

Curriculum Vitae

1: Name: Dr. Debi Prasad Mishra,

Professor, Department of Aerospace Engg., IIT, Kanpur

Adjunct Professor, Center for Indian Knowledge System, NIT, Calicut

Adjunct Professor, Center for Indian Knowledge System, NIT, Jamshedpur

Former Chairman, BoG, Government Engineering College, Kalahandi

Former Adjunct Professor, Center for Indian Knowledge System, IIT, Guwahati

Former Founder Director, NITTTR Kolkata (Deemed to be University)

2: Address: Department of Aerospace Engineering, IIT Kanpur-208 016

2a: email id: dpmishraiitk@gmail.com & mishra@iitk.ac.in; Mobile no:9451873857

3: Date of Birth: 23rd February 1965

4: Educational Qualifications:

Degree	Institution Conferring	Field(s)	Year
B. Sc(Engg)	University College of Engineering, Burla, Odisha	Mechanical Engg.	1987
Ph. D.	I.I.Sc, Bangalore	Mechanical Engg.	1994

5: Areas of Interest: Combustion, Atomization and Heat Transfer

6: Professional Experience:

(i) **Teaching and Research Experience:**

Duration	Organization	Areas
8 th June 2020-7 th June 2025	Director & Professor, Department of Mechanical Engineering, NITTTR, Kolkata-700106	Thermal Engineering & Ancient Indian Science and Technology
13 th December 2024-till date	Adjunct Professor, Center for Indian Knowledge System, NIT Calicut	Ancient Indian Science and Technology
10 th July 2023-9 th July 2025	Adjunct Professor, Center for Indian Knowledge System, IIT Guwhati	Ancient Indian Science and Technology
26 th March 2012 - till date	Professor, Aerospace Engg., Dept. IIT, Kanpur—208 016	Propulsion, Combustion & Atomization & Ancient Indian Science and Technology

31 st December 2007- 26 th March 2012	Associate Professor, Aerospace Engg., Dept. IIT, Kanpur—208 016	Propulsion, Combustion & Atomization & Ancient Indian Science and Technology
23 rd June 1997-30 th December 2007	Assistant Professor, Aerospace Engg., Dept. IIT, Kanpur—208 016	Propulsion, Combustion & Atomization
1 st February 1996- 23 th June 1997	Visiting Assistant Professor, Aerospace Engg., Dept. IIT, Kanpur—208 016	Propulsion, Combustion & Atomization
November 1994- January 1996	Senior Research Engineer, Engineering Mechanics Research Corporation, Bangalore-560 001	Combustion & CFD
June 1993-November 1994	Research Associate, Aerospace Engg., Dept., IISc, Bangalore	Flame & Combustion

(ii) **Administrative Experience:**

Year	Organization	Nature of Responsibility	Designation
2001-02	Aerospace Engg, IIT, Kanpur	Departmental Post Graduate Affairs	Convener, DPGC
2005-06 2014-2016	Aerospace Engg, IIT, Kanpur	Departmental undergraduate Graduate Affairs	Convener, DUGC
2005-06	SUGC, IIT, Kanpur	Policy related to curriculum	Member, CCC
2002-05	Hall –III, IIT, Kanpur	Administration in Hostel III	Warden, Hall III
2002-03	CoW, IIT, Kanpur	Affairs related Mess workers	Member, COW, IITK
2007-08	Academic Affairs, IIT, Kanpur	Affairs related to Core courses	Member, Core Course Monitoring Subcommittee.
2012-2014	Central Library	Affairs related to library	Member, Senate library committee
2012-2014 & 1012-1013	R&D, IIT Kanpur	Institute Research and Development Committee	Member
20/11/201919/11/2021	Biju Patnaik Technical University, Rourkela	Member, Academic Council	Member
2013-2014	Health Center	Administrative work	Member, HCUC
2013-2014	Placement Cell	Administrative work	Member
2013-2014	Center for Laser Technology	Administrative work	Member, DFAC

2015-2021	Synergy Institutions of Engineering & Technology	Administrative work	Member, Board of Governors,
2014-2016	Aerospace Engg. IIT, Kanpur	Administrative work	Member, DFAC
2016-2018	Design Programme, IIT, Kanpur	Administrative work	Member, DFAC
2014-16	Aerospace Engg. IIT, Kanpur	Administrative work	Convener, DUGC
2014-2015	IIT, Kanpur	Administrative work	Chairperson, SUGC, IITK
2014-2015	IIT, Kanpur	Administrative work	Member, Educational Policy Committee (EPC), IIT Kanpur
2014-1016	All India Association for Educational Research	Administrative work	Vice president, AIAER
2016-2018	The Institution of Engineers (India) (Kanpur Centre)	Administrative work	Chairman
2016-2018	IIT Kanpur Alumni Association	Administrative work	Treasurer
14 th September 2016-2 nd May 2019	Rajasthan Technical University, Kota	Board of Studies, Aerospace Engg.	Member
2017-2018	IIT Kanpur	Administrative work	Chairperson, Senate Curriculum Development and Monitoring Committee, (SCDMC), IITK
2018-2220	IIIT, Allahabad	Administrative work	Member, Governing Body of CSTCP-IIITA
2018-2019	IIT Kanpur	Administrative work	Member, e-masters
2019-2021	Aerospace Engineering, IIT, Kanpur	Administrative work	Member, DFAC
25/02/2019 25/02/2021	Biju Patanaik Technical University, Rourkela	Academic work	Member, Academic Council

2020-2022	Alumni Association of IISc Bangalore	Administrative work	Executive committee member
2020-2022	State Council for Technical Education & Vocational Training, Odisha	Administrative work	Member
2020-2025	NITTTR, Kolkata	Product Design and Development Cell	Chairman
2020-2025	NITTTR, Kolkata	Incubation Cell	Chairman
2020-2025	NITTTR, Kolkata	Board of Governors	Member Secretary
2020-2025	NITTTR, Kolkata	Finance Committee	Member Secretary
2020-2025	NITTTR, Kolkata	NITTTR, Kolkata Society,	Member Secretary
2020-2022	NITTTR, Kolkata	Committee to frame innovation and startup policy	Chairman
2020-2022	CSIR, New Delhi	National Committee of SVaSTIK (Scientifically Validated Societal Traditional Indian Knowledge)	Member
2022 -2024	BPTU, Rourkela	Expert committee for making Roadmap	Member
8 th June 2020- 7 th June 2025	National Institute of Technical Teachers' Training and Research (NITTTR) Kolkata - 700 106	Administrative Work	Director
8 th June 2020- 7 th June 2025	NITTTR, Kolkata - 700 106	Academic Council	Chairman
2021- 7 th June 2025	NITTTR, Kolkata - 700 106	Building and Works Committee	Chairman
8 th June 2020- 7 th June 2025	AICTE, New Delhi	NITT-NCC,	Member
15 th April 2023 till 14 th April 2026	Government College of Engineering	Board of Governors	Chairman
5 th July 2023 to 5 th July 2025	Centre for the IKS at IIT Guwahati	Teaching and Research	Adjunct Professor

