

Curriculum Vitae
(As on 19.8.18)

Name: Dr. P.S. Ghoshdastidar

Sex: Male

Date of Birth: June 30, 1956

Marital Status: Married

Number of Children: One

Present Employer: Indian Institute of Technology Kanpur

Designation: Professor (Higher Academic Grade (HAG))

Mailing Address: Department of Mechanical Engineering
Indian Institute of Technology Kanpur
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INDIA

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EDUCATIONAL QUALIFICATIONS

University	Degree	Year of Graduation
1. Jadavpur University, Calcutta, INDIA	Bachelor of Mechanical Engineering (B.M.E Hons)	1978
2. University of South Carolina Columbia, S.C., U.S.A.	Master of Science (M.S.)	1981
3. University of South Carolina Columbia, S.C., U.S.A.	Doctor of Philosophy (Ph.D)	1984

PROFESSIONAL EXPERIENCE

Employer	Designation	Period
1. Philips India Ltd, Calcutta	Management Trainee	Oct'78-Sept'79
2. Indian Institute of Technology Kanpur	Visiting Faculty	July 26'84-May 23'85
3. Indian Institute of Technology Kanpur	Lecturer	May 24'85-Nov 24'86
4. Indian Institute of Technology Kanpur	Assistant Professor	Nov 25'86-May 10'94
5. Indian Institute of Technology Kanpur	Associate Professor	May 11, 1994-12.09.01
6. Universität Hannover, Germany	Guest Professor	Sept 1' 00-Aug 31'01 (On long leave from IITK)
7. Indian Institute of Technology Kanpur	Professor	Sept 13' 01- July 31'14
8. Indian Institute of Technology Kanpur	Professor (HAG)	Aug 01' 14 - Present

TEACHING/RESEARCH/INDUSTRIAL EXPERIENCE

Teaching: 34 years

Research: 34 years

Industrial: 1 year

RESEARCH INTERESTS: Computational Heat Transfer, Non-Newtonian Fluid Flow and Heat Transfer, Boiling and Two-Phase Flow, Nanofluids, Microscale Heat Transfer

Recent Areas of Research:

1. Numerical Modelling of Pool Boiling by the Coupled Map Lattice Method
2. Simulation of Heat Transfer in Rotary Kilns
3. Electronic and Optonic Cooling
4. Heat Transfer in Nanofluids

EXPERIENCE IN GUIDING POSTGRADUATE RESEARCH

Number of Doctoral (Ph.D) Thesis (Completed): 6

Number of Doctoral (Ph.D) Thesis (in-Progress): 4

Number of Master's Thesis (Completed): 65

Number of Master's Thesis (in-Progress): 4

EXPERIENCE IN GUIDING FINAL YEAR UG PROJECTS

Number of UG Projects (Completed): 6

EXPERIENCE IN GUIDING SURGE (IITK) PROJECTS

Number of SURGE Projects (Completed): 3

SPONSORED RESEARCH PROJECTS (Completed)

1. Title: NUMERICAL SOLUTION OF CONVECTION-DIFFUSION PROBLEMS WITHOUT USING UPWIND SCHEME

Investigators: Dr.P.S.Ghoshdastidar (PI) and Dr.K.Muralidhar (CI)

Sponsor: Department of Science and Technology
Govt. of India

Duration: September, 1990-April, 1994

Amount of Grant: Rs.2, 95,000/-

2. Title: NUMERICAL SIMULATION OF FLUID FLOW AND HEAT TRANSFER IN SINGLE-SCREW EXTRUDERS WITH APPLICATIONS TO POLYMER AND FOOD PROCESSING

Investigators: Dr.P.S.Ghoshdastidar (PI) and Dr.R.P.Chhabra (CI)

Sponsor: Council of Scientific and Industrial Research
Govt. of India

Duration: April, 1993-April, 1996

Amount of Grant: Rs.2, 20,000/-

3. Title: **MODERNIZATION OF HEAT TRANSFER LABORATORY**

Investigator: Dr.P.S.Ghoshdastidar (PI)

Sponsor: Ministry of Human Resource Development
Govt. of India

Duration: 1998-1999

Amount of Grant: Rs.2, 80,000/-

4. Title: **COMPUTER SIMULATION OF HEAT TRANSFER WITH AND WITHOUT CHEMICAL REACTIONS IN ROTARY KILNS: APPLICATIONS TO DRYING AND CEMENT PRODUCTION**

Investigators: Dr.P.S.Ghoshdastidar (PI) and Dr.R.P.Chhabra (CI)

Sponsor: Council of Scientific and Industrial Research
Govt. of India

Duration: August, 1997-August, 2000

Amount of Grant: Rs.5, 25,000/-

5. Title: **EXPERIMENTAL AND NUMERICAL INVESTIGATIONS OF PISTON COOLING BY OIL JET IMPINGEMENT**

Investigators: Dr.A.K.Agarwal (PI) and Dr.P.S.Ghoshdastidar (CI)

Sponsor: Council of Scientific and Industrial Research
Govt. of India

Duration: August, 2005- August, 2007

Amount of Grant: Rs.5, 25, 000/-

6. Title: **Rotational-Magnetorheological Abrasive Flow Finishing (R-MRAFF)**

Investigators: Dr.V.K.Jain (PI) and Dr.P.S.Ghoshdastidar (CI)

Sponsor: Department of Science and Technology, Govt. of India

Duration: January, 2009-January, 2012

Amount of grant: Rs.30, 00, 000/- (approx.)

7. Title: **Measurements and Modeling of Melt Temperature in Steelmaking**

Investigators: Dr.Dipak Mazumdar (PI) and Dr.P.S.Ghoshdastidar (CI)

Sponsor: Department of Science and Technology, Govt. of India

Duration: February, 2009-June, 2012

Amount of Grant: Rs.27, 74, 000/-

CONSULTANCY PROJECTS (Completed)

1. Title: **Feasibility Study of Extracting Cold and Useful Energy from Compressed LPG for Automobile Applications**

Investigators: Dr. Sameer Khandekar (PI) and Dr.P.S.Ghoshdastidar (CI)

Sponsor: Mrs. Suparna Sarkar, Lucknow (Project No. C-SUPARN-ME-20090243)

Duration: 1.11.2009-28.2.2010

Amount of Grant: Rs.60,000/-

2. Title: **Optimal Design of a Heat Sink for an LED Luminaire**

Investigator: Dr.P.S.Ghoshdastidar (PI)

Sponsor: Philips Lighting India, Philips Electronics India Ltd, Noida, U.P.201301

Duration: 26.3.2012-5.7.2012

Amount of Grant: Rs.1,37,875/-

ADMINISTRATIVE EXPERIENCE

1. Convener, Departmental Postgraduate Admissions and Studies (1994-1996)
2. In-Charge, Departmental Heat Transfer Laboratory (December, 1995-January, 1999; July, 2002-July, 2005)
3. Convener, Departmental Library (1986-1988)
4. Cultural Counsellor (1987-1988)
5. Warden, Hall-V (1987-1988)
6. Convener, Fluids and Thermal Sciences Group (1989-1994, 2001-2003)
7. JEE and GATE Centre Representative and Examiner
8. Faculty Counsellor, Student Counselling Service

