

L.A.D. & Smt. R.P. College for Women, Nagpur

FACULTY PROFILE

❖ Basic Information

- **Name:** Dr. Payal Hiranwar
- **Designation:** Assistant Professor
- **Department:** Mathematics
- **Area of Specialization:** Thermoelasticity
- **VIDWAN ID-** 617584



❖ Educational Qualifications: M.Sc, M.Phil., Ph.D (Mathematics)

❖ Teaching Experience:

Name of Institute	Nature of Appointment	Duration
• Lady Amritbai Daga and Smt. R.P College (LAD College), Shankar ..	Assistant Professor & Head , Department of Mathematics.	From August 2021 till Date
• Santaji Mahavidyalaya	Adhoc	June 2019- March 2020
• M.P.Deo Memorial Dharampeth Science College	CHB	June 2018- April 2019
• Hislop College	CHB	June 2017 – DEC 2017
• Dr. Babasaheb Ambedkar College of Engineering and Research	UGC REGULAR	August 2009- June 2013
• Priyadarshini College of Engg. Nagpur	Adhoc	July 2008-April 2009
• G.H. Rasoni College of Engineering, Nagpur	CHB	Aug 2006-Jan 2007

Total Teaching Experience: 13+ Years

❖ **Research Experience**

1. Total Research Experience: 15 years
2. Research Guidance (M.Phil/Ph.D. Guided):-
3. Areas of Research Interest: Thermoelasticity.

❖ **Research Publications**

(A) Research Papers in National/ International Journals

- Published a research Paper titled “Analysis of Transportation Aspects using Enhanced Methodology” in The Indian Journal of Technical Education, Volume 48, Special Issue No. 1, Pg. no. 167, October 2025, ISSN 0971-3034.
- Published a research Paper titled “Modified Transporting Algorithm with Matlab Coding” in The Indian Journal of Technical Education, Volume 48, Special Issue No. 1, Pg. no.174 , October 2025, ISSN 0971-3034.
- Deflection Behavior due to the response of the Caputo-Fabrizio fractional Derivative in a thermoelastic disc with heat generation published in Indian Journal Of Technical Education(IJTE) , ISSN:0971-3034, Volume 46, Special Issue, Sept 2023
- Thermoelastic Problem of a Semi Infinite Cylinder with Internal Heat Sources, published in International Journal of Engineering and Innovative Technology (IJEIT) ,ISSN:2277-3754, Vol 3, Issue 1, July 2013.
- Thermal Deflection of a Thick Clamped Rectangular Plate published in International Journal of Engineering and Innovative Technology (IJEIT) ,ISSN:2277-3754, Vol 3, Issue 1, July 2013.
- Thermoelastic problem of an Cylinder with Internal Heat Sources , published in Journal of Statistics and Mathematics, ISSN: 0976-8807 & E-ISSN 0976-8815,Vol 3,Issue 2,pp-103-108,2012
- “Deflection Behavior due to the response of the Caputo-Fabrizio fractional Derivative in a thermoelastic disc with heat generation” published in Indian Journal of Technical Education, Volume 46, Special Issue, September 2023.ISSN 0971-3034.
- Thermoelastic problem of an isotropic circular annular fin, published in Journal Of Statistics and Mathematics, ISSN: 0976-8807 & E-ISSN 0976-8815,Vol 3,Issue 2,pp-103-108.

(B) Books / Book Chapters

Authored-

- Contemporary Abstract Algebra by RK Publications, ISBN No. 978-93-48020-87-1.
- Calculus and Ordinary Differential Equations by RK Publications, ISBN No. 978-93-48020-23-9.

