RESUME

Dr. Ganesh D. Kedar (Employee Code: 7557)

DOB: March 02, 1967

Professor and Head

Department of Mathematics
RTM Nagpur University
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Research Area

Solid Mechanics, Operations Research

Educational Profile

2012 **Ph.D.** (Mathematics), RTM Nagpur University, Nagpur
Title: *Study of Some Boundary Value Problems in Heat Conduction and its Thermoelasticity*

2009 **M.Phil.** (Mathematics), Periyar University, Salem
Dissertation: *A Study of Fourier Transforms, Some Integral Operators and their Applications*

1991 **B.Ed.** Amravati University, Amravati

1990 **M.Sc.** (Mathematics) Amravati University, Amravati

Experience

Post	Duration	Institution
Lecturer	20.08.1992 to 31.12.2006	Kamla Nehru Mahavidyalaya, Nagpur
Associate Professor and HOD Mathematics Dept.	01.01.2006 to 21.09.2013	Kamla Nehru Mahavidyalaya, Nagpur
Associate Professor	21.09.2013 to 20.09.2016	Department of Mathematics RTM Nagpur University, Nagpur
Professor	21.09.2016 to 18.11.2020	Department of Mathematics RTM Nagpur University, Nagpur
Professor and Head	19.11.2020 to till date	Department of Mathematics RTM Nagpur University, Nagpur

Ph.D. Thesis Supervised

Awarded	Submitted	Working
07	01	07

Membership on Professional Bodies

- Indian Society of Theoretical and Applied Mechanics
- Von Karman Society for Advanced study and Research in Mathematical and Social Sciences.
- Marathi Vidnyan Parishad, Nagpur
- The Indian Science Congress Association
- Member of Board of Studies: Mathematics (RTM Nagpur University, Nagpur) 2018-2022 and 2022-till date.
- Member of Academic Council: An Autonomous Institute of Government of Maharashtra, Nagpur from 2021 till date.
- Member of Board of Studies: Mathematics, HH Raisoni University, Saikheda, Chindwara (MP) form 2021 till date.
- Member of Board of Studies: Humanities and Applied Sciences, General Engineering, SGB Amravati University, Amravati form June 2023 till date.
- Member of the Sectional Committee of the Section of Mathematical Sciences (including Statistics), Indian Science Congress Association for 2023-24.
- Member of Research and Recognition Committee (RRC) in Mathematics, Gondwana University, Gadchiroli.
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Organization of Workshop / Seminar / Conferences

2002	**Member (organizing Committee),** A National Seminar on, "Novel Synthesis of Materials" organized by Kamla Nehru Mahavidyalaya, Nagpur & Luminescence Society of India (Maharashtra Chapter) Dec 22, 2002.
2004	**Coordinator,** A National Seminar on, "Recent trend in Mathematics" organized by Kamla Nehru Mahavidyalaya, Nagpur, Jan 11, 2004.
2006	**Coordinator,** A National Conference on, "Network Security and Fuzzy Logic" organized by Kamla Nehru Mahavidyalaya, Nagpur, Aug 12, 2006.
2006	**Coordinator,** A National Conference on, "Role of Buddhist Monk and Lay People in Propagation of Buddhism" organized by Kamla Nehru Mahavidyalaya, Nagpur and P.P. Dr. Babasaheb Ambedkar Smarak Samiti, Deekshabhoomi, Nagpur Sept 28, 2006.
2010	**Member (organizing Committee),** A Vidarbha level Conference on, "Mihan opportunities and challenges" organized by Kamla Nehru Mahavidyalaya, Nagpur Feb 20, 2010.
2012	**Coordinator,** A workshop on, "Software MATLAB" organized by Kamla Nehru Mahavidyalaya, Nagpur, Oct 27, 2012.
2013	**Coordinator,** A National conference on, "Frontiers of Mathematics" organized by Kamla Nehru Mahavidyalaya, Nagpur, Mar 22, 2013.
2014	**Member (Organizing Committee)** An International Conference on, "Recent Advances in Mathematics (ICRAM 2014), organized by Department of Mathematics, RTM Nagpur University, Nagpur, during Jan 20-23, 2014.
2023	**Local Sectional Secretary: Mathematical Sciences (including Statistics)** 108th Indian Science Congress, organised at RTM Nagpur University, Nagpur, during January 03-07, 2023.