9. Member, Senate Elections Committee (Nov, 2001-Sept, 2002)
10. Warden-in-Charge, Hall-III (July 1, 2003- August 31, 2008)
11. Departmental In-Charge, Placement & Training (August 1, 2003-July 31, 2004)
12. Member, Senate Scholarship and Prizes Committee (October 1, 2004-September 30, 2005, October 1, 2010-September 30, 2011)
13. Acting Head, Dept. of Mechanical Engineering, IIT Kanpur (May 11-June 17, 2005, June 6-11, 2012, June 15-30, 2012, June 1-21, 2013, July 4-5, 2013)
14. Senate Nominee, Library Committee (2005-06, 2006-07)
15. Member, Council of Wardens (2004-05, 2006-07)
16. Convener, Departmental Undergraduate Committee (May 1, 2006- August 31, 2008)
17. Convener, Institute Core Course Time-Table Committee (9.2.07-8.2.10)
18. Member, Departmental Faculty Advisory Committee (DFAC) (July 1, 2007-December 31, 2009, January 1, 2013-December 31, 2014)
19. Senate Nominee, Senate Students Affairs Committee (SSAC) (October 1, 2007-September 30, 2008)
20. Chairman, Senate Undergraduate Committee (SUGC) (October 1, 2007-September 30, 2008)
21. Convener, Departmental B.Tech Project Evaluation Committee (2009-10)
22. Member, Senate UG Manual Committee (2011-2013)
23. Chairman, House Allotment Committee-I (9.9.11-8.9.13)
24. Chief Vigilance Officer (1.1.15- 11.9.16)
25. Chairman, JEE (Advanced) 2017, IIT Kanpur (1.9.16 - 31.7.17)

TEACHING AT IIT KANPUR

COURSES

Undergraduate

1. Heat Transfer (ME 342)
2. Heat and Mass Transfer (ME 341)
3. Fluid Mechanics and Rate Processes (ESc207(old), ESO212)
4. Fluid Mechanics (ME 331)
5. B.Tech Project I (ME451)
6. B.Tech Project II (ME452)

Postgraduate

1. Conduction (ME 645(old))
2. Conduction and Radiation (ME 641)
3. Convective Heat and Mass Transfer (ME 642)
4. Numerical Fluid Flow and Heat Transfer (ME 630)
5. Viscous Flow Theory (ME 631)
6. Combustion and Environment (ME 643)
7. Programming and Numerical Analysis (ME 685)
8. Computer-Aided Design of Thermal Systems (ME 648)
9. Boiling and Condensation (ME 742)
10. Communication Skills for Engineers (ME600)

LABS

1. Heat Transfer
2. Fluid Mechanics
3. Energy Conversion (I.C.Engines and Turbomachinery)
4. ME100 (Introduction to Mechanical Engineering)

TUTORIALS

1. Fluid Mechanics and Rate Processes (ESc 207(old))
2. Graphics (TA 101)
3. Thermodynamics (ESO 102 (old), ESO201A)
4. Manufacturing Processes (TA 201, TA 203(old))
5. Programming and Numerical Analysis (ESc 101(old))
6. Mechanical Design-I (ME 353(old))
7. Computational Methods in Engineering (ESO 218)
8. Engineering Design and Graphics (ME 251)

TEACHING AT UNIVERSITÄT HANNOVER, GERMANY

1. Numerical Fluid Flow and Heat Transfer (Winter Semester, 2000/2001)
2. Sieden und Kondensieren (Boiling and Condensation)
(Summer Semester, 2001)

LIST OF PUBLICATIONS

BOOKS

Published

1. Title: **Computer Simulation of Flow and Heat Transfer**
Author: **P.S. Ghoshdastidar**
Year of Publication: **1998**
Number of Pages: **295**
Publisher: **Tata McGraw-Hill Publishing Co. Ltd., New Delhi**
(A Division of the McGraw-Hill Companies)
Aimed at: **Postgraduate and Advanced Undergraduate Students**
Versions: **Softcover with floppy diskette (ISBN 0-07-463151-9)**
Hardcover without floppy diskette (ISBN 0-07-463150-0)
2. Title: **Heat Transfer (includes a CD-ROM)**
Author: **P.S. Ghoshdastidar**
Year of Publication: **2004 (Reprints: 2005/2007/2008/2009/2010/2011, ISBN 0-19-567050-7)**
Number of pages: **656**
Publisher: **Oxford University Press**

Aimed at: **Primarily Undergraduate but also Postgraduate Students**

3. Title: **Heat Transfer (Second Edition, Enlarged, Reformatted, includes a CD-ROM)**

Author: **P.S. Ghoshdastidar**

Year of Publication: **2012 (ISBN 0-19-807997-4) Reprints: 2013/2014/2015**

Number of Pages: **642**

Publisher: **Oxford University Press**

Aimed at: **Primarily Undergraduate but also Postgraduate Students**

4. Title: **Computational Fluid Dynamics and Heat Transfer**

Author: **P.S. Ghoshdastidar**

Year of Publication: **2017 (ISBN: 9788131533079)**

Number of Pages: **296**

Publisher: **Cengage Learning India Pvt. Ltd., New Delhi**

Aimed at: **Postgraduate and Advanced Undergraduate Students**

BOOK CHAPTERS

1. Title: ***Heat Transfer in Rotary Kilns*. Published in CRC Handbook of Thermal Engineering, Second Edition (Editor: R.P. Chhabra)**

Chapter 4, pp. 1334-1347

Publisher: **CRC Press, Boca Raton, Florida, USA**

Year of Publication: **2018**

SOLUTIONS MANUAL

1. Title: **Solutions Manual of HEAT TRANSFER**

Year of Publication: **2005**

Publisher: **Oxford University Press**

Aimed at: **Teachers using the book**

Available in CD

2. Title: **Solutions Manual of HEAT TRANSFER (Second Edition)**

Year of Publication: **2012**

Publisher: **Oxford University Press**

Aimed at: **Teachers using the book**

Available in CD

3. Title: **Solutions Manual of COMPUTATIONAL FLUID DYNAMICS AND HEAT TRANSFER**

Year of Publication: **2017**

Publisher: **Cengage Learning India Pvt. Ltd., New Delhi**

Aimed at: **Teachers using the book**

Available in Soft Copy

MONOGRAPHS

1. Title: **Nanofinishing Process using Magnetorheological Polishing Medium**
Author(s): **Manas Das, V.K.Jain and P.S.Ghoshdastidar**
Year of Publication: **2012 (ISBN 978-3-8484-9496-5)**
Number of Pages: **185**
Publisher: **Lap Lambert Academic Publishing GmbH & Co. KG, Germany**

REFEREED JOURNALS

1. P.S.Ghoshdastidar and A.Mukhopadhyay, "Transient Heat Transfer from a Straight Composite Fin: A Numerical Solution by ADI", **International Communications in Heat and Mass Transfer**, Vol.16, No.2, pp.257-265, 1989.
2. P.S.Ghoshdastidar and Aniruddha Mukhopadhyay, "An Application of ADI Scheme to the Numerical Solution of Transient Heat Conduction Problem in a Straight Composite Fin", **Journal of Energy, Heat and Mass Transfer**, Vol.11, pp.7-13, 1989.
3. P.S.Ghoshdastidar and Y.S.T.Raju, "Transient Combined Mixed Convection and Radiation from a Vertical Aluminium Fin", **Journal of Energy, Heat and Mass Transfer**, Vol.14, pp.45-53, 1992.
4. K.M.Pillai, K.Muralidhar and P.S.Ghoshdastidar, "Numerical Modelling of Enhanced Oil Recovery Using Water Injection Method", **Journal of the Institution of Engineers (India), Chemical Engineering Division**, Vol.75, pp.17-24, 1994.
5. Debashish Mishra, K.Muralidhar and P.S.Ghoshdastidar, "Computation of Flow and Heat Transfer Around a Vertical Discrete Protruding Heater Using an Operator-Splitting Algorithm", **Numerical Heat Transfer, Part A: Applications**, Vol.28, No.1, pp.103-119, 1995.
6. Manab K.Das and P.S.Ghoshdastidar, "A Comparative Study of Quasi Two-Dimensional and Fully Two-Dimensional Computer Models of Flow and Conjugate Heat Transfer in the Metering Section of a Single-Screw Plasticating Extruder", **Journal of Energy, Heat and Mass Transfer**, Vol.17, pp.33-42, 1995.
7. P.S.Ghoshdastidar and V.K.Anandan Unni, "Heat Transfer in the Non-Reacting Zone of a Cement Rotary Kiln", **ASME Journal of Engineering for Industry**, Vol.118, No.1, pp.169-172, 1996.
8. R.Bhattacharya, V.K.Jain and P.S.Ghoshdastidar, "Numerical Simulation of Thermal Erosion in EDM Process", **Journal of the Institution of Engineers (India), Production Engineering Division**, Vol.77, pp.13-19, 1996.