2022-2024	Gandhi Institute of Technology, Bhubanswar	Academic Council	Member
8th August 2023 till date	Vignan's University, Guntur, AP	Academic Council	Member
1 st March 2022 –28 th February 2025	Woxsen University Hyderabad	Research Council	Chief Technical Advisor (R&D)
3rd October 2022 to 7 th June 2025	NITTTR, Bhopal	Project Award Monitoring Committee	Chairman
26th May 2023-7 th June 2025	Department of Science & Technology and Biotechnology, West bengal	Expert Committee on Traditional and Indigenous Knowledge	Member
23-10-2023 till date	IIT Ropar	Advisory Board for Entrepreneurship & Rural Development	Member
25-01-2024	IIT Kharagpur	Selection Committee for the post of Assistant Registrar	Member
	IIT Dharward	Selection Committee for the post of Professor and Associate Professor	Member
25-02-2023	IIT Dharward	Selection Committee for the post of Assistant Professor	Member
13-02-2024 till date	NIT Calicut	Academic Member, Advisory Board of the Centre for Indian Knowledge Systems, NIT Calicut	Member of Advisory Board
28-03-2024	AICTE	All India Board of Technician Education	Member

26.07.2024	Mahatma Gandhi Central University, Bihar	Committee for Indian Traditional Knowledge System	Member
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16-04-2024 till 7 th June 2025	Samarth e-Gov	Samarth e-Gov	Chairman
28-06-2024 till 7 th June 2025	NITTTR, Kolkata	National Apprenticeship Training Scheme	Chairman

11-07-2024 -7 th June 2025	Ordinance of the Institute	NITTTR, Kolkata	Chairman
15 th July 2024-7 th June 2025	State Council for Technical Education (SCTE), Assam	Directorate of Technical Education, Assam	Member
19-09-2024	Committee for exploring the various ways to make the Institute self-sustainable	NITTTR, Kolkata	Chairman
16-10-2024	Committee to prepare the Conduct Rules for the employees of the Institute in accordance with the Central Civil Services (Conduct) Rules 1964	NITTTR, Kolkata	Chairman
28-11-2024	Committee to organize National Youth Conclave for Vikshit Bharat	NITTTR, Kolkata	Chairman
05-12-2024	Committee for monitoring and reviewing the progress of curriculum revision for 3 rd to 6 th semester of 34 diploma courses for the Polytechnic of the State of Odisha	NITTTR, Kolkata	Chairman
8 th June 2020- 7 th June 2025	State Council for Technical Education	Directorate of Higher & Technical Education, Arunachal Pradesh	Member
18 th December 2024- 7 th June 2025	Scrutiny and Review Committee to monitor and review the progress of Curriculum Revision for 3 rd to 6 th Semester of 34 Diploma Courses for the Polytechnics of the State of Odisha	NITTTR, Kolkata	Chairman
1 st August 2025 till date	DFAC, Aerospace Engineering Department	IIT Kanpur	Member

7 (a) Major Contributions:

(i) **Establishment of Combustion Lab:** A new combustion lab has been established in the aerospace engineering department to carry out research work in the field of combustion and allied fields. Several experimental rigs have designed and developed in the lab from the scratch.

- (ii) **Design and Development of Laser Ignition System:** For the first time in India, laser ignition of liquid fuel in laboratory scale swirl combustor is established successfully
- (iii) **Experimental Set-up for Impingement Premixed Flame:** This work is very important of improving the energy efficient particularly material processing industries.
- (iv) **Flame Synthesis of Nanomaterials:** The silica nanomaterials are produced for the first time in India by us which can revolutionize the future technology.
- (v) **Microgravity Combustion Facility:** Currently, efforts are made to create a microgravity combustion facility to carryout droplet combustion which will be unique facility in India.

(b) Awards & Recognition:

- (i) ***Young Scientist Award***, Ministry of Non-conventional Energy Sources, 1991.
- (ii) ***Excellent Tutor Recognition***, for Thermodynamics, at IIT, Kanpur, 2000
- (iii) ***INSA-JSPS Fellowship***, 2002
- (iv) ***Vijay Shree Award***, 2005
- (v) ***Fellow***, Institution of Engineers (India), 2005
- (vi) ***Associate Editor, Journal of Natural Gas Science and engineering, Elsevier Publisher, USA, 2008.***
- (vii) ***Aerospace Engineering Division Prize***, by the Institute of Engineers (India), Kolkata, India, 2008
- (viii) ***Sir Rajendranath Mookerjee Memorial Prize*** by the Institute of Engineers (India), Kolkata, India, 2008
- (ix) ***Editorial board member***, Recent Patents on Engineering, Bentham Science Publishers Ltd. 2008.
- (x) ***Asst. Editor, International Journal of Hydrogen Energy, Elsevier Publisher, USA, 2009.***
- (xi) ***Samanta Chandra Sekhar Award, 2009.***
- (xii) ***Editor, 8th Asia-Pacific Conference on Combustion, 2010.***
- (xiii) ***Vikasa Prerak Award, 2010.***
- (xiv) ***Editorial board member***, Journal of the Chinese Institute of Engineers, Published by Taylor & Francis, 2011
- (xv) ***Editorial Board Member***, International Journal for Turbo and Jet Engines, Published by De Gruyter, Germany, 2011.
- (xvi) ***Chairman, Hydrogen Utilization, National Hydrogen Association of India, 2012***
- (xvii) ***Indian Oil Golden Jubilee Professional Chair Professor, 2015***
- (xviii) ***Excellence in Aerospace Education Award, 2017***
- (xix) ***Fellow***, Indian Institute of Scientific Heritage, 2017
- (xx) ***Mechanical Engineering Design Award, 2018***
- (xxi) ***Editor-in-chief***, Bharatiya Kala and Shilpa, NITTTR Kolkata, 2020
- (xxii) ***Coordinator, UNESCO-UNEVOC Centre, NITTTR, Kolkata, 2020***
- (xxiii) ***Coordinator, Swayam NPTEL, NITTTR, Kolkata, 2020***