Research Projects carried out

Title of the project	Role	Duration	Funding Agency	Amount (Rs. In L)
Boundary Value Problems in Heat Conduction and its Thermoelasticity	PI	2012-2013	UGC	2.00
Study of some direct and indirect heat conduction problems in solids and their thermal behaviour	CI	2011-2014	UGC	5.28
Innovative Methods to Prepare the Mathematical Models on Some Thermoelastic Problems	PI	2015-2017	RTM Nagpur University	1.75

Chaired Technical Sessions: 14

National	International (Inland)	International (Abroad)
07	04	01 (Nepal)

1. UGC sponsored National seminar on, "Present Development and Future trends in Mathematical Sciences", organized by Department of Mathematics, Sindhu Mahavidyalaya, Nagpur during January 28-29, 2012.
2. UGC sponsored National conference on, "Recent advances in Mathematics and its Applications", organized by S.N. Mor Arts, Commerce and G D Saraf Science College Tumsar on Mar 30, 2012.
3. National Conference on Recent trends in Mathematical Sciences, organized by Arts, Com and Science College, Koradi.
4. National Conference on Advanced Research Trends in Sciences, organized by G.H. Raisoni College of Engg. During Feb 28-March 01, 2014.
5. Two sessions chaired in National Seminar (SAP-UGC) on General Relativity and Thermoelasticity organized by Dept. of Mathematics RTM Nagpur University, Nagpur during Feb 13-14, 2015.
6. Chaired the technical session-08 in the National Conference organized by the department of Mathematics, Mrs. K.S.K Alias Kaku Arts, Sci and Comm College, Beed during Jan 21-23, 2016.
7. Chaired a Technical Session in the 23rd International Conference of International Academy of Physical Sciences (CONIAPS XXIII), held at Nepal Academy of Sciences and Technology, **Kathmandu, Nepal** during Nov 16-18, 2018.
8. Chaired the technical session of 63rd congress of Indian society of Theoretical and Applied Mechanics: An International Meet, held at Dayananda Sagar University, Bangalore, India during Dec 20-23, 2018.
9. Chaired a session during International Conference on Advances in Physical, Chemical and Mathematical Sciences organized by Department of Mathematics, RTM Nagpur University during Feb 13-16, 2020.

10. Chaired a session in Two Days Workshop on Quality Enhancement Initiatives Through Innovative Pedagogical and Research Practices in Higher Education Institutes and Universities organized by IQAC, RTM Nagpur University during June 20-21, 2022.
11. Chaired a session in the International Conference on Mathematical Sciences and Its Applications organized by School of Sciences, SRTM University, Nanded during July 28-30, 2022.
12. Chaired a session in the National Symposium on Functional Materials for Sustainable Development organized by the National Academy of Sciences, India (NASI), Nagpur Chapter, held at RTM Nagpur University, Nagpur during October 10-12, 2022.
13. Chaired a session during 108th Indian Science Congress organized by RTM Nagpur University, Nagpur during Jan 03-07, 2023.
14. Chaired a session during two weeks UGC Sponsored Refresher Programme in Mathematics and Computational Sciences jointly organized by HRD Centre Savitribai Phule Pune University and KBC North Maharashtra University, Jalgaon on Nov 02, 2023.

Delivered Lectures: 21

National Conferences	International Conferences	Other Programs
04	05	12

1. Delivered a talk as a resource person in a workshop on, "Research methodology and computer application in research" held during Sept 25-30, 2015 at M.G. Arts and Science College, Armori.
2. Delivered a talk entitled, "Fractional Thermoelasticity" in a National Conference organized by the department of Mathematics, Mrs. K.S.K Alias Kaku Arts, Sci. and Com. College, Beed during Jan 21-23, 2016.
3. Delivered a talk entitled, "Boundary Value Problems in Heat Conduction" at Deogiri Institute of Engg. and Management Studies, Aurangabad, on July 22, 2016.
4. Delivered a lecture entitled, "Teaching Methodology of Engineering Mathematics" at Deogiri Institute of Engg. and Management Studies, Aurangabad, on July 15, 2017.
5. Delivered an expert talk entitled, "Statistical and Numerical Methods" at G.H. Raisoni Institute of Information Technology, Nagpur on Aug 04, 2018.
6. Delivered an invited lecture entitled, "Application of Magneto Fractional Order Thermoelasticity due to Eddy Current in a Plate" in 63rd congress of Indian society of Theoretical and Applied Mechanics: An International Meet, held at Dayananda Sagar University, Bangalore, India during Dec 20-23, 2018.
7. Delivered an invited lecture entitled, "Theory and applications of Heat Conduction" in the National Conference on Recent Trends in Mathematics, held at Shree Shivaji Arts, Commerce and Science College, Rajura (Chandrapur) Maharashtra on February 16, 2019.