9. D.R.Samuel Jones, P.S.Ghoshdastidar, M.K.Muju and Manab K.Das, "The Design of a Large Single-Screw Melt Extruder Using a Quasi Two-Dimensional Conducting Screw Computer Model", **ASME Journal of Manufacturing Science and Engineering**, Vol.119, No.4(A),pp.644-648, 1997.
10. Basudeb Munshi, Rajendra P.Chhabra and Partha Sarathi Ghoshdastidar, "A Numerical Study of Steady Incompressible Newtonian Fluid Flow Over a Disk at Moderate Reynolds Numbers", **Canadian Journal of Chemical Engineering**, Vol.77, No.1, pp.113-118, 1999.
11. P.S.Ghoshdastidar, Gagan Ghai and R.P.Chhabra, "Computer Simulation of Three-Dimensional Transport During Moistened Defatted Soy Flour Processing in the Metering Section of a Single-Screw Extruder", **Journal of Mechanical Engineering Science, Proc. IMechE Part C**, Vol. 214, pp.335-349, 2000.
12. Iftakhar Alam and P.S.Ghoshdastidar, "Optimization of Laminar Heat Transfer in Circular Tubes with Internal Longitudinal Fins Having Tapered Lateral Profiles", **Journal of Energy, Heat and Mass Transfer**, Vol.22, pp.129-140, 2000. Published in 2002.
13. P.S.Ghoshdastidar, G. Bhargava and R.P.Chhabra, "Computer Simulation of Heat Transfer during Drying and Preheating of Wet Iron Ore in a Rotary Kiln", **Drying Technology**, Vol.20, No. 1, pp.19-38, 2002.
14. Amit Kumar and P.S.Ghoshdastidar, "Numerical Simulation of Polymer Flow into a Cylindrical Cavity", **ASME Journal of Fluids Engineering**, Vol.124, pp.251-262, 2002.
15. Iftakhar Alam and P.S.Ghoshdastidar, "A Study of Heat Transfer Effectiveness of Circular Tubes with Internal Longitudinal Fins Having Tapered Lateral Profiles", **International Journal of Heat and Mass Transfer**, Vol.45/6, pp.1371-1376, 2002.
16. Manab K. Das and P.S.Ghoshdastidar, "A Quasi 3D Computer Model of the Thermal Transport Processes in the Metering Section of a Single-Screw Plasticating Extruder", **Journal of Energy, Heat and Mass Transfer**, Vol.22, pp.223-236, 2000. Published in 2002.
17. Iftakhar Alam and P.S.Ghoshdastidar, "Numerical Simulation of Laminar Heat Transfer in Circular Tubes with Internal Longitudinal Fins having Tapered Lateral Profiles", **Journal of the Institution of Engineers(India), Mechanical Engineering Division**, Vol.82, pp.143-150, 2002.

18. Manab K.Das and P.S.Ghoshdastidar, "A Quasi Three-Dimensional Conjugate Heat Transfer Model for the Metering Section of A Single-Screw Plasticating Extruder", **Journal of Materials Processing Technology**, Vol. 120/1-3, pp.397-411, 2002.
19. Amit Kumar, P.S.Ghoshdastidar and M.K.Muju, "Computer Simulation of Transport Processes during Injection Mold-Filling and Optimization of Molding Conditions", **Journal of Materials Processing Technology**, Vol.120/1-3, pp.438-449, 2002.
20. P.S.Ghoshdastidar, S. Kabelac and A. Mohanty, "Numerical Modelling of Atmospheric Pool Boiling by the Coupled Map Lattice Method", **Journal of Mechanical Engineering Science, Proceedings of the Institution of Mechanical Engineers Part C(U.K.)**, Vol. 218, pp.195-205, 2004.
21. A. Gupta and P.S.Ghoshdastidar, "A Three-dimensional Numerical Modeling of Atmospheric Pool Boiling by the Coupled Map Lattice Method", **ASME Journal of Heat Transfer**, Vol. 128, No.11, pp.1149-1158, 2006.
22. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Analysis of Magnetoreheological Abrasive Flow Finishing (MRAFF) Process", **International Journal of Advanced Manufacturing Technology**, Springer-Verlag, London, Published on-line on June 21, 2007.
23. P.S.Ghoshdastidar and Indrajit Chakraborty, "A Coupled Map Lattice Model of Flow Boiling in a Horizontal Tube", **ASME Journal of Heat Transfer**, Vol.129, No. 12, pp.1737-1741, 2007.
24. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Fluid Flow Analysis of Magnetorheological Abrasive Flow Finishing (MRAFF) Process", **International Journal of Machine Tools and Manufacture**, Vol. 48, pp.415-426, 2008.
25. I.Chakraborty, B.Ray, G.Biswas, F.Durst, A.Sharma, P.S.Ghoshdastidar, "Computational Investigation on Bubble Detachment from Submerged Orifice in Quiescent Liquid under Normal and Reduced Gravity", **Physics of Fluids**, Vol.21, p. 062103-1-17, 2009.
26. P.S.Ghoshdastidar and Ankit Agarwal, "Simulation and Optimization of Drying of Wood Chips with Superheated Steam in a Rotary Kiln", **ASME Journal of Thermal Science and Engineering Applications**, Vol.1, No.2, p.024501, 2009.
27. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Nano-finishing of Stainless-Steel Tubes Using R-MRAFF Process", **Machining Science and Technology**, Vol.14, No.3, pp.365-389, 2010.

28. M.Das, A.Sidpara, V.K.Jain, P.S.Ghoshdastidar, "Parametric Analysis of MR Polishing Fluid using Statistical Technique", **Int. J. Precision Technology**, Vol. 2, No.1, pp.51-63, 2011.
29. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Investigations into Out-of-Roundness of the Internal Surfaces of Stainless Steel Tubes Finished by R-MRAFF Process", **Journal of Materials and Manufacturing Processes**, Vol.26, pp.1073-1084, 2011.
30. I. Chakraborty, G.Biswas, P.S.Ghoshdastidar, "Bubble Generation in Quiescent and Co-flowing Liquids", **International Journal of Heat and Mass Transfer**, Vol.54, pp. 4673-4688, 2011.
31. Koustubh Sinhal, P.S.Ghoshdastidar and Bhaskar Dasgupta, "Computer Simulation of Drying of Food Products with Superheated Steam in a Rotary Kiln", **ASME Journal of Thermal Science and Engineering Applications**, Vol.4, p.011009, 2012.
32. Manas Das, Vijay K Jain and Partha S Ghoshdastidar, "Computational Fluid Dynamics Simulation and Experimental Investigations into the Magnetic Field-Assisted Nano-finishing Process", **Proc. IMechE Part B, Journal of Engineering Manufacture**, Vol. 226, No.7, pp.1143-1158, 2012.
33. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Nanofinishing of Flat Workpieces using Rotational-Magnetorheological Abrasive Flow Finishing (R-MRAFF) Process", **International Journal of Advanced Manufacturing Technology**, Vol. 62, pp. 405-420, 2012.
34. I. Chakraborty, G. Biswas, P.S.Ghoshdastidar, "A Coupled Level-Set and Volume-of-Fluid Method for the Buoyant Rise of Gas Bubbles in Liquids", **International Journal of Heat and Mass Transfer**, Vol. 58, pp. 240-259, 2013.
35. P. Sharma, R. Sarma, L. Chandra, R. Shekhar and P.S. Ghoshdastidar, "On the Design and Evaluation of Open Volumetric Air Receiver for Process Heat Applications", **Energy Procedia**, Vol. 57, pp. 2994-3003, 2014.
36. Manas Das, V. K. Jain and P.S.Ghoshdastidar, "Estimation of Magnetic and Rheological Properties of MR Polishing Fluid and their Effects on Magnetic Field Assisted Finishing Process", **International Journal of Precision Technology**, Vol. 4, Nos. 3-4, pp. 247-267, 2014.
37. Manas Das, V.K. Jain and P.S. Ghoshdastidar, "A 2D CFD simulation of MR Polishing Medium in Magnetic Field-Assisted Finishing Process using Electromagnet", **International Journal of Advanced Manufacturing Technology**, Vol. 76, Nos. 1-4, pp. 173-187, 2014.