- (xxiv) **Honorary Fellow**, Indian Society of Technical Education, New Delhi, 2020
 (xxv) **Editor-in-chief**, Journal of Engineering and Education, NITTTR Kolkata, 2022
 (xxvi) **Adjunct Professor**, IIT, Guwahati, 2023
 (xxvii) **Chief Editor**, The Indian Journal of Technical Education, ISTE, 2023
 (xxviii) **Advisor of Combustion**, Propulsion and Heat Transfer for Skilledset Immersive Learning, at IIT Bhubaneswar
 (xxix) **Member of Advisory committee** of Peer reviewed Journal Educatum at Gopal Chandra Memorial College of Education at New Barrackpore, North 24 Parganas, 2023
 (xxx) **Adjunct Professor**, NIT, CIKS, Calicut, 2024
 (xxxi) **President**, Bharatiya Paramparik Gyan Vigyan Samaj, 2024
 (xxxii) **Editor**, Journal of Bharatiya Paramparik Gyan, 2025
 (xxxiii) **Adjunct Professor**, NIT, CIKS, Jamshedpur, 2026

(c) Reviewer: Combustion & flame, Fuel, Energy & Fuel, Applied Thermal Engineering, Journal of propulsion and power, Combustion Science and Technology, Journal of Hazardous Materials, International Journal of Turbo & Jet Engine, International Journal of Hydrogen Energy, Atomization and Spray, combustion institute proceedings (USA) and in certain national and internal conferences.

- (d) **NPTEL Course Development: (i) Fundamentals of Combustion
(ii) Introduction to Propulsion**
 (e) **MHRD Virtual Lab: Virtual Combustion and Atomization Lab**
 (f) **MOOC course: (i) Engineering Thermodynamics
(ii) Introduction to Ancient Indian Technology
(iii) Fundamental of Propulsion
(iii) Fundamentals of Combustion: part I
(iv) Fundamentals of Combustion: part II**
 (vi) **Introduction to Rocket Propulsion**
 (g) **Swayamprava TV Lecture: (i) Glimpses of Ancient Science and Technology, 2020**

8 Major Research Projects completed:

(i) Sponsored Projects:

Sl. No.	Title of the project	Agency	Present status	PI/Co-investigator
1.	Experimental and Computational Studies of Natural Gas-Air Flame	DST, New Delhi	Completed	Nil
2.	An Experimental Study of Flame Impingement Heat Transfer	CSIR, New Delhi	Completed	Nil
3.	An experimental study of droplet burning in recirculation flow field	ISRO	Completed	A. Kushari

4.	An experimental study of turbulent premixed co-axial jet flames	ARDB, New Delhi	Completed	Nil
5.	An Experimental Study of Low Emission Energy Efficient Burner	MHRD, New Delhi	Completed	Nil
6.	An Experimental Study of Diffusion Jet Flame with Highly Preheated Air	DST, New Delhi	Completed	Nil
7.	Design and Development of Low Emission LPG Burner	PCRA, New Delhi	Completed	Nil
8.	Design and Development of an Improved Wood Stove	CST, Lucknow	Completed	Nil
9.	Experimental Study of Water Mist System for Fire Suppression	CSIR, New Delhi	Completed	Nil
10.	Synthesis and characterization of carbon-nanotubes on the surface of glass fiber and its composite in epoxy matrix	DST, New Delhi	Completed	K K Kar
11.	Experimental Study of an Internally Mixed Swirl Coaxial Atomizer for Scramjet Engine	ISRO-IITK Space Cell	Completed	Nil
12.	Flame Synthesis of Silica Nanopowders	ARDB, New Delhi	Completed	A Uppadhya
13.	Experimental Study of Aerated Liquid Injection into Subsonic Flow	ARDB, New Delhi	Completed	Nil
14.	Numerical and Experimental Study Droplet Combustion under Normal and Microgravity Conditions	ISRO, Bangalore	Completed	Nil
15.	Experimental Study of Liquid Fuel Combustion using Chemiluminescence Sensor	DRDO, New Delhi	Completed	Nil
16.	Experimental Studies of Coke Formation Liquid Fuel for Scramjet Application	DMSRD, Kanpur	Completed	Nil
17.	Experimental Studies on Spray Characteristics of Kerosene Gel Propellant	DRDL, Hyderabad	Completed	Nil
18.	Design, Simulation and Characterization of Pneumatic Spray Nozzle	BRNS, Mumbai	Completed	Dr. V. K. Jain
19.	Design and Development of a Hydrogen Burner for Industrial Application	MNRE, New Delhi	Completed	Dr. M. Das

20.	Combustion and Atomization Virtual Lab	MHRD, New Delhi	Completed	Nil
21.	Experimental Studies of Trapped Vortex Combustor	DST, New Delhi	Completed	Nil
22.	Center for Organic farming	DORA, IITK	Completed	HC Verma
23.	Experimental Studies on ISROsene Gel propellant Spray loaded with Alumina Particle	ISRO-IITK	Completed	Nil
24.	Design and Development Pine Needle based Smokeless Chulla	TEQIP II, MHRD, New Delhi	Completed	Nil
25.	Numerical and Experimental Studies of Annular Trapped Vortex Combustor	SERB, DST, New Delhi	Completed	Nil
26.	Numerical and Experimental Studies of Swirled Stabilized Hydrogen Fueled Combustor	DST, New Delhi	Completed	Steven Frankel, IIT, Israel
27.	Design and development of burner system for glass beads and artware facility	Office of the Principal Scientific Adviser, Rutag, IIT, Kanpur	Completed	
28.	Improved Detection of Pathogenic Strains from Metagenomics data	Department of Biotechnology, New Delhi	On going Rs 31,0000/- July 2024 to June 2027.	Dr. Indrajit Saha, NITTTR Kolkata (PI)
29.	COVID 19 Disease Risk Prediction and Diagnostic Classification using Statistical and Machine Learning Techniques ICMR, Govt. of India	ICMR, New Delhi	18.7 Lakhs 2022-2025	Prof. Chandan Chakraborty, NITTTR Kolkata

(ii) Consultancy Completed: 6

Sl. No	Period	Organization	Title of Project & Nature work	Co-investigator
1	1997	Tata Energy Research Institute, New Delhi	Design and development of a burner for producer gas burner	Nil

2	2005-06	Achintya Gamut Omni India Pvt Ltd, Kanpur	Effect of Additives on the Coal Combustion	Nil
3	2006- 2007	Achintya Gamut Omni India Pvt Ltd, Kanpur	Effect of Additive on Specific Fuel Consumption and emission level of a Diesel Engine	Nil
4	2012-13	Calves and leaves Damodar Threads Ltd, Kanpur	Analysis of Combustion Products from Burning of Incense	Nil
5	2013- 2014	GTRE, Bangalore	Gas Turbine Engine Combustion Characterization by Using Fixed Laser Energy Source	Nil
6	2017- 2019	SAIL, RDCIS, Ranchi	Development of mixed fired flat flame burner	Nil