8. Delivered a lecture entitled, "Boundary Value Problems in Heat Conduction and Their Applications" as a resource person on the occasion of National Mathematics Day 2018 at School of Mathematical Sciences, KBC North Maharashtra University, Jalgaon (Maharashtra) India on March 03, 2019.
9. Delivered an invited lecture entitled, "Mathematical Modeling in Transportation" on the occasion of the National Mathematics Day Program 2019, held at Gondwana University, Gadchiroli on Jan 08, 2020.
10. Delivered an invited lecture entitled, "Fractional Magneto Thermoelastic Model Subjected to Eddy Current and Hysteresis Losses" in the 24th International Conference of International Academy of Physical Sciences on Innovations in Physical Sciences held at Chaudhary Charan Singh University, Meerut during August 09-11, 2019.
11. Delivered a talk in a workshop on Developments in Mathematics Curriculum organized by Department of Mathematics, Science College Pauni on March 06, 2020.
12. Delivered a talk entitled, "Magnetic Effect on Heat Conduction" in the National Webinar on Advances in Mathematics organized by Department of and IQAC of Shrikrishna Mahavidyalaya, Gunjoti (Osmanabad) during July 24-26, 2020.
13. Delivered an Invited Talk on "Magneto heat conduction model subjected to eddy current and hysteresis losses in finite conducting plate" online in the International Conference on Integrated Interdisciplinary Innovations in Engineering (ICIIIE- 2020) Organized under twinning arrangement by held at Panjab University, Chandigarh.
14. Delivered an invited talk entitled, "Magneto Thermoelasticity" in a One Day International Webinar on 'Recent Advances in Mathematics' jointly organised by Shri Shivaji College, Rajura and Vidya Vikas College, Samudrapur on March 31, 2022.
15. Delivered a talk entitled, "One Dimensional Magneto Thermoelastic Problem Subjected to Eddy Current and Hysteresis Loss" at the International Conference on Mathematical Sciences and Its Applications organized by School of Sciences, SRTM University, Nanded during July 28-30, 2022.
16. Delivered a talk entitled, "Magnetic Effect in Conducting Thermoelastic Medium" in one-week online FDP organised by KDK College of Engineering in the one-week online FDP on 'Application of Mathematics in Science and Engineering: Social Impact' during August 22-27, 2022.
17. Delivered an invited Talk entitled, "Mathematical Modelling of Various Heat Sources and Internal Heat Generation in Solids" in the 2nd National Conference on Recent Trends in Pure and Applied Mathematics organised by PG Department of Mathematics, Science College, Nanded during March 28-29, 2023.
18. Delivered a talk entitled, "Importance of Outcome base Learning" in 'Outcome Base Teaching and Learning Summit-2023' organised by JD College of Engineering and Management, Nagpur on April 18, 2023.
19. Delivered a lecture entitled, "Theory and Applications of Heat Conduction" on during a UGC Sponsored Refresher Course in Physics, Mathematics Electronics, Computer Science and IT organised by HRD Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur on October 18, 2023.

20. Delivered a lecture entitled, Mathematical Modelling for Daily life Problems' on the occasion of 'National Science Day' organised by IQAC, RTM Nagpur University, Nagpur on February 27, 2024.
21. Delivered a lecture entitled, Mathematical Modelling for Daily life Problems' on the occasion of 'National Science Day' organised by Santaji Mahavidyalaya, Nagpur on February 28, 2024.