38. Sayan Sadhu and P.S.Ghoshdastidar, "Heat Flux Controlled Pool Boiling of Zirconia-Water and Silver-Water Nanofluids on a Flat Plate: A Coupled Map Lattice Simulation", **ASME Journal of Heat Transfer**, Vol. 137, p.021503, 2015.
39. P. Sharma, R. Sarma, L. Chandra, R. Shekhar and P.S. Ghoshdastidar, "Solar Tower based Aluminum Heat Treatment System: Part I. Design and Evaluation of an Open Volumetric Air Receiver", **Solar Energy**, Vol. 111, pp. 135-150, 2015.
40. Piyush Sharma, Rakesh Sarma, Laltu Chandra, Rajiv Shekhar and P.S. Ghoshdastidar, "On the Design and Evaluation of Open Volumetric Air Receiver for Process Heat Applications", **Solar Energy**, Vol. 121, pp. 41-55, 2015.
41. Indrajit Chakraborty, Gautam Biswas, Satyamurthy Polepalle and Partha S. Ghoshdastidar, "Bubble Formation and Dynamics in a Quiescent High-Density Liquid", **AIChE Journal**, Vol. 61, No. 11, pp. 3996-4012, 2015.
42. Ashish Agrawal and P.S. Ghoshdastidar, "Numerical Simulation of Heat Transfer during Production of Rutile Titanium Dioxide in a Rotary Kiln", **International Journal of Heat and Mass Transfer**, Vol. 106, pp. 263-279, 2017.
43. Arijit Mahapatra and P.S. Ghoshdastidar, "A Computational Study of Mixed Convection Heat Transfer from a Continuously Moving Isothermal Vertical Plate to Alumina-Water Nanofluid as in Hot Extrusion", **ASME Journal of Manufacturing Science and Engineering**, Vol.139, p.114501, 2017.
44. Aditi Sengupta and P.S. Ghoshdastidar, "Heat Transfer Enhancement in Ferrofluids Flow in Micro and Macro Parallel Plate Channels: A Comparative Numerical Study", **ASME Journal of Thermal Science and Engineering Applications**, Vol. 10, p. 021012, 2018. **Published online on 20.12.17.**
45. Ashish Agrawal and P.S. Ghoshdastidar, "Computer Simulation of Heat Transfer in a Rotary Lime Kiln", **ASME Journal of Thermal Science and Engineering Applications**, Vol. 10, p. 031008, 2018. **Published online on 28.3.18.**
46. Dileep V. Nair and P.S. Ghoshdastidar, "A Comparative Study of 2-D and 3-D Conjugate Natural Convection from a Vertical Rectangular Fin Array with Multilayered Base Subjected to Distributed High Heat Flux", **International Journal of Heat and Mass Transfer**, Vol. 121, pp. 1316-1334, 2018. **Published online on 7.3.18.**

REFEREED CONFERENCE PROCEEDINGS

(Numbering continued from Journal list)

47. P.S.Ghoshdastidar, C.A.Rhodes and M.S.Khader, "Transient Laminar Mixed Convection Heat Transfer from a Moving Vertical Plate", **21st ASME National Heat Transfer Conference, Seattle**, July 24-27, 1983. ASME Paper No.83-HT-74.
48. P.S.Ghoshdastidar, C.A.Rhodes and D.I.Orloff, "Heat Transfer in a Rotary Kiln During Incineration of Solid Waste", **23rd ASME National Heat Transfer Conference, Denver**, August 5-8, 1985. ASME Paper No. 85-HT-86.
49. P.S.Ghoshdastidar and Aniruddha Mukhopadhyay, "An Application of ADI Scheme to the Numerical Solution of Transient Heat Conduction Problem in a Straight Composite Fin", **Proc. 9th National Heat and Mass Transfer Conference, IISc Bangalore**, December 8-10, 1987. Paper No.HMT-43-87.
50. P.S.Ghoshdastidar and A.Bandyopadhyay, "Conjugate Heat Transfer in the Laminar Flow of High Prandtl Number Fluids in a Circular Tube Subjected to Non-Uniform Circumferential Radiation Heat Flux from a Large Heated Wall", **Proc. 1988 ASME National Heat Transfer Conference, Houston**, July 24-27, Vol.1, HTD-Vol.96, pp.153-161, 1988.
51. P.S.Ghoshdastidar and V.K.Anandan Unni, "Heat Transfer in the Non-Reacting Zone of a Cement Rotary Kiln", **Proc. 1989 ASME National Heat Transfer Conference, Philadelphia**, August 6-9, HTD-Vol.106, pp.113-122, 1989.
52. P.S.Ghoshdastidar and Y.S.T.Raju, "Transient Combined Mixed Convection and Radiation from a Straight Vertical Fin", **Proc. 1989 ASME National Heat Transfer Conference, Philadelphia**, August 6-9, HTD-Vol.110, pp.121-128, 1989.
53. S.Mondal, T.Sundararajan and P.S.Ghoshdastidar, "A Coupled Analysis of Thermal and Electromagnetic Phenomena During Hyperthermia in Biological Tissues", **Proc. Symp.on Hyperthermia, ASME Winter Annual Meeting, San Francisco**, December 10-15, 1989.
54. Manab K.Das and P.S.Ghoshdastidar, "Numerical Simulation of Fluid Flow and Conjugate Heat Transfer in a Single-Screw Plasticating Extruder", **Proc. 7th International Conference on Numerical Methods in Thermal Problems, Stanford, U.S.A.**, July 8-12, pp.1451-1465, 1991.
55. K.Muralidhar, K.M.Pillai and P.S.Ghoshdastidar, "Operator-Splitting Algorithm for Advection-Diffusion Problems", **Proc. 11th National Heat and Mass Transfer Conference, IIT Madras**, December 21-23, pp.161-166, 1991.