10. Research Publications in Journals:

1. D. P. Mishra, P. J. Paul and H. S. Mukunda, "Stretch Effects Extracted from Inwardly and Outwardly Propagating Spherical Premixed Flames", Combustion and Flame, 97, pp 35-47, 1994.
2. D. P. Mishra, P. J. Paul and H. S. Mukunda, "Stretch Effects Extracted from Propagating Spherical Premixed Flames with Detailed Chemistry", Combustion and Flame, 99, pp.379-386,1994.
3. D. P. Mishra and A Rahaman, "An Experimental Studies of Flammability Limits of LPG/Air Mixtures", Fuel, 82, pp.863-866, 2003.
4. D. P. Mishra and R Kannan, "An Experimental of Lean Premixed Combustor", International Journal of Turbo & Jet Engines, 20, No 3, pp. 245-253, 2003.
5. D P Mishra, "Effects of Initial Temperature on the Structure of Laminar CH₄-Air Premixed Flame", Fuel, 82, page 1471-1475, 2003
6. D. P. Mishra and R Kannan, "Experimental Investigation of Lean Premixed Swirl Burner", International Journal of Turbo & Jet Engines, 21, No2, pp.103-113, 2004.
7. D. P. Mishra, "Emission Studies of Impinging Premixed Flames", Fuel, 83, pp. 1743-1748, 2004.
8. D. P. Mishra, "Numerical Studies of Stretched CH₄-Air Cylindrical Premixed Flames", Fuel, 83, pp. 2345-2350, 2004.
9. Shreekanta Dash, G. C. Dash, and D. P. Mishra, "Unsteady MHD flow of blood through an indented tube with atherosclerosis", J. AMSE, 73, No 4, pp. 19-30, 2004.
10. Shreekanta Dash, G. C. Dash, and D. P. Mishra, "Unsteady magneto hydrodynamic flow of a second-order fluid in a rectangular channel." J. AMSE, 73, No 6, pp. 75-86, 2004.
11. D. P. Mishra, "Numerical Modeling of Lean CH₄-Air Combustion", Journal of AMSE, Vol 74, No 5, pp.53-62 2005.

12. D. P. Mishra and Vishak T, "Numerical Simulation of Cold Flow in an Axisymmetric Dump Combustor", *International Journal of Turbo & Jet Engines*, 22, p.237-253, 2005.
13. D. P. Mishra and D. Mishra, "Augmentation of Local and Average Heat Transfer to an Impinging Air Jets Using Orifice", *International Journal of Turbo & Jet Engines*, 22, 225-235, 2005.
14. Mishra D. P. and T. Desai, "Numerical Study of Mixed Convection Heat Transfer from Thermal Sources on a Vertical Surface", *J. AMSE, B* 74 (1), pp. 31-44, 2006.
15. Mishra D. P. and A Rahaman, "An Experimental Study of Stability Limits of LPG-Air Premixed Flames" *Journal of Institute of Engineers (India)*, vol 87, p. 22-24, 2006
16. D. P. Mishra, "Effect of Nozzle Geometry of Turbulent Jet on the Impingement Heat transfer to a Flat Plate", *International Journal of Turbo & Jet Engines*, vol 23, No 2, p. 87-96, 2006.
17. Yoshida A, Naito H, Mishra D P, "Structure of Distributed Reaction Zone in a Well-stirred Reactor, *Journal of the Combustion Society of Japan*, vol48, No 144, p. 198-205, 2006.
18. D. P. Mishra, "Experimental Studies of Flame Stability Limits of CNG-air Premixed Flame", *Energy Conversion and Management*, V48, 4, p. 1208-1211, 2007.
19. D. P. Mishra and S. Kuchibhatla, "Numerical Studies of a Novel Vortex Combustor, *International Journal of Turbo & Jet Engines*, Volume 24, No. 2, 2007.
20. Kiran D. Y. and D. P. Mishra "Experimental Studies of Flame Stability and Emission Characteristics of Simple LPG Jet Diffusion Flame", *Fuel*, V86,10-11, P 1545-1551, 2007.
21. D. P. Mishra and Vishak T, "Computational Studies of Turbulent Premixed Flame Based Dump Combustor" *Fuel*, V86, 17-18, 2007.
22. D. P. Mishra and A Maji, "Numerical Studies of Combustion of Single n-Heptane Droplet", *Arcivum Combustionis*, V27, No.1-2, pp.45-54, 2007.
23. P. Kumar and D. P. Mishra "Experimental Investigation of Laminar LPG-H₂ Jet Diffusion Flame", *International Journal of Hydrogen*, 33, p.225-231, 2008
24. D. P. Mishra and A Maji, "Experiment and Numerical Studies of Combustion of Single n-Heptane Droplet", *Journal of Institution of Engineers (India)*, V88, P. 3-9, 2007.
25. Yoshida A, Naito H, Mishra D P, "Turbulent Combustion of Preheated Natural Gas-Air Mixture, *Fuel*, 87, 605-611, 2008.
26. K. U. Reddy and D. P. Mishra, "Studies on Spray Behavior of a Pressure Swirl Atomizer in the Transition Regime", *Journal of Propulsion and Power*, vol 24, No1 , P. 74-80, Jan-Feb2008.
27. Shreekantha Dash, G. C. Dash, and D. P. Mishra, "MHD Flow through a porous medium past a stretched vertical permeable surface in the presence of heat sources/sink and a chemical reaction", *Proceedings of the National Academy of science, India (Section A)* , vol 78, P 1, 2008.