PUBLICATIONS

International Journals	Proceedings of International Conferences	Proceedings of National Conferences
58	02	03

Cited by (Source: https://scholar.google.co.in)

	All	Since 2019
Citations	436	264
h-index	12	08
i10-index	14	08
Documents	58	19

Cited by (Source: https://www.scopus.com)

Citations	220
h-index	09
Documents	29

Research papers published in International Journals: 58

1. Inverse Heat Conduction Problem in a Semi-Infinite Circular Plate and its Thermal Deflection by Quasi-static Approach, K.C. Deshmukh, S.D. Warbhe, **G.D. Kedar** and V.S. Kulkarni, Applications and Applied Mathematics: An International Journal (AAM) Vol. 5, No. 1, 120-127 (June 2010). Web of Sci
2. Inverse Heat Conduction Problem in a Semi-Infinite Cylinder and its Thermal Stresses by Quasi-Static Approach, K.C. Deshmukh, S.D. Warbhe, **G.D. Kedar** and V.S. Kulkarni, Applications and Applied Mathematics: An International Journal, Vol. 6, (11), pp. 143 – 152 (June 2011). Web of Sci
3. Estimation of Temperature distribution and Thermal Stresses in a Thick Circular Plate**, G.D. Kedar** and K.C. Deshmukh, African Journal of Mathematics and Computer Science Research, Vol. 4(13), pp. 389-395, (December 2011).
4. Thermal Stresses in a Semi-Infinite Solid Circular Cylinder, **G.D. Kedar,** S.D. Warbhe, K.C. Deshmukh and V.S. Kulkarni, Int. J. of Appl. Math and Mech. (IJAMM), Vol. 8(10), 38-46, (2012).

5. A Transient Heat Conduction Problem of Semi-infinite Solid Circular Cylinder and its Thermal Deflection by Quasi-static Approach, **G.D. Kedar** and K.C. Deshmukh, Int. J. of Physics and Mathematical Sciences, Vol. 2(4) pp.11-16, (Oct 2012).
6. Determination of Thermal Stresses in a Thin Clamped Hollow Disk under Unsteady Temperature Field due to Point Heat Source, **G.D. Kedar** and K.C. Deshmukh, IOSR Journal of Mathematics, Vol. 4(6), pp. 14-19, (January 2013).
7. Inverse Estimation of Temperature Distribution and Thermal Stresses in a Semi-infinite Hollow Circular Cylinder by Quasi-static Approach, **G.D. Kedar** and K.C. Deshmukh, Int. J. of Mathematical Sciences & Engineering Applications, Vol. 7(I), pp.371-381, (January 2013).
8. Thermal Deflection in a Semi-infinite Hollow Circular Cylinder Subjected to Ramp-type Heating, **G.D. Kedar** and K.C. Deshmukh, Asian Journal of Current Engineering & Maths 2 (1), 27-29. (January 2013).
9. Estimation of Thermal Stresses due to Arbitrary Initial Heat Supply in a Semi-infinite Solid Circular Cylinder by quasi-static approach, **G.D. Kedar** and K.C. Deshmukh, Int. J. of Applied Mathematical Sciences, Vol. 6(1), 29-37, (March 2013).
10. Thermal Stresses due to Ramp-type Heating in a Semi-infinite hollow Circular Cylinder, **G.D. Kedar** and K.C. Deshmukh, Far East Journal of Applied Mathematics, Vol. 76(1), 01- 12, (May 2013).
11. Effect of Heat Generation on Quasi-Static Thermal Stresses in a Solid Sphere S.P. Pawar, K.C. Deshmukh, **G.D. Kedar**, IOSR Journal of Mathematics (IOSR-JM) 7 (5), 21-29 (July 2013).
12. Effect of Internal Heat Generation and Temperature Asymmetry in a Hollow Sphere and its Thermal Stresses, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar** Journal of Thermoelastisity (JOT) 1 (3), 1-5 (September 2013).
13. Dynamic Behavior of Functionally Graded Solid Sphere Subjected to Thermal Load S.P. Pawar, K.C. Deshmukh, **G.D. Kedar**, IOSR Journal of Mathematics (IOSR-JM) e- ISSN: 2278-3008, p-ISSN:2319-7676. Vol. 9, Issue 5, PP 43-54 (Jan. 2014).
14. Thermal stresses in an infinite body with spherical cavity due to an arbitrary heat flux on its internal boundary surface, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar**, Journal of Advances in Mathematics, Volume 9(3) PP.2039-2056 (August 2014).
15. On Thermal Stresses in an Infinite Body Heated by Continuous Point Source inside it, S.P. Pawar, K.C. Deshmukh, **G.D. Kedar**, Journal of Thermoelasticity (JOT) 1 (4), 32-38, (December 2014).
16. Dynamic Problem of Generalized Thermoelasticity for a Semi-infinite Cylinder with Heat Sources, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Journal of Thermoelasticity, Vol. 2(1) pp. 01-08 (2014).
17. Generalized thermoelastic diffusion problem in a thick circular plate with axisymmetric heat supply, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Acta Mech. (Springer), 226, 2121–2134 (January 2015). Springer