56. Manab K.Das and P.S.Ghoshdastidar, "A Two-Dimensional Computer Model of Fluid Flow and Conjugate Heat Transfer in a Single-Screw Plasticating Extruder", **Proc. 1992 ASME National Heat Transfer Conference, August 9-12, San Diego, California**, HTD-Vol.194, pp.25-36, 1992.
57. Manab K.Das and P.S.Ghoshdastidar, "A Quasi Three-Dimensional Computer Model of Flow and Conjugate Heat Transfer in the Metering Section of a Single-Screw Plasticating Extruder", **Proc.1994 ASME/AIAA Thermophysics and Heat Transfer Conference, Colorado Springs, Colorado**, June 20-23, HTD-Vol.275, pp.123-133, 1994.
58. Manab K.Das and P.S.Ghoshdastidar, "Quasi Two-Dimensional and Fully Two-Dimensional Computer Models of Flow and Conjugate Heat Transfer in the Metering Section of a Single-Screw Plasticating Extruder: A Comparative Study", **Proc.10th International Heat Transfer Conference, Brighton, U.K.**, August 14-18, Vol.2, pp.331-336, 1994.
59. P.S.Ghoshdastidar, D.R.Samuel Jones, M.K.Muju and Manab K.Das, "The Design of a Large Single-Screw Melt Extruder Using a Quasi Two-Dimensional Conducting Screw Computer Model", **Proc. ASME International Mechanical Engineering Congress and Exposition, Chicago**, November 6-11, 1994.
60. P.S.Ghoshdastidar, Gagan Ghai and R.P.Chhabra, "Computer Simulation of 3-D Transport During Polymer and Food Processing in the Metering Section of Single-Screw Extruders", **Proc. 1997 ASME National Heat Transfer Conference, Baltimore, Maryland**, August 8-12, HTD-Vol.339, pp.171-215, 1997.
61. P.S.Ghoshdastidar and Basant Kumar Ray, "Inverse Determination of Thermal Conductivity in Two-Dimensional Domains Using Finite-Difference Technique", **Proc. 11th International Heat Transfer Conference, Kyongju, Korea**, August 23-28, Vol.7, pp.15-20, 1998.
62. Amit Kumar and P.S.Ghoshdastidar, "Numerical Simulation of Transport Processes in Injection Mold-Filling during Production of a Cylindrical Object under Isothermal and Non-Isothermal Conditions", **Proc. 33rd ASME National Heat Transfer Conference, Albuquerque, New Mexico**, August 15-17, 1999.
63. Amit Kumar, P.S.Ghoshdastidar and M.K.Muju, "Numerical Simulation of Transport Processes During Injection Mold-Filling and Optimization of Molding Conditions", **Proc. 4th ISHMT/ASME and 15th National Heat and Mass Transfer Conference, Pune**, January 12-14, 2000, pp.1115-1120, 2000.

64. Iftakhar Alam and P.S.Ghoshdastidar, “Numerical Simulation and Optimization Study of Laminar Heat Transfer in Circular Tubes with Internal Longitudinal Fins Having Tapered Lateral Profiles”, **Proc. 34th ASME National Heat Transfer Conference, Pittsburgh, Pennsylvania**, August 20-22, 2000. Paper No. NHTC2000-12097.
65. P.S.Ghoshdastidar and S.Kabelac, “Application of the Coupled Map Lattice(CML) Numerical Technique to Boiling Phenomena”, Presented at the **13th School-Seminar of Young Scientists and Specialists on Physical Principles of Experimental and Mathematical Simulation of Heat and Mass Transfer, St. Petersburg, Russia**, May 20-25, 2001.
66. P.S.Ghoshdastidar and S.Kabelac, “The Coupled Map Lattice Approach to Boiling”, Presented at **IIR Conference, Commission B1, Paderborn, Germany**, October, 2001.
67. P.S.Ghoshdastidar, G.Bhargava and R.P.Chhabra, “A Numerical Study of Heat Transfer in a Rotary Kiln for Drying and Preheating of Wet Iron Ore”, **Proc. 16th National/5th ISHMT-ASME Heat and Mass Transfer Conference, Kolkata**, January 3-5, 2002, 838-843.
68. P.S.Ghoshdastidar and S.Kabelac, “Computer Simulation of Pool Boiling of Water by Coupled Map Lattice Method”, **Proc. 16th National/5th ISHMT-ASME Heat and Mass Transfer Conference, Kolkata**, January 3-5, 2002, pp.559-564.
69. Nikhil K.Gupta, P.S.Ghoshdastidar and Keshav Kant, “A Numerical Model of Heat Transfer During Frying of Potato Chips”, **CD-ROM Proc. International Symposium on Recent Trends in Heat and Mass Transfer, IIT Guwahati**, January 7-8, 2002. Paper No. ISRTHMT 02-165.
70. P.S.Ghoshdastidar, N.Kumar and R.P.Chhabra, “Computer Simulation of Heat Transfer during Dry Process Cement Production in a Rotary Kiln”, **Proc. 12th International Heat Transfer Conference, Grenoble, France**, August 18-23, 2002, Vol.4, pp.779-784.
71. P. Taliwal and P.S.Ghoshdastidar, “Computer Simulation of Quenching of Steel Cylinders”, **Proc. 17th National/6th ISHMT-ASME Heat and Mass Transfer Conference, Kalpakkam**, January 5-7, 2004.
72. A.Gupta and P.S. Ghoshdastidar, “A Three-dimensional Numerical Modelling of Atmospheric Pool Boiling by the Coupled Map Lattice Method”, **Proc. 2005 ASME Summer Heat Transfer Conference, San Francisco, California, USA**, July 17-22, 2005. Paper No. HT2005-72497.

73. Manas Das, V.K.Jain and P.S.Ghoshdastidar, "Computer Simulation of Magnetorheological Abrasive Flow Finishing Process", **Proc. 4th National Conference on Precision Engineering, Jadavpur University, Kolkata**, December 16-17, 2005, pp.350-356.
74. P.S.Ghoshdastidar and Indrajit Chakraborty, "A Coupled Map Lattice Model of Flow Boiling in a Horizontal Tube", **Proc. 18th National & 7th ISHMT-ASME Heat and Mass Transfer Conference, IIT Guwahati**, January 4-6, 2006, pp. 559-566. Paper No. HMT-06-C079.
75. A. Gupta and P.S.Ghoshdastidar, "An Investigation of Chaos in Pool Boiling using a 3D Coupled Map Lattice Model", **Proc. 13th International Heat Transfer Conference, Sydney, Australia**, August 13-18, 2006.
76. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Analysis of Magnetorheological Abrasive Flow Finishing (MRAFF) Process", **Proc. 1st International & 22nd AIMTDR Conference-2006, December 21-23, 2006, IIT Roorkee**, pp. 881-886.
77. Indrajit Chakraborty and P.S.Ghoshdastidar, "Application of a Coupled Map Lattice Model to Simulate Laminar Stratified Flow Boiling of Propane in a Horizontal Tube", **Proc. 19th National and 8th ISHMT-ASME Heat and Mass Transfer Conference**, January 3-5, 2008, JNTU, Hyderabad.
78. P.S.Ghoshdastidar and Ankit Agarwal, "Simulation and Optimization of Drying of Wood Chips with Superheated Steam in a Rotary Kiln", **Proc.2008 ASME Summer Heat Transfer Conference, Jacksonville, Florida, USA**, August 10-14, 2008. Paper No. HT2008-56258.
79. Sandeep Singh Kushwaha and P.S.Ghoshdastidar, "Numerical Prediction of the Temperature Distribution within a Human Eye during Laser Surgery", **Proc. 2008 ASME Summer Heat Transfer Conference, Jacksonville, Florida, USA**, August 10-14, 2008. Paper No. HT2008-56259.
80. Indrajit Chakraborty, P.S.Ghoshdastidar, G.Biswas, "Simulation of Laminar Stratified Flow Boiling of Liquid in a Horizontal Tube by the Coupled Map Lattice Model", **Proc. 2009 ASME Summer Heat Transfer Conference, San Francisco, California, USA**, July 19-23, 2009. Paper No. HT2009-88487.
81. Manas Das, V.K.Jain, P.S.Ghoshdastidar, "Parametric Study of Process Parameters and Characterization of Surface Texture using Rotational-magnetorheological Abrasive Flow Finishing (R-MRAFF) Process", **Proc. 2009 ASME International Manufacturing Science and Engineering Conference, MSEC 2009, West Lafayette, Indiana, USA**, October 4-7, 2009. Paper No. MSEC2009-84320.