(C) Conference / Seminar Proceedings

- Research paper entitled “Thermoelastitic Modeling of Memory based Space-fractional ordered Hollow Cylinder” in Proceedings of International Conference – Indian Society of Theoretical and Applied Mechanics (ISTAM 2025) organised by School of Advanced Sciences and Languages, VIT Bhopal University, India during December 10-12, 2025.
- Presented Two Research Papers titled “ Analysis of Transportation Aspect using enhanced Methodology” & “ Modified Transporting Algorithm with Matlab Coding” in the 3rd International Conference on “Advancement in Science, Technology and Management” organised at S.B.Jain Institute of Technology, Management and Research , Nagpur on 21st & 22nd March 2025.
- Oral Presentation of Paper entitled “Distribution of deflection in a circular structural object as a result of memory-dependent impact” in International Conference MASS-2024 (Materials & Applied Science for Society) 30-31st Dec 2024 organised by ANAND NIKETAN college of Science , Arts & Commerce, Anandwan, Warora, Dist. Chandrapur, Maharashtra, India-442914.
- Presented a Poster titled “ Unraveling the Potential of Mathematical modeling in Medicine” in One Day National Conference on “Recent Innovations in Science and Technology (RIST 2024) sponsored by Jalgaon and jointly organised by S.I.Patil Arts G.B.Patel Science and S.T.K.V. Sangh Commerce College, Shahada,Nandurbar,Maharashtra on 22nd March 2024.
- Presented Paper Entitled “Transient Thermoelastic Problems of an Isotropic Circular Annular Fin”, in International Conference on Mathematical Sciences for Advancement of Science & Technology MSAST 2011, Kolkata from 18th – 20th Dec, 2011.

❖ **Orientation / Refresher Courses / FDPs Attended**

- Successfully completed Refresher Course (Online), Organized by UGC MMTTC Patna University, Patna in collaboration with Department of Mathematics, Patna University, Patna from 2nd February -14th February 2026.
- Participated in the **Five Day International Faculty Induction Program** on “AI in Research & Innovation” organised by L.A.D & Smt. R.P. College for Women, Nagpur in Collaboration with Yeshwantrao Chavan College of Engineering (YCCE) , from 18th to 22nd August 2025 .
- Successfully completed the “**NEP 2020 Orientation and Sensitization Programme**” under the Malaviya Mission Teacher Programme (MM-TTP) of University Grants Commission organised by UGC-Malaviya Mission Training Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, from 16th March -30th March 2025.
- Participated in the **Online 13th Faculty Induction Program** organised by UGC-Malaviya Mission Training Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, from 2nd Jan -30th Jan 2025 obtained **A+ Grade**.
- **Organising Secretary** of “**Seven Days International Faculty Induction Program**” on Data Science and Optimization Techniques organised by Dept. of Mathematics of Yeshwantrao Chavan College of Engineering (YCCE) in Association with Nagpur University Mathematics Teacher’s Association (NUMTA) during 27th January to 3rd February 2025.
- Attended Six Day **Faculty development Programme – “PRAGATI KE PATH PAR 2024”** from 18 to 24 July 2024, organized by Justice M.L. Pendse Language Lab in Collaboration with IQAC, L.A.D & Smt. R.P. College for women, Nagpur.
- Attended **Five Days Online Short Term Training Program** on “Women in Workplace: Liberalization, Globalization and Gender Equality” **Organized by Department of Basic Sciences, IIIT Nagpur** from 26th December to 30th December 2023.
- Attended **Five Day Faculty Development Programme** on “**Student Centric Methodology and Interactive Teaching Strategies using Technological Tools**” from 9th October to 13th October 2023 organised by L.A.D College for Women , Nagpur under the aegis of IQAC.
- Participated in “8-Days National Online Training Programme on “**INDIAN KNOWLEDGE SYSTEMS**” organized by Matru Seva Sangh Institute of social work,

Nagpur, Rajkumar Kewalramani Kanya Mahavidhalaya, Nagpur, Green Heaven Institute of Management and research, Nagpur, Manoharrao Kamdi. Mahavidhalaya, Nagpur, Rabindranath Tagore College of Arts, Science & Commerce, Nagpur, From 23rd Nov-2nd Dec 2023.

- Participated in five Day online short-term training program on “Gender Discrimination & Equality promotion at workplace” organised by Indian Institute of Information Technology, Nagpur held during 19th-23rd September 2022.
- Participated in SPECTRUM: ONE WEEK ONLINE -MULTIDISCIPLINARY SHORT TERM TRAINING PROGRAM on “Updatations in teaching learning techniques and research” organised by Priyadarshini College of Engineering, Nagpur during 19-23 December 2022.
- Attended three Days STTP in “LATEX and other open source software” at Department of Mathematics, RTM Nagpur University, Nagpur, dated 29th -31st March 2010.

❖ **Papers Presented in Conferences / Seminars**

- Presented a research paper entitled “Thermoelastitic Modeling of Memory based Space-fractional ordered Hollow Cylinder” in an International Conference – Indian Society of Theoretical and Applied Mechanics (ISTAM 2025) organised by School of Advanced Sciences and Languages, VIT Bhopal University, India during December 10-12, 2025.
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Technology (RIST 2024) sponsored by Jalgaon and jointly organised by S.I.Patil Arts G.B.Patel Science and S.T.K.V. Sangh Commerce College, Shahada, Nandurbar, Maharashtra on 22nd March 2024.