18. Two-dimensional generalized thermoelastic diffusion in a half-space under axisymmetric distributions, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Acta Mech. (Springer), 226, 3263–3274 (Oct 2015). Springer
19. Inverse Heat Conduction Problem in a Semi-infinite Hollow Cylinder and its Thermal Deflection by Quasi-static Approach, **G.D. Kedar** and K.C. Deshmukh, International Journal of Applied Mathematics and Computation, Volume 6(2) pp. 15–21 (February 2015).
20. Inverse heat conduction problem in a solid sphere and its thermal stresses, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar**, Journal of Advances in Mathematics, Vol. 10(6), 3588- 3592 (May 2015).
21. Thermal stresses in functionally graded hollow sphere due to non-uniform internal heat generation, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar**, Applications and applied Mathematics: An International Journal (AAM), Vol. 10(1), 552-569 (June 2015). Web of Sci
22. Dynamic Problem of Fractional Order Thermoelasticity for a Thick Circular Plate with Finite Wave Speeds, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Journal of Thermal Stresses, Vol. 39, No. 2, 220–230, (2016). Scopus
23. A Brief Note on Generalized Thermoelastic Response in a Half Space due to a Periodically Varying Heat Source under Axisymmetric Distribution, J.J. Tripathi, K.C. Deshmukh and **G.D. Kedar**, International Journal of Thermodynamics (IJoT), Vol. 19 (1), pp. 1-6, (March 2016). Scopus
24. Generalized thermoelastic problem of a thick circular plate Subjected to axisymmetric heat supply, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Journal of Solid Mechanics Vol. 8, No. 3, 578-589, (2016). Scopus
25. Generalized thermoelastic diffusion in a thick circular plate including heat source, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Alexandria Engineering Journal (Elsevier), 55(3), 2241–2249 (June 2016). Scopus
26. Effects of Stress Resultants on Thermal Stresses in a Functionally Graded Rectangular Plate Due to Temperature Dependent Material Properties, V.R. Manthena, N.K. Lamba, **G.D. Kedar** and K.C. Deshmukh, International Journal of Thermodynamics (IJoT) Vol. 19 (4), pp. 235-242, (Dec 2016). Scopus
27. Springbackward Phenomenon of a Transversely Isotropic Functionally Graded Composite Cylindrical Shell, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Journal of Applied and Computational Mechanics, Vol. 2(3), pp. 134-143 (Dec 2016). Scopus
28. Transient thermoelastic problem of a nonhomogeneous rectangular plate, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Journal of Thermal Stresses, Vol. 40(5), pp. 627– 640 (April 2017). Scopus
29. Generalized thermoelastic problem of thick circular plate with Axisymmetric Heat Supply Due to Internal Heat Generation, J.J. Tripathi, **G.D. Kedar** and K.C. Deshmukh, Journal of Solid Mechanics, Vol. 9(1), pp. 115-125 (2017). Scopus