28. D. P. Mishra, "An Experimental Study of an Impinging LPG/Air Premixed Flame, Journal of Institution of Engineers (India), v88, 1-7, 2008.
29. D. P. Mishra, "Experimental Studies of Low Emission LPG Vortex Burner", International Journal of Turbo & Jet Engines, 2008, vol25, No1, p. 27-35.
30. D. P. Mishra and N. Goyal, "Experimental Study of Internally Mixed Twin-Fluid Liquid Atomizer", International Journal of Turbo & Jet Engines, Vol 25, No 2, p. 105-110, 2008.
31. D. P. Mishra and P. Kumar, "Experimental investigation of laminar LPG-H₂ jet diffusion flame with preheated reactants, Fuel, 87, p. 3091-3095, 2008.
32. S Mahesh and D. P. Mishra, "Flame Stability and Emission Characteristics of Turbulent LPG IDF in a Backstep Burner", Fuel, 87, 2614-2619, 2008.
33. P. Kumar and D. P. Mishra, "Effects of Bluff-Body Shape on LPG-H₂ Jet Diffusion Flame, International Journal of Hydrogen, Volume 33, Issue 10, May 2008, p. 2578-2585.
34. P. Kumar and D. P. Mishra, "Characterization of Bluff-Body Stabilized LPG Jet Diffusion Flame with N₂ Dilution", Energy Conversion and Management, Volume 49, Issue 10, October, P. 2698-2703, 2008.
35. D. P. Mishra and P. Kumar, "Experimental Study of N₂ Dilution on Bluff-Body Stabilized LPG Jet Diffusion Flame with Preheated Reactant", *Combustion, Explosion, and Shock Waves, Vol. 45, No. 1, p. 1-7, 2009. Issn no: 0010-5082*
36. D. P. Mishra and Kiran Kumar D. Y., "Experimental Studies of the Bluff-body Stabilized Diffusion Flames", Fuel, 88, 573-578, 2009.
37. S Panda, A Uppadhaya, D. P. Mishra, "Effect of Varying Gas-Flow Conditions on the Characteristics of the Diffusion Flame and Silica Powders Prepared using Flame Combustion Synthesis", Journal of Powder Technology, 191, 164-169, 2009.
38. D. P. Mishra and A Verma, "Study of Downward Smoldering of Combustion in Polyurethane Foams", Archivum Combustionis, V 29, No. 3-4, 73-80, 2009.
39. D. P. Mishra and Maheshwari M, "An Experimental Study of Flame Spread over an Inclined Thin Fuel Surface", Archivum Combustionis, V 29, No. 3-4, 101-110, 2009.
40. K. V. Sridhar and D P Mishra, "Numerical Investigation of Direct Fuel Injection from the Cavity Walls in 2D Supersonic Combustor", International Journal of Turbo & Jet Engines, 26, 155-168, 2009
41. N.S. Karan, A. Agrawal, P.K. Pandey, P. Smitha, S.J. Sharma, D.P. Mishra, N.S. Gajbhiye, "Diffusion Flame synthesis of Hollow, Anatase TiO₂ Nanoparticles", Materials Science and Engineering: B, V 163, Issue 2, 128-133, 2009.
42. D P Mishra and P Kumar, "Experimental study of bluff-body stabilized LPG-H₂ jet diffusion flame with preheated reactant" Fuel, V 89, p.212-218, 2009.
43. Ashok Kumar, Ashok Kumar, D. P. Mishra, and Jitendra Kumar, "Flame Aerosol Synthesis and Characterization of Pure and Carbon Coated Titania Nano Powder", Journal of Aerosol Sciences, V 40, 720-730, 2009.

44. S. Y. Jejurkar and D. P. Mishra, "A Review of Recent Patents on Micro-combustion and Applications" Recent Patents on Engineering, V3, No.3, Pp. 194-209, 2009.
45. D P Mishra and R Sundharsan, "Numerical Analysis of Fuel-Air Mixing in a 2D Trapped Vortex Combustor", *Proc. IMechE, Part G: J. Aerospace Engineering*, 224(G1), 65-75, 2009.
46. D P Mishra, "Stability and Emission in LPG-Air Premixed Coaxial Jet Flame Burner under a Wide Range of Operating Condition", *International Journal of Chemical Reactor Engineering*, Vol. 7: P. 64, 2009. ISSN no: 1542-6580
47. S Mahesh and D. P. Mishra, Flame structure of LPG-air Inverse Diffusion Flame in a Backstep burner, *Fuel*, 89, 8, 2145-2148, 2010.
48. D P Mishra and P Kumar, "Effects of N₂ Gas on Preheated Laminar LPG Jet Diffusion Flame, *Energy Conversion and Management*, 51, P. 2144-2149, 2010.
49. D P Mishra and Singh H J, Numerical Studies of Bluff-Body Stabilized Lean Premixed Flame Based Combustor, *Archivum Combustionis*, 30, 1-2, P. 63-84, 2010.
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145. Abhishek Verma and Debi Prasad Mishra, Strategic Cooling Enhancement through Trench-Shaped Injection Holes, Two-Phase Numerical Study, Proceedings of the 9th World Congress on Momentum, Heat and Mass Transfer (MHMT'24) London, United Kingdom, April 11 – 13, 2024.
146. Soumyabrata Chakravarty, Subrata Mondal and Debi Prasad Mishra, Delhi Iron Pillar: The Corrosion-Resistant Wonder of Ancient India at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
147. Rayapati Subbarao and Debi Prasad Mishra, Analysis on the Practical Importance of Various Customs Followed in Ancient India, at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
148. Anil Kumar and Debi Prasad Mishra, Water Crisis - Blending Ancient Indian Water Wisdom with Modern Technology at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.

149. Bhawandeep Sharma, Anand Prakash Dwivedi and Debi Prasad Mishra, Challenging the Aryan Invasion Theory: A Critical Examination of the Evidence, at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
150. Rajiba Lochan Mohapatra and Debi Prasad Mishra, Practical Vedanta: Implication for Life, Society and Education at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
151. Samirsinh P. Parmar and Debi Prasad Mishra, Ancient Ingenuity: Town Planning Concepts of the Indus Valley Civilization at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
152. Anand Prakash Dwivedi, Bhawandeep Sharma and Debi Prasad Mishra, Wootz Steel: A Scientific Achievement of Ancient India at International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), NITTTR Kolkata on 26-27th July, 2024.
153. Amit Kumar Tiwary, Swarnambuj Suman and Debi Prasad Mishra, A Hybrid Strategy for Monitoring of Measured Critical Parameters for a Steel Ingot Manufacturing Facility- 22nd November, 2024, INCOMAME 2024 at NITTTR Kolkata.
154. Imran Rasheed and Debi Prasad Mishra- Characteristics of a Hydrogen Jet in Supersonic Crossflow, INCOMAME 2024 at NITTTR Kolkata, 23rd November, 2024,
155. S. Nayek, C. Chakraborty, D.P. Mishra, and R. Mukherjee, “Statistical data visualization and machine learning framework for diagnostic prediction of COVID-19 disease using clinical information,” Proc. 16th Int. Conf. Computing, Communication and Networking Technologies (ICCCNT), IIT Indore, India, Jul. 2025.
156. Samirsinh P. Parmar and Debi Prasad Mishra, Soil and Rock Engineering Methods of Ancient India, 2nd International Conference on Bharatiya Traditional Knowledge System (ICBTKS), NIT, Calicut, 18-19th July 2025.
157. Jeeja, E.; Awasthi, A.2); Mishra, D. P., Exploring the Taittiriya Upanishad’s Pancha Kosha Framework for Modern Early Childhood Development, 2nd International Conference on Bharatiya Traditional Knowledge System (ICBTKS), NIT, Calicut, 18-19th July 2025
158. Ajit Kumar Pattanaik , Debi Prasad Mishra, Arati Rath, and DilipA Comparative Study of Public Administration in the Gupta and Mughal Empires 2nd International Conference on Bharatiya Traditional Knowledge System (ICBTKS), NIT, Calicut, 18-19th July 2025.