82. Samarth P. Ramdasi, Sudhir Misra, P.S.Ghoshdastidar, “Designing RC Structures for Fire”, **Proc. 8th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, Incheon, Korea**, October 15-16, 2009.
83. I.Chakraborty, G.Biswas, P.S.Ghoshdastidar, “The Dynamics of Gas Bubbles in a Co-flowing Liquid Ambience”, **Proc. 20th National and 9th International ISHMT-ASME Heat and Mass Transfer Conference, BARC, Mumbai**, January 4-6, 2010, Paper No. 10HMTC214.
84. I.Chakraborty, G.Biswas, P.S.Ghoshdastidar, “Satellite Bubble Formation in Co-flowing Liquid Ambience”, **Proc. 8th Asian Computational Fluid Dynamics Conference, Hong Kong**, January 10-14, 2010.
85. I. Chakraborty, G.Biswas, P.S.Ghoshdastidar, “Transition from Bubbling to Jetting in Co-flowing Liquid Ambience”, **Proc. 7th International Conference on Multiphase Flow, ICMF 2010, Tampa, Florida, USA**, May 30-June 4, 2010.
86. Koustubh Sinhal, P.S.Ghoshdastidar, Bhaskar Dasgupta, “Computer Simulation of Drying of Food Products with Superheated Steam in a Rotary Kiln”, **Proc. 14th International Heat Transfer Conference, Washington D.C., USA**, August 8-13, 2010, Paper No. IHTC-14-23201.
87. Rajat Dhingra and P.S.Ghoshdastidar, “Simulation of Mixed Convection Air Cooling of Protruding Heat Sources Mounted on One Side of a Vertical Channel”, **Proc. ASME 2011 International Mechanical Engineering Congress and Exposition, Denver, Colorado, USA**, November 11-17, 2011. Paper No. IMECE2011-63289.
88. S. Inder Singh and P.S.Ghoshdastidar, “Coupled Map Lattice Simulation of Heat Flux Controlled Atmospheric Saturated Pool Boiling of Water and Nanofluids on a Flat Plate”, **Proc. 21st National & 10th ISHMT-ASME Heat and Mass Transfer Conference, IIT Madras**, December 27-30, 2011. Paper No. ISHMT_IND_16_027.
89. Manas Das, V.K. Jain and P.S.Ghoshdastidar, “Simulation of Surface Finish and 2D CFD Simulation of MR Polishing Medium in Magnetic Field Assisted Finishing Process”, **Proc. 4th International and 25th All India Manufacturing Technology, Design and Research (AIMTDR) Conference, Jadavpur University, Kolkata**, December 14-16, 2012. Paper Ref. No. SR-18.
90. Manas Das, V.K. Jain and P.S. Ghoshdastidar, “Estimation of Magnetic and Rheological Properties of MR Polishing Fluid and their Effects on Magnetic Field Assisted Finishing Process”, **Proc. ASME 2013 International Manufacturing Science and Engineering Conference, Madison, Wisconsin, USA**, June 10-14, 2013. Paper No. MSEC2013-1085.

91. Piyush Sharma, Rakesh Sarma, Laltu Chandra, Rajiv Shekhar, P.S. Ghoshdastidar, "On the Design and Evaluation of Open Volumetric Air Receiver for Process Heat Applications", **Proc. ISES Solar World Congress, Cancun, Mexico**, November 3-7, 2013.
92. Prabhanshu Pavecha, Rajat Dhingra and P.S. Ghoshdastidar, "Simulation of Mixed Convection Cooling of Protruded Heated Blocks in a Vertical Channel by Air and Nanofluids", **Proc. 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur**, December 28-31, 2013. Paper No. HMTTC1300175.
93. Manas Das, V. K. Jain and P.S. Ghoshdastidar, "Estimation of Magnetic and Rheological Properties of MR Polishing Fluid and Their Effects on Magnetic Field Assisted Finishing Process", **Proc. International Conference on PRECISION, MESO, MICRO, AND NANO ENGINEERING (COPEN-8:2013), NIT, Calicut**, December 13-15, 2013.
94. Ashish Agrawal and Partha S. Ghoshdastidar, "A Computer Model for Simulation of Drying and Preheating of Wet Iron Ore in a Rotary Kiln", **Proc. 15th International Heat Transfer Conference (IHTC-15), Kyoto, Japan**, August 10-15, 2014. Paper No. IHTC15-9411.
95. Sahil Arora and P.S. Ghoshdastidar, "A Numerical Study of Heat Transfer and Pressure drop in Nanofluids Flow between Parallel Plates", **Proc. ICHMT International Symposium on Advances in Computational Heat Transfer, Rutgers University, Piscataway, USA**, May 25-29, 2015. Paper No. CHT-15-051.
96. Hunaid Ali Shakkarwala and P.S. Ghoshdastidar, "Computer Simulation of Mixed Convection Flow of Nanofluids Past a Continuously Moving Vertical Plate", **Proc. ICHMT International Symposium on Advances in Computational Heat Transfer, Rutgers University, Piscataway, USA**, May 25-29, 2015. Paper No. CHT-15-066.
97. Saptarshi Mandal and P.S. Ghoshdastidar, "A Comparative Numerical Study of Heat Transfer in Parallel Plate Flow of Alumina-Water Nanofluid Using Homogeneous and Heterogeneous Flow Models", **Proc. 23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC2015)**, December 17-20, 2015, Thiruvananthapuram, India. Paper No. IHMTTC2015-974.
98. Rajat Dhingra and P.S. Ghoshdastidar, "A Numerical Study of the Effect of Thermal Radiation on the Forced Air Cooling of Low Heat Flux Electronic Chips Mounted on One Side of a Vertical Channel", **Proc. 2016 15th IEEE Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems (ITherm), May 31-June 3, 2016, Las Vegas, NV, USA**. Paper No. p445.

99. Aditi Sengupta and P.S. Ghoshdastidar, "Heat Transfer Enhancement in Ferrofluids Flow in Micro and Macro Parallel Plate Channels: A Comparative Numerical Study", **Proc. ASME 2016 Heat Transfer Summer Conference (HT2016), July 10-14, 2016, Washington, DC, USA.** Paper No. HT2016-7352.
100. Souvik Naskar and P.S. Ghoshdastidar, "Numerical Simulation of Free Convection Heat Transfer from a Vertical Plate to Non-Newtonian Nanofluids", **Proc. 2nd ASTFE Thermal and Fluids Engineering Conference, TFEC2017, April 2-5, 2017, Las Vegas, NV, USA.** Paper No. TFEC-IWHT2017-17676.
101. Rahul Nath and P.S. Ghoshdastidar, "A Computational Study of the Effect of Magnetic Field on Heat Transfer in Ferrofluid Flow in a Circular Tube", **Proc. 2nd ASTFE Thermal and Fluids Engineering Conference, TFEC2017, April 2-5, 2017, Las Vegas, NV, USA.** Paper No. TFEC-IWHT2017-17669.
102. Dileep V. Nair and P.S. Ghoshdastidar, "A Computational Study of Synthetic Air Jet Aided Cooling of an LED Street Lighting Luminaire", **Proc. 6th Asian Symposium on Computational Heat Transfer and Fluid Flow (ASCHT 2017), December 10-13, 2017, Indian Institute of Technology Madras, Chennai, India.** Paper No. 181.
103. Swati Singh and P.S. Ghoshdastidar, "Simulation of Conjugate Heat Transfer from a Continuously Moving Horizontal Plate to Nanofluid", **Proc. 5th International Conference on Computational Methods for Thermal Problems THERMACOMP2018, July 9-11, 2018, Indian Institute of Science, Bangalore, INDIA.**
104. Saptarshi Mandal and P.S. Ghoshdastidar, "A Numerical Investigation of Heat Transfer Enhancement in Nanofluids Flow in a Parallel Plate Channel Subjected to Constant Heat Flux", **Proc. 5th International Conference on Computational Methods for Thermal Problems THERMACOMP2018, July 9-11, 2018, Indian Institute of Science, Bangalore, INDIA.**
105. Atinder Pal Singh and P.S. Ghoshdastidar, "A Numerical Study of Drying and Preheating of Food in a Rotary Dryer with Superheated Steam and Air as the Drying Media", **Proc. 16th International Heat Transfer Conference, IHTC-16, August 10-15, 2018, Beijing, China.**