30. Thermal stress analysis in a functionally graded hollow elliptic-cylinder subjected to uniform temperature distribution, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Applications and Applied Mathematics: An International Journal (AAM), Vol. 12(1), pp. 613-632 (June 2017). Web of Sci
31. Generalized thermoelastic axi-symmetric deformation problem in a thick circular plate with dual phase lags and two temperatures, Rajneesh Kumar, V.R. Manthena, N.K. Lamba, **G.D. Kedar,** Materials Physics and Mechanics 32, 123-132 (Nov 2017). Scopus
32. Thermoelastic analysis of a nonhomogeneous hollow cylinder with internal heat generation, V.R. Manthena, N.K. Lamba, **G.D. Kedar**, Applications and Applied Mathematics: An International Journal (AAM), Vol. 12(2), 946–967 (Dec 2017). Web of Sci
33. Transient thermal stress analysis of a functionally graded thick hollow cylinder with temperature dependent material properties, V. R. Manthena and **G. D. Kedar,** Journal of Thermal Stresses, Vol. 41(5), 568–582 (March 2018). Scopus
34. Mathematical Modeling of Thermoelastic State of a Thick Hollow Cylinder With Nonhomogeneous Material Properties, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Journal of Solid Mechanics, Vol. 10(1) pp. 142-156, (2018). Scopus
35. Thermoelastic Analysis of a Rectangular Plate with Nonhomogeneous Material Properties and Internal Heat Source, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Journal of Solid Mechanics, Vol. 10(1) pp. 200-215, (2018). Scopus
36. Thermal stress analysis of a thermosensitive functionally graded rectangular plate due to thermally induced resultant moments, V.R. Manthena, **G.D. Kedar** and K.C. Deshmukh, Multidiscipline Modeling in Materials and Structures, Vol. 14 (5), pp.857-873, (Nov 2018). Scopus
37. Mathematical Modeling of Thermoelastic State of a Functionally Graded Thermally Sensitive Thick Hollow Cylinder with Internal Heat Generation, V.R. Manthena1, **G.D. Kedar**, International Journal of Thermodynamics (IJoT) Vol. 21 (4), pp. 202-212, (Dec 2018). Scopus
38. Estimation of Thermoelastic State of a Thermally Sensitive Functionally Graded Thick Hollow Cylinder: A Mathematical Model, V.R. Manthena, N.K. Lamba and **G.D. Kedar**, Journal of Solid Mechanics, Vol. 10(4) pp. 766-778, (2018). Scopus
39. On thermoelastic problem of a thermosensitive functionally graded rectangular plate with instantaneous point heat source, V.R. Manthena, **G.D. Kedar**, Journal of Thermal Stresses, Vol. 42(7), pp. 849-862 (2019). Scopus
40. Analytical solution of heat conduction of a multilayered annular disk and associated thermal deflection and thermal stresses, VR Manthena, VB Srinivas, **GD Kedar**, Journal of Thermal Stresses 43 (5), 563-578 (2020).
41. Thermoelastic Behavior in a Multilayer Composite Hollow Sphere with Heat Source, S.P. Pawar, J.J. Bikram, **G.D. Kedar**, Journal of Solid Mechanics, Vol. 12(4), pp. 883-901 (Aug 2020).

42. Study of Time fractional heat conduction equation in rectangular plate, J.J. Bikram, **G.D. Kedar**, V.M. Raut, NOVYI MIR Research journal, Vol. 5(10), pp. 93-104, (Oct 2020).
43. Effect of temperature dependency in a one-dimensional two-temperature magneto- thermoelastic problem due to the influence of modified Ohm's law, L.C. Bawankar, **G.D. Kedar**, Journal of Solid State technology, Vol. 63(4), pp. 5870-5885, (2020).
44. Fractional order heat conduction and thermoelastic response of a thermally sensitive rectangular parallelepiped V.B. Srinivas, V.R. Manthena, Jaya Bikram, **G.D. Kedar**, Int. Journal of Thermodynamics, Vol. 24(1), pp. 62-73 (Mar 2021).
45. Analysis of Thermal Behaviour of a Thermosensitive FG Plate V.B. Srinivas, V.R. Manthena, **G.D. Kedar**, Solid State Technology, Vol. 64(2), pp. 4794-4802, (2021).
46. Analysis of Probability Distribution Due to Aspiration Level in Fuzzy Matrix Game, SP Dubey, **GD Kedar,** Communications in Mathematics and Applications 12 (3), 595 (2021).
47. Fractional order heat conduction and thermoelastic response of a thermally sensitive rectangular parallelopiped, VB Srinivas, VR Manthena, J Bikram, **GD Kedar,** International Journal of Thermodynamics 24 (1), 62-73. (2021).
48. A Communication Network Routing Problem: Modelling and Optimization Using Non– Cooperative Game Theory, S.P. Dubey, **G.D. Kedar**, S.H. Ghate, Int. Journal of Applied Mathematics and Computer Science, Vol. 31(1), 155–164 (2021).
49. Memory response of magneto-thermoelastic problem due to the influence of modified Ohm's law, L.C. Bawankar, **G.D. Kedar**, Applications and applied mathematics: An International Journal, Vol. 16(1), pp. 1-21 (2021).
50. Magneto-thermoelastic problem with eddy current loss of a thermosensitive conducting plate, L.C. Bawankar, **G.D. Kedar**, Advances in Mathematics: Scientific journal Vol. 10(1), 557-570 (2021).
51. Study of Thermoelastic behaviour, Efficiency and Effectiveness of Rectangular Fin with Fractional Order Energy Balance Equation J.J. Bikram1, G.D. Kedar, International Journal of Thermodynamics (IJoT) Vol. 24 (3), pp. 216-225 (2021).
52. Initial Stress and Modified Ohm's Law in Magneto-thermoelastic Problem Under Three Theories with Microtemperatures and Voids, L Bawankar, **G.D. Kedar,** International Journal of Thermodynamics, Vol. 25 (1), 54-63. (2022).
53. Transient hygrothermal response of an infinite solid cylinder with internal heat generation, T.F. Islam, **G.D. Kedar**, S. Anwar, Journal of Thermal Stresses, 1-14 (2023)
54. Effect of Thermosensitivity on Heat Conduction and Stresses of a Multi-layered Annular Disk, **G.D. Kedar**, VB Srinivas, VR Manthena, Journal of Solid Mechanics, Vol. 15 (2), 198-216. (2023).
55. Hygrothermal analysis of a semi-infinite cylinder: an integral transform approach, T.F. Islam, **G.D. Kedar**, S. Anwar, Multidiscipline Modelling in Materials and Structures Vol. 19 (6), 1262-1274 (2023).