(c) Technical Reports:

- (1) D. P. Mishra, “Design and Development of A Burner for Producer Gas”, Submitted to the Tata Energy Research Institute, New Delhi, Report No: AE/DPM/TERI/97/1, 1997.

- (2) D. P. Mishra, “Experimental and Computational Studies of Natural Gas-Air Premixed Flame”, Submitted to the DST, New Delhi, Report No: DST-PP-TR-2002-1, 2002
- (3) D. P. Mishra, “An Experimental Study of Flame Impingement Heat Transfer”, Submitted to the CSIR, New Delhi, Report No: CSIR-PP-TR-2002-2, 2002
- (4) D. P. Mishra, “An Experimental Study of Turbulent Premixed Coaxial Jet Flame Burner”, Submitted to the ARDB, New Delhi, Report No: ARDB-PP-TR-2002-2, 2004
- (5) D. P. Mishra, “An Experimental Study of Low Emission Energy Efficient Burner” Submitted to the MHRD, New Delhi, Report No: MHRD-PP-TR-2003-1, 2005
- (6) A. Kushari and D. P. Mishra, “Study of Liquid Fuel Combustion in a Re-Circulating Flow Field of Gaseous Oxidizer” Submitted to the ISRO-IITK Space Technology Cell, 2005.
- (7) D. P. Mishra, “Design and Development of LPG Commercial Burner ” PCRA, New Delhi, 2007.
- (8) D. P. Mishra, “Experimental Study of Coaxial Internally Mixed Atomizer” Submitted to the ISRO-IITK Space Technology Cell, 2008.
- (9) D. P. Mishra, “Experimental Study of Water Mist System for Fire Suppression” Submitted to the CSIR, New Delhi, 2008.
- (10) D. P. Mishra, and A Uppadhyaya, “Flame Synthesis of Silica Nanopowders” Submitted to the ARDB, New Delhi, 2009.
- (11) D. P. Mishra, “Experimental Study of Aerated Liquid Injection into Subsonic Flow” Submitted to the ARDB, New Delhi, 2010.
- (12) D. P. Mishra, “Experimental Study of Liquid Fuel Combustion using Chemiluminescence Sensor” Submitted to the DRDO, New Delhi, 2010.
- (13) D. P. Mishra, “Numerical and Experimental Study Droplet Combustion under Normal and Microgravity Conditions” Submitted to the ISRO, Bangalore, 2010.

(d) Books:

- (1) D. P. Mishra, Fundamentals of Combustion, Prentice Hall of India, New Delhi, revised edition, 2010. ISBN: 978-81-203-3348-2
- (2) D. P. Mishra, Engineering Thermodynamics, Cengage Learning India Pvt. Ltd, 2011. ISBN: 978-81-315-1596-9
- (3) D. P. Mishra, Experimental Combustion: An Introduction, CRC Press, USA, 2014. ISBN: 978-1-4665-1735-6
- (4) D. P. Mishra, Gas Turbine Propulsion, MV Learning, London/New Delhi, 2015. ISBN: 978-81-309-2752-7
- (5) D. P. Mishra, Fundamentals of Rocket Propulsion, CRC Press, USA, 2017. ISBN: 978-1-4987-8535
- (6) Debi Prasad Mishra, Bhagavad Gita for Youth, IFHE Publisher, 2024. ISBN: 978-81-967-615-8
- (7) Debi Prasad Mishra, An Introduction to Ancient Indian Technology, IFHE Publisher, 2024. ISBN: 978-81-967-615-8

(e) Edited Books/Proceedings:

- (1) D. P. Mishra, "Proceedings of National Seminar on Combustion", Allied Publisher, 2005. (ISBN:81-7764-953-1)
- (2) A. K. Ghosh and D. P. Mishra, "Proceedings of 21st National Convention of Aerospace Engineers", 16-17th Nov 2007, IIT, Kanpur, India.
- (3) D. P. Mishra and V K Reddy, Proceedings of 8th Asia Pacific Conference on Combustion, 10-13th December 2010, Hyderabad, India.
- (4) D. P. Mishra, "Glimpses of Ancient Indian Science and Technology", IFHE Publisher, 2015.
- (5) D. P. Mishra and Ranjeet Singh, "Techniques of Organic Farming", IFHE Publisher, 2015. (ISBN:978-93-5300-174-2)
- (6) D. P. Mishra, "Forays into Ancient Indian Science and Technology", IFHE Publisher, 2016.
- (7) Debi Prasad Mishra, "प्राचीन भारतीय विज्ञान प्रौद्योगिकी की झलक", IFHE Publisher, 2018. (ISBN:978-93-5267-412-1)
- (8) Debi Prasad Mishra, and Habiba Hussain, Proceedings of National Conference on Engineering Education November, NITTTR, Kolkata, India, 2022
- (9) Debi Prasad Mishra, Advances in Combustion Technology, CRC Press, 2022.
- (10) Debi Prasad Mishra, Ashok Kumar Dewangan, and Achhaibar Singh, Recent Trends in Thermal and Fluid Sciences, Springer, 2022
- (11) Achhaibar Singh, Debi Prasad Mishra, Ganapathi Bhat, Recent Trends in Thermal and Fluid Sciences, Springer, 2024
- (12) Debi Prasad Mishra and Kinsuk Giri, Book of Abstracts on 1st International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), 26th-27th July, 2024, NITTTR Kolkata 2024.
- (13) Debi Prasad Mishra and Subrata Mondal, Book of Abstracts for Proceedings on 1st International Conference on Mechanical Aerospace and Metallurgical Engineering 2024, NITTTR Kolkata 2025.
- (14) Debi Prasad Mishra, Dilip Raj Behera, Suresh Ku. Sahoo and Tapan Kumar Behera, Glorious Odisha, Biswa Odia Pariwar, First Edition 2025.
- (15) Debi Prasad Mishra, Subrata Mondal and Mrinal Kaushik, Recent trends in Mechanical Engineering, Springer 2026.zsa
- (16) Debi Prasad Mishra, Gayadhar Panda, Thajyal Naanyagi Ramasamy, Sustainable Energy, Environment and Green Technology for Greener Future, Proceedings of ICEEGT 2025, Volume II, Springer 2026.