Invited Papers

1. P.S.Ghoshdastidar, "Computer Simulation of Heat Transfer in a Rotary Kiln during Incineration of Solid Waste", **National Workshop on Incineration and Solid Waste Management, IIT Madras, April 29-30, 2005.**

2. P.S.Ghoshdastidar, "Computer Simulation of the Pool Boiling Process: A Coupled Map Lattice Approach", **50th Congress of ISTAM (An International Meet), IIT Kharagpur, December 14-17, 2005.**
3. Manas Das, V.K.Jain and P.S.Ghoshdastidar, "Computer Simulation of Nano-finishing Process", *Directions (the Magazine of IIT Kanpur)*, Vol.7, No.3, pp.23-28, February 2006.

SHORT TERM COURSES ORGANISED

1. Title: **Computational Fluid Flow and Heat Transfer**
Duration: **May 11-23, 1992**
Co-organiser: **Dr.K.Muralidhar**
Sponsor: **Indian Society for Technical Education (ISTE)**
Venue: **IIT Kanpur**
Participants: **Engineering college teachers and professional engineers of India**
2. Title: **Advanced Computational Techniques in Flow and Heat Transfer**
Co-organiser: **Dr.T.K.Sengupta**
Duration: **December 17-28, 2002**
Sponsor: **Quality Improvement Programme, IIT Kanpur**
Venue: **IIT Kanpur**
Participants: **Engineering college teachers and professional engineers of India**
3. Title: **Boiling and Condensation: Theory and Applications**
Duration: **September 6 - 14, 2016**
Foreign Faculty Member: **Prof. Amitabh Narain**
Michigan Technological University, USA
Sponsor: **Global Initiative of Academic Networks (GIAN)**
MHRD, Govt. of India
Venue: **IIT Kanpur**
Participants: **Engineering college teachers of India**

COURSE PACKAGE PUBLISHED

Title: **Computer Methods in Heat Transfer**
Authors: **P.S.Ghoshdastidar and K.Muralidhar**
Publisher: **Indian Society for Technical Education (ISTE)**
Year of Publication: **1992**
Number of Pages: **242**

CONFERENCES ATTENDED

1. 9th National Heat and Mass Transfer Conference, IISc Bangalore, India, December 8-10, 1987.
2. 1989 ASME National Heat Transfer Conference, Philadelphia, U.S.A., August 6-9, 1989.

3. 10th International Heat Transfer Conference, Brighton, U.K., August 14-18, 1994.
4. 11th International Heat Transfer Conference, Kyongju, Korea, August 23-28, 1998.
5. 4th ISHMT/ASME and 15th National Heat and Mass Transfer Conference, Pune, India, January 12-14, 2000.
6. 3rd European Thermal Sciences Conference, Heidelberg, Germany, September 10-13, 2000.
7. 16th National/5th ISHMT-ASME Heat and Mass Transfer Conference, Science City, Kolkata, January 3-5, 2002.
8. 12th International Heat Transfer Conference, Grenoble, France, August 18-23, 2002.
9. 2005 ASME Summer Heat Transfer Conference, July 17-22, San Francisco, USA.
10. 50th Congress of ISTAM(An International Meet), IIT Kharagpur, December 14-17, 2005.
11. 2008 ASME Summer Heat Transfer Conference, August 10-14, 2008, Jacksonville, Florida, USA.
12. 14th International Heat Transfer Conference, August 8-13, 2010, Washington D.C., USA.
13. 2011 ASME International Mechanical Engineering Congress & Exposition, Denver, Colorado, USA, November 11-17, 2011.
14. 21st National and 10th ISHMT-ASME Heat and Mass Transfer Conference, IIT Madras, Chennai, December 27-30, 2011.
15. 22nd National and 11th ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur, December 28-31, 2013.
16. 15th International Heat Transfer Conference, August 10-15, 2014, Kyoto, Japan.
17. 6th International Symposium on Advances in Computational Heat Transfer, May 25-29, 2015, Rutgers University, Piscataway, USA.
18. 2nd ASTFE Fluids and Thermal Engineering Conference, TFEC2017, April 2-5, 2017, Las Vegas, Nevada, USA.
19. 5th International Conference on Computational Methods for Thermal Problems (ThermaComp 2018), July 9-11, 2018, IISc Bangalore.
20. 16th International Heat Transfer Conference (IHTC16), August 10-15, 2018, Beijing, China.

INVITED SEMINAR

1. Topic: **Numerical Modelling of Pool Boiling By Coupled Map Lattice Method**

At: **Universität Stuttgart, Germany**
Institut für Kernenergetik und Energiesysteme

Delivered on: **18.5.2001**

2. Topic: **Computational Fluid Dynamics**

At: **Kongu Engineering College, Perundurai, Erode, Tamil Nadu**

Delivered on: **18.2.2011**

3. Topic: **Numerical Simulation of Mixed Convection Heat Transfer from a Continuously Moving Isothermal Vertical Plate to Alumina-Water Nanofluid as in Hot Extrusion**

At: **IIT BHU (Inaugural Lecture in FDP on "Nanofluids and its Engineering Applications", November 6-11, 2017)**

Delivered on: **6.11.17**

AWARDS AND RECOGNITION

1. Recipient of the **Institution Prize** of the Institution of Engineers (India) for the paper entitled, "Numerical Modelling of Enhanced Oil Recovery Using Water Injection Method" (by K.M.Pillai, K.Muralidhar and P.S.Ghoshdastidar) published in 1994 in the institution journal. This award was given away by the President of India on December 20, 1995 during the inaugural session of the 10th Indian Engineering Congress held in Jaipur.
2. Recipient of the **Certificate of Merit** of the Institution of Engineers(India) for the paper entitled," Numerical Simulation of Thermal Erosion During EDM Process"(by R.Bhattacharya, V.K.Jain and P.S.Ghoshdastidar) published in 1996 in the institution journal.
3. Elected **Fellow** of World Innovation Foundation, U.K. on 15th August, 2002.
4. Recipient of the **Certificate of Merit** of the Institution of Engineers (India) for the paper entitled, "Numerical Simulation of Laminar Heat Transfer in Circular Tubes with Internal Longitudinal Fins Having Tapered Lateral Profiles"(by Iftakhar Alam and P.S.Ghoshdastidar) published in 2002 in the institution journal.
5. **Commendations** from the Director, IIT Kanpur for excellence in teaching.
6. **Invited Speaker** at the Golden Jubilee Congress of the Indian Society of Theoretical and Applied Mechanics (An International Meet), IIT Kharagpur, December 14-17, 2005.
7. **Long and Satisfactory Service Award** (given away by Director, IIT Kanpur on 5.9.2010) on completion of twenty five years of satisfactory service on 23.5.2010 at IIT Kanpur.
8. **Associate Editor** (since May 1, 2011), **Heat Transfer Research** (an international journal published by Begell House Inc., USA).