56. Study of Hysteresis and Eddy Current loss of One-dimensional Magento-thermoelastic problem, B.B. Balpande, **G.D. Kedar,** The International Journal of Engineering and Science 12 (7), 29-40. (2023).
57. A Quasi-Static Approach for Inverse Hygrothermal Problem and Stress Analysis in Semi-Infinite Circular Plates, **G.D. Kedar** and T.F. Islam, International Journal of Applied and Computational Mathematics, Vol. 10 (Article 6) (2024).
58. Hygrothermal buckling analysis of thin rectangular FGM plate with variable thickness, T.F. Islam and **G.D. Kedar**, Engineering Computations, Vol. 41 (3) 710-726 (2024).

Research papers published in proceedings of international conference: 02

1. Non-Homogeneous Steady-State Heat Conduction Problem in a Rectangular Plate and its Thermal Stresses, K.C. Deshmukh, M.V. Khandait, **G.D. Kedar** and Y.I. Quazi, 57th Congress of ISTAM (An Int. Meet), Pune held on Dec 17-20, 2012, pp. 183-188.
2. Theoretical Approach to Study disturbances due to mechanical Source in a Generalized Thermoelastic Diffusive Half Space, K.C. Deshmukh, J.J. Tripathi and **G.D. Kedar**, Third International Conference on Advances in Applied Science and Environment Engineering ASEE 2015, held at **Kuala Lumpur, Malaysia** during April 11-12, 2015, Electronic ISBN: 978-1-63248-055-2, DOI: 10.15224/978-1-63248-055-2-12, pp. 57-61.

Research papers published in proceedings of National conference: 03

1. Thermal Stresses in a Solid Sphere with Convective Heat Transfer, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar,** UGC Sponsored National Conference on Frontiers of Mathematics held on March 22, 2013, pp. 05-14.
2. A Temperature Distribution in a Functionally Graded Hollow Sphere with Heat Generation: A Comparative Study with Isotropic Model S.P. Pawar, K.C. Deshmukh, **G.D. Kedar** and A.B. Buradkarm, UGC Sponsored National Conference on Frontiers of Mathematics held on March 22, 2013, pp. 97-104.
3. On conduction of Heat in an Infinite Body, S.P. Pawar, K.C. Deshmukh and **G.D. Kedar**, National Conference on Recent trends in Mathematical Sciences, organized by Arts, Com and Science College, Koradi, PP 21-29.