(F) Popular Scientific and Spiritual Articles:

- (1) Rishav Agarwal and D. P. Mishra, "Perspective of hydrogen energy in future", Science India, Vol. 16, No. 10, p 12-17, 2013.
- (2) Swarup Y Jejurkar and D.P. Mishra, "Microcombustion: Powering the Miniature Machines", Science India, Vol. 17, No. 9, P 37-40, 2014.
- (3) Yash D and D. P. Mishra, Cooling System – Power Guzzlers, Science India, Vol. 18, No. 4, P 19-22, 2015.

- (4) Amit Kumar Gupta and D.P. Mishra, Wastewater treatment by photocatalytic oxidation process, Science India, Vol. 18, No. 11, P 25-30, 2015.
- (5) Vishnu H. and Debi Prasad Mishra, “An Eco-friendly Aircraft of the Future”, Dream 2047, 2019.
- (6) Debi Prasad Mishra, Indigenous Municipal Solid Waste Management System, Prasang, No2, Vol. 15, p1, 2019.
- (7) Debi Prasad Mishra and Anubhav Haldar, The Evolution of Hot Air Balloon, Science India, Vol. 19, No. 53, P 14-21, 2020.
- (8) Debi Prasad Mishra and Sanjay Vasanth, Why is Space Debris a Threat to Us?, Science Horizon, 10-15, 2020.
- (9) Anubhav Haldar and Debi Prasad Mishra, “The Saga of Sky Lantern”, Dream 2047, 2020.
- (10) Debi Prasad Mishra and Imran Rasheed, Saga of Scramjet Engine for Hypersonic Vehicle, Everyman Science, Vol. LVI, No 1&2, (April-July) 2021.

(G) Book Chapter

Glimpses of Ancient Indian Science and Technology”, IFHE Publisher, 2015.

1. A. Tiwari and D. P. Mishra, Iron and steel making method in ancient India
2. S. Mahesh and D. P. Mishra Vernacular Architecture in India – Role of Passive Cooling
3. Harshvardhan and D. P. Mishra, Dhwantapramapaka: Spectroscopy in Ancient India
4. Indramani Dhada, Prabhavati Giri and D. P. Mishra, Ancient temple construction technology and its relevance in modern era
5. Avinash Acharya and D. P. Mishra, Sun Temple Konark – An Engineering Marvel

Forays into Ancient Indian Science and Technology”, IFHE Publisher, 2016.

1. A. Tiwari and Debi Prasad Mishra, Extraction and Smelting of Zinc in Ancient India.
2. P. Giri, R. P. Naik and Debi Prasad Mishra Textile Technology in Ancient India and its Relevance.
3. S. P. Parmar and Debi Prasad Mishra, Geotechnical Engineering Practice in Ancient Vedic Period.
4. R. Sharma and Debi Prasad Mishra, The Traditional Indian Ahara in Modern Context.
5. Arjun Ravichandran and Debi Prasad Mishra, The Grand Anikut-Kallanai.

Advances in Combustion Technology, CRC Press, 2022.

1. Swarup Y. Jejurkar and Debi Prasad Mishra, Annular Microcombustor and Its Characterization.
2. Mahesh S. and Debi Prasad Mishra, Inverse Jet Flame Based Swirl Combustor.
3. Debi Prasad Mishra and Swarup Y. Jejurkar, Burner Technology for Hydrogen Fuel.
4. Debi Prasad Mishra and PK Ezhil Kumar, Trapped Vortex Combustor for Gas Turbine Application.
5. Manisha B. Padwal and Debi Prasad Mishra, Advances in Gel Propellant Combustion Technology.

Recent Trends in Thermal and Fluid Sciences, Springer, 2022

1. Imran Rasheed and Debi Prasad Mishra, Effects of Freestream Mach Numbers on Flow Field Features of a Sonic Jet in a Supersonic Crossflow.

2. Shiv Kumar, Debi Prasad Mishra and Vishnu Hariharan, Effect of Turbulence Intensity on Soot Formation in Confined Turbulent Jet of Methane-Air Diffusion Flame.

(H) Other Articles

1. D. P. Mishra, Yogic Consciousness in the Srimad Bhagavad Gita, Gita Pyus. No2. Vol. 6, p34, 2019.
2. Debi Prasad Mishra, Manini Manre, Prena Punja, Meerut, 2025
3. Debi Prasad Mishra, Phaguna Patjhad, Odiya Sahitya, Kolkata, 2025
4. Debi Prasad Mishra, Bikata Jalavayu Parivartna and Bharata and Odishare tara Prabhaha, Rastradeepa, Cuttack, 2025
5. Debi Prasad Mishra, Manini Manre, Antash, IIT Kanpur, 2026

11. Patents:

- i) D P Mishra, Improved Tandoor Oven, patent No:1292/DEL/2004, Grant No : 251576, 24th March 2012
- ii) D P Mishra and S C Nayak Recuperative Vortex LPG Burner, IPA No: 3197/DEL/2005 Grant No 269392, 19th October 2015
- iii) D P Mishra, and S J Swarup, Heat Recuperating Microcombustor, IPA No:2257/DEL/2009
- iv) D P Mishra, Low emission energy efficient gas burner, IPA No: 2347/DEL/2009
- v) D. P. Mishra & Manisha B P, “Two-fluid Atomizer”, IPA NO: 1551/DEL/2013.
- vi) D. P. Mishra, Hydrogen Gas Burner and Method of Combustion in Hydrogen Burner, 2013, IPA NO: 2545/DEL/2013.
- vii) Debi Prasad Mishra and Vishnu Hariharan, “Low NO_x Fuel Port Array Burner For Emission Control”, IPA no: 11052615/Del/2019.