9. **Invention Award** of U.S. \$1000 (shared with Dr. Manas Das and Prof. V. K. Jain) for the work entitled, “A Rotational-Magnetorheological Abrasive Flow Finishing Process and Device” given by Intellectual Ventures Asia PTE Ltd in January, 2012.
10. **2012 A. M. Strickland Prize** of the Manufacturing Industries Division of the Institution of Mechanical Engineers, U.K. for the paper, “Computational Fluid Dynamics Simulation and Experimental Investigations into the Magnetic-field-assisted Nano-finishing Process” published in Journal of Engineering Manufacture (Proceedings of the Institution of Mechanical Engineers, Part B in 2012). The award (given away to the recipients on 12th June, 2013 in London, U.K. in absentia) was shared with Dr. Manas Das and Prof. V.K. Jain, the co-authors of the paper.
11. **Editorial Board Member** (since May 9, 2015) of **Engineering Science and Technology, an International Journal (JESTECH)**, published by Elsevier.
12. **Certificate of Appreciation** from **The Institution of Engineers (India)** on June 18, 2015 for excellence as a reviewer for **Journal of The Institution of Engineers (India): Series C**.
13. **Editorial Advisory Board Member** (since August 10, 2017) of **Journal of Energy, Heat and Mass Transfer**.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1. Member, ASME (The American Society of Mechanical Engineers)
2. Life Member, ISHMT (Indian Society for Heat and Mass Transfer)

EDITORSHIP OF JOURNALS

1. Associate Editor (since May 1, 2011), **HEAT TRANSFER RESEARCH** (an international journal published by Begell House Inc., USA)
2. Editorial Board Member (since May 9, 2015) of **Engineering Science and Technology, an International Journal (JESTECH)**, published by Elsevier.
3. Editorial Advisory Board Member (since August 10, 2017) of **Journal of Energy, Heat and Mass Transfer**, an international journal published by Regional Centre for Energy, Heat and Mass Transfer for Asia and the Pacific, Madras, India.

REVIEWER FOR

Journals

1. ASME Journal of Heat Transfer
2. International Journal of Heat and Mass Transfer
3. ASME Journal of Manufacturing Science and Engineering(formerly ASME JEI)
4. ASME Journal of Engineering for Industry
5. ASME Journal of Computing & Information Science in Engineering
6. Journal of Materials Processing Technology
7. Journal of the Institution of Engineers(India)
8. AIAA Journal of Thermophysics and Heat Transfer
9. Journal of Materials and Manufacturing Processes
10. International Journal of Thermal Sciences
11. Journal of Visualization
12. Indian Journal of Pure and Applied Mathematics
13. Indian Journal of Chemical Technology
14. Journal of Food Engineering
15. Chemical Engineering Science
16. IMechE Journal of Power and Energy
17. International Journal of Numerical Methods for Heat and Fluid Flow
18. Heat Transfer Engineering
19. Heat Transfer Research
20. Computers and Fluids
21. Defence Science Journal
22. BioResources
23. Journal of Mechanical Engineering Science (IMechE Part C)
24. Progress in Computational Fluid Dynamics
25. Drying Technology
26. Sadhana
27. ASME Journal of Thermal Science and Engineering Applications
28. Advances in Mechanical Engineering
29. Engineering Applications of Computational Fluid Mechanics
30. Computational Thermal Sciences
31. Renewable Energy
32. Neural Computing and Applications
33. Experimental Thermal and Fluid Science
34. International Journal of Mechanical Sciences
35. International Journal of Advanced Manufacturing Technology
36. Energy Procedia
37. Multiphase Science and Technology

REVIEWER FOR

Conference Proceedings

1. 1.1992 ASME National Heat Transfer Conference, San Francisco,U.S.A., August 9-12, 1992.
2. 4th ISHMT/ASME and 15th National Heat and Mass Transfer Conference, Pune, India, January 12-14, 2000.
3. 34th ASME National Heat Transfer Conference, Pittsburgh, U.S.A., August 20-22, 2000.
4. 6th ISHMT/ASME and 17th National Heat and Mass Transfer Conference, Kalpakkam, India , January 5-7, 2004.
5. 6th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, April 2005, Japan.
6. 7th ISHMT-ASME and 18th National Heat and Mass Transfer Conference, January 4-6, 2006, IIT Guwahati.
7. 33rd National and 3rd International Conference on Fluid Mechanics and Fluid Power, December 7-9, 2006, IIT Bombay.
8. 8th ISHMT-ASME and 19th National Heat and Mass Transfer Conference, Hyderabad, India, January 3-5, 2008.
9. 9th ISHMT-ASME and 20th National Heat and Mass Transfer Conference, BARC, Mumbai, January 4-6, 2010.
10. 14th International Heat Transfer Conference, Washington, D.C., U.S.A, August 8-13, 2010.
11. 37th National and 4th International Conference on Fluid Mechanics and Fluid Power, Dec 16-18, 2010, IIT Madras.
12. 10th ISHMT-ASME & 21st National Heat and Mass Transfer Conference, IIT Madras, December 27-30, 2011.
13. ASME Turbo Expo, Copenhagen, Denmark, June 11-15, 2012.
14. ASME 2012 Gas Turbine India Conference, Mumbai, December 1, 2012.
15. ASME 2013 Gas Turbine India Conference, Bangalore, December 5-6, 2013.
16. 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur, December 28-31, 2013.

17. 15th International Heat Transfer Conference, Kyoto, Japan, August 10-15, 2014.
18. 4th International and 41st National Conference on Fluid Mechanics and Fluid Power, December 12-14, 2014, IIT Kanpur.
19. 23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, Thiruvananthapuram, December 17-20, 2015.
20. 42nd National Conference on Fluid Mechanics and Fluid Power (FMFP 2015), NIT Karnataka Surathkal, December 14-16, 2015.
21. IEEE CPMT Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, May 31-June 3, 2016, Las Vegas, NV, USA.
22. Judge for evaluating best student poster in IEEE CPMT Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems, May 31 - June 3, 2016, Las Vegas, NV, USA.
23. Springer Proceedings on National Conference on Solar Thermal Energy Technologies 2016 (NCSTET 2016), IIT Jodhpur, February 26 - 28, 2016.
24. 2nd ASTFE Thermal and Fluids Engineering Conference and 4th International Workshop on Heat Transfer, April 2-5, 2017, Las Vegas, Nevada, USA.
25. 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power, MNNIT, Allahabad, December 15-17, 2016.
26. ASME 2017 Summer Heat Transfer Conference, HT2017, July 9-14, 2017, Bellevue, Washington, USA.
27. 6th Asian Symposium on Computational Heat Transfer and Fluid Flow (ASCHT 2017), December 10-13, 2017, Indian Institute of Technology Madras, Chennai, India.
28. ASME GT India Conference 2017 (GT India 2017), December 7-8, Bangalore, India.
29. 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), Dec 27-30, 2017, BITS-Pilani, Hyderabad Campus.
30. 3rd ASTFE Thermal and Fluids Engineering Conference (TFEC), March 4-7, 2018, Fort Lauderdale, Florida, USA.
31. 16th International Heat Transfer Conference, Beijing, China, August 10-15, 2018.

32. 4th International Symposium on Hydrogen Energy, Renewable Energy and Materials, HEREM 2018, Bangkok, Thailand, June 13-15, 2018.

REVIEWER OF

1. Project proposals submitted to Department of Science and Technology, Govt. of India
2. NPTEL Video Lectures
3. CRC Press Books
4. McGraw-Hill Education Books