chemical Engineers, CHEMCON 2011, Bangalore, December 27-29, 2011
61. Aditya B., Vasu, Sinhamahapatra K. P., 2011, Control surface specific CFD analysis of a multi-element airfoil for flying wing, 25th National Convention of Aerospace Engineers (NCAE2011), BIT Mesra, November 04 – 05, 2011
62. Dutta, T., Sinhamahapatra, K. P., and Bandyopadhyay S.S., CFD Analysis of Energy and Phase Separation in a Ranque-Hilsch Vortex Tube at Cryogenic Temperature, GLS 10, Braga, Portugal, June 2011.
63. Poonkodi S, Bej Nilotpala, Datta Abanti and Sinhamahapatra K. P., 2011, Numerical Simulation of Supersonic Cavity Flow using Space-Time Conservation and Solution Element Method, 13th Annual CFD Symposium, 11-12 August, Bangalore
64. Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2011, Development of numerical code for the simulation of translational downburst, Proceedings of International Conference on Wind Engineering 2011, 10-15 July, Amsterdam, The Netherlands.
65. Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2011, Development of a numerical code to estimate the microburst wind profile near a prismatic building, Proceedings of the 5th International symposium on wind effects on buildings and urban environments, ISWE, 7-8th March 2011, Tokyo, Japan.
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69. Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010, Simulation of thunderstorm downburst, Proceedings of the 17AFMC, 5-7th December 2010, New Zealand.
70. Das, K. K., Ghosh, A. K. and Sinhamahapatra K. P., 2010, Development of a numerical code for 3D LES simulation of Thunderstorm Downburst, 5th International Symposium on Computational Wind Engineering, Chapel Hill, North Carolina, USA, May 23-27, 2010, Paper Serial 84
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76. Upadhyay, P. P. and Sinhamahapatra, K. P., 2009, Numerical simulation of hot and cold supersonic jets using k-ε turbulence model, 22nd National Conference of Fluid Mechanics and Fluid Power, Pune.
77. Dash, K. K., Ghosh, A. K. and Sinhamahapatra K. P., 2008, Simulation of stationary dry thunderstorm microburst, 10th AeSI CFD Symposium 11-12 August, NAL, Bangalore.
78. Upadhyay, P. P. and Sinhamahapatra, K. P., 2008, Numerical simulation of axisymmetric cold jet aerodynamics using k-ε turbulence model, 22nd National Convention of Aerospace Engineers, BIT Ranchi, November 27-29, 2008, 6.1-6.7
79. Singha, S. and Sinhamahapatra, K. P., 2008, Flow Over Two Side-by-Side Circular Cylinders at a Medium Gap, 22nd National Convention of Aerospace Engineers, BIT Ranchi, November 27-29, 2008, 7.1-7.7
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