12. Software Developments:

- (i) CAI for Gas turbine Propulsion
- (ii) CAI for Thermodynamics
- (iii) CFD code for Navier Stokes Solver
- (iv) CFD code for droplet combustion
- (v) Software for calculation of mass distribution in spray.
- (vi) Software for calculation of cone angle in spray.
- (vii) Software for flame length calculation
- (viii) Software for droplet size distribution

13. Thesis Supervision:

M Tech/M. Sc thesis: 39 (completed); Ph D thesis: 6 (completed), Ph D thesis: 3 (ongoing)
: Postdoc : 3 Nos

14. Other Academic/Administrative Contribution:

(A) Seminar/Short Term Course Organized:

1. Joint Convener for Winter School on “Mathematical Modeling and Computational Methods”, Nov 1997.

2. Delivered invited lecture on Biomass Gasifier Energy System” in short term course on **Non-Conventional Energy System**, 1998 at IIT, Kanpur.
3. Delivered invited lecture on “Thermo-chemical Conversion of Biomass” in short term course on **Renewable Energy System**, September 7-11, 2001, at IIT, Guwahati.
4. Convener, “**Air Pollution & its control**”, QIP short-term course, Nov 2002.
5. Convener, “**Innovation for Entrepreneurship**”, SIDBI sponsored Course, March 2003.
6. Convener, “**Combustion generated emission & its control**” QIP short-term course, 1st-5th March 2004.
7. Convener, “**National Seminar on Combustion**”, 8th November, 2004.
8. Convener, “**Non-Conventional Energy Sources**”, IRDP sponsored short-term course, December 2005.
9. Convener, “**Combustion and Spray**”, QIP short-term course, 3-7th December 2007.
10. Convener, “**Computational Combustion**”, QIP short-term course, 28th February - 3rd March 2012.
11. Convener, “**1st National Seminar on Ancient Science and Technology**”, 9th March 2012.
12. Convener, “**National Seminar on Burner Design and Development**”, 16th July 2013.
13. Chairman, **Seminar on Education for children with special needs**, 16th November 2013.
14. Convener, “**Ancient Science and Technology**”, QIP short-term course, 10th -14th November 2014.
15. Convener, “**2nd National Seminar on Ancient Science and Technology**”, 15th November 2013.
16. **Chairman**, Workshop on Organic Farming, 2nd November 2013
17. Convener, “**Workshop on Skill Development for Leather Craft**”, 27-28th June 2015.
18. Convener, “**Applied Combustion**”, short-term course, 13th -17th July 2015, in RDCIS, Ranchi.
19. Convener, “**3rd National Seminar on Ancient Indian Science and Technology**”, 14th October 2014.
20. Chairman, “**4th National Seminar on Traditional Indian Knowledge System**”, 16th December 2015
21. Chairman, “**5th National Seminar on Ancient Indian Science and Technology**”, 1st October 2016.
22. **Chairman**, Seminar on “**Seminar on Thermal Power Plants – Present Scenario and Future Trends**”, 19th August 2017.
23. **Chairman**, Seminar on “**Power with Zero Emissions and Zero Discharge**”, 28th October 2017
24. **Chairman**, “**6th National Seminar on Ancient Indian Science and Technology**”, 17th February 2017.
25. **Coordinator**, short term courses on **Supercritical Technology for Power Generation in India**, 20-24th June 2018.

26. **Chairman, “7th National Seminar on Ancient Indian Science and Technology”, 2nd November 2018.**
27. **Chairman, National Workshop on Inclusion of Indian Traditional Knowledge in Technical Education System, 7th September 2019.**
28. **Chairman, “8th National Seminar on Ancient Indian Science and Technology”, 2nd November 2019.**
29. **Chairman, “All India Seminar on Sustainable Energy Technologies”, 8-9th February 2020.**
30. **Chairman, 9th National Seminar on Ancient Indian Science and Technology, 8th August 2020, NITTTR Kolkata**
31. **Chairman, 10th National Seminar on Ancient Indian Science and Technology, 21st August 2021, , NITTTR Kolkata**
32. **Chairman, National Conference on Engineering Education, 11-12th Nov. 2021**
33. **Chairman, National workshop on Lokvidya held on 19th July 2021**
34. **Chairman, Technical Committee, “National Convention on Aerospace Engineering”, 21-22 March 2022.**
35. **Chairman, 11th National Seminar on Ancient Science and Technology, 15th October 2022, NITTTR Kolkata**
36. **Chairman, 12th National Seminar on Ancient Indian Science and technology, 2023, NITTTR Kolkata**
37. **Co-convener, ATAL short term courses on Life Skills for empowering 21st Century Learners, Kolkata, 2024.**
38. **Chairman, 1st International Conference on Bharatiya Traditional Knowledge, 26-27th July 2024, at NITTTR Kolkata.**
39. **Chairman, 13th National Seminar on Ancient Indian Science and technology, 16th November 2024, NITTTR Kolkata**
40. **Chairman, 1st International Conference on Mechanical, Aerospace, and Metallurgical Engineering, 22-23rd November 2024, at NITTTR Kolkata.**
41. **Chairman, Committee for exploring the various ways to make the Institute self-sustainable, NITTTR, Kolkata, 19th September 2024.**
42. **Chairman, Committee to prepare the Conduct Rules for the employees of the Institute in accordance with the Central Civil Services (Conduct) Rules 1964, NITTTR, Kolkata, Chairman, 16th October 2024**
43. **Co-patron, 2nd International Conference on Bharatiya Traditional Knowledge, 18-19th July 2025, NIT, Calicut.**

(B) Other Outreach Activities:

- Faculty Adviser, Vivekananda Samiti, IIT, Kanpur, 2012-2020
- Chairman, Workshop on Organic Farming, 2nd November 2013
- Chairman, International Foundation of Humanistic Education, 2011.
- Founder, Awake Mother India, 2012.
- Founder, Bachpan Bachao Abhiyan, 2016.
- Advisor, Think India, 2017
- Founder, Shikshak Bano Abhiyan 2018

(D) Academic Societies Membership:

- Life Member, Alumni Association of Indian Institute of Science, Bangalore (AA002084)
- Life Member, Alumni Association of Indian Institute of Technology, Kanpur
- Life Member, The Combustion Institute (Indian section) (LMC-527)
- Fellow, The Institution of Engineers (F-110821)
- Life member, The Aeronautical Society of India (M-20750)
- Life Member, The Solar Energy Society of India (LM: 0837/98)
- Life Member, Indian Society for Heat and Mass Transfer (LM: 76)
- Life Member, The Indian Society for Technical Education (LM-32083)
- Life member, The Indian Science Congress Association (76/2003),
- Life member, Indian Aerosol Science and Technology Association.
- Life member, Biogas Forum-India (LMO129),
- Fellow life member, Indian Institute of Scientific Heritage, (F:1366)
- Life member, Vigyan Bharati, New Delhi (UP/KNP/153)
- Life member, Indian Society of Mechanical Engineers (L-1176)
- Life member, Indian Society for Advancement of Materials and Processing Engineering. (L-996), 2007
- Member, ASME, USA, 2022-2023 (100686451)
- Council Member, Bharatiya Paramparik Gyan Vigyan Samaj, (CM-01)