RESEARCH PAPERS PRESENTED

International Conferences	National Conferences
12	07

Research Papers Presented at International Conferences: 12

1. *Inverse Heat Conduction Problem in a Semi-Infinite Circular Plate and Thermal Stresses by Quasi-Static Approach*, 54th Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), International Meet, held at Netaji Subhas Institute of Technology, New Delhi, December 18-21, 2009.
2. *Thermal Stresses in a semi-infinite hollow circular cylinder subjected to ramp-type heating*, 55th Congress of Indian Society of Theoretical and Applied Mechanics (An International meet), Hamirpur (HP) India, held on December 18-21, 2010.
3. *Determination of Thermal Stresses in a Thin Clamped Hollow Disk under unsteady temperature field due to point heat source*, 56th Congress of Indian Society of Theoretical and Applied Mechanics (An International meet), Surat, India, held on December 19-21, 2011.
4. *Non-Homogeneous Steady-State Heat Conduction Problem in a Sphere and Its Thermal Stresses*, 57th Congress of ISTAM (An Int. Meet), Pune held on Dec 17-20, 2012.
5. *Transient Thermal Stresses in a Functionally Graded Solid Sphere*, International Conference on Recent Advances in Mathematics (ICRAM 2014), organized by Department of Mathematics, RTM Nagpur University during Jan 20-23, 2014.
6. *On generalized thermoelastic diffusion in a thick plate with internal heat generation subjected to an axisymmertic heat supply*, 59th congress of Indian society of Theoretical and Applied Mechanics: An International Meet, held at Alliance University, Bangaluru during Dec 17-20, 2014.
7. *Theoretical approach to study disturbances due to mechanical source in a generalized thermoelastic diffusive half space*, International Conference on Advances in Applied Science and Environmental Engineering - ASEE 2015, held at **Kuala Lumpur, Malaysia** during April 11-12, 2015.
8. *Thermal Stresses in a Circular Plate Subjected to Random Temperature Distribution*, 60th congress of ISTAM (Indian society of Theoretical and Applied Mechanics, Malviya National Institute of Technology (MNIT), Jaipur, during Dec 16-19, 2015.
9. *Estimation of Thermoelastic State of a Thermally Sensitive Functionally Graded Hollow Cylinder: A Mathematical Model*, International Conference on Recent Advances in Theoretical and Computational Partial Differential Equations with Applications, held at Institute of Engineering and Technology, Panjab University, Chandigarh during December 5-9, 2016.
10. *Thermoelastic Analysis of a rectangular Plate with Non-homogeneous Material Properties and Internal Heat Source*, International Conference on Advanced Trends in Engineering Science and Humanities held at Priyadarshini J.L. College of Engineering, Nagpur during Dec 15-17, 2016.

11. *Thermal Stresses Analysis of a Multilayered Circular Disk due to Thermally Induced Resultant Moments and Internal Heat Generation*, 62nd congress of ISTAM (Indian society of Theoretical and Applied Mechanics) held at University College of Engineering, Osmania University, Hyderabad during December 15-18, 2017.
12. *Thermal Stresses due to Eddy Current Loss in a Rectangular Plate*, 23rd International Conference of International Academy of Physical Sciences (CONIAPS XXIII), held at Nepal Academy of Sciences and Technology, **Kathmandu, Nepal** during Nov 16-18, 2018.

Research Papers Presented at National Conferences: 07

1. *Inverse Heat Conduction Problem in a Semi-infinite Hollow Cylinder and its Thermal Stresses by Quasi-static Approach*, 5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations, Organized by Department of Mathematics, Kakatiya University, Warangal, A.P. (India), March 13-15, 2010.
2. *Inverse Heat Conduction Problem in a Semi-infinite Hollow Cylinder and its Thermal Deflection by Quasi-static Approach*, National Conference on Recent Trends in Mathematical Sciences, Organized by Department of Mathematics, Osmania University, Hyderabad (A.P.), India, March 30-31, 2010.
3. *Thermal Deflection in a Semi-infinite Hollow Circular Cylinder Subjected to Ramp- type heating, National conference on Mathematical Modeling and Computer Simulation*, Organized by ITBHU Varanasi, March 25-27, 2011.
4. *Quasi-static Thermal Deflection in a Semi-infinite Solid Circular Cylinder*, National seminar on Present Development and Future trends in Mathematical Sciences, Organized by Sindhu Mahavidyalaya, January 28-29, 2012.
5. *Estimation of thermal stresses due to arbitrary initial heat supply in a semi-infinite solid circular cylinder by quasi-static approach*, National conference on Recent advances in Mathematics and its Applications organized by SN Mor Arts, Commerce and G D Saraf Science College Tumsar, Mar 30, 2012.
6. *Thermal stresses in a hollow sphere with internal heat generation and asymmetric steady temperature field,* National conference on Mathematical Sciences, organized by Shri Dr. R.G. Rathod College Mrtizapur held on Jan 18-19, 2013.
7. *On Temperature Distribution in Functionally Graded Solid Sphere,* National Conference on Statistics, Mathematics and Their Applications, organized by Institute of Science, Nagpur during Jan 02-03, 2014.