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❖ **Administrative Responsibilities**

- Co-opted Member of Board of Studies of Mathematics, R.T.M. Nagpur University, Nagpur
- Head- Department of Mathematics

❖ **Membership of Professional Bodies**

- **NUMTA** (NAGPUR UNIVERSITY MATHEMATICS TEACHERS' ASSOCIATION)
- **UWAN** (University Women's Association, Nagpur)
- **ISTE** (Indian society of Technical Education)

❖ **Awards / Recognitions**

- Received “Vidarbha Bhushan Award 2025” for outstanding achievement & remarkable contribution in the field of Education on 28th Dec 2025 by Vidyabhushan Foundation NGO.
- Received the Award for Academic Excellence in Mathematics in recognition of my contributions to the subject. The award was presented to me by Dr. T. M. Karde Sir, revered as the Bhisma Pitamah of Mathematics. Only a select few professors of mathematics from Maharashtra were conferred with this distinction, and I am grateful to be among them.
- Won Late Yamunabai Chopde Memorial NATIONAL AWARD in the BEST TEACHER (Female) Category on 23rd Dec 2023 by the Hands of International Cricketer Mr. Umesh Yadav.
- Received “Best Paper Award ” for the paper “Deflection Behaviour due to the response of the Caputo-Fabrizio fractional derivative in a thermoelastic disc with heat generation” in 2nd International Conference on Advancement in Science,

Technology and Management-2023 organized by S.B.Jain Institute of Technology, Management & Research, Nagpur held on 27-28th July 2023.

- University Topper of M.Phil. (Mathematics)
- Topper of Institute of Science in M. Sc I Year and M. Sc-II Year.
- Received Prof. G. K. Patwardhan Memorial Award for securing highest marks in B.Sc-I year in Institute of Science.

❖ Extension Activities / Community Engagement

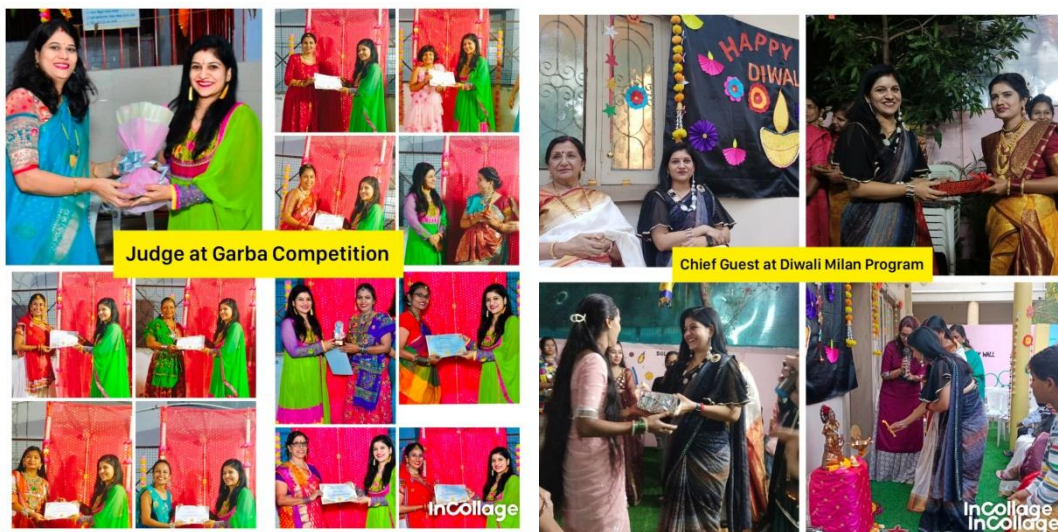
- Youtuber-Provided subject knowledge of Mathematics to more than 4500 students through my Youtube Channel “Easy Maths with Payal Ma’am”
- Publisher-Newspaper Article on “Easy Tips & Tricks for Students to Study Math” published in Nagpur Post Newspaper on 19th February 2025.

❖ E-Content / MOOCs / ICT Use

- YouTube Lectures -<https://www.youtube.com/@Dr.PayalHiranwar>
- Google Classroom
LMS<https://classroom.google.com/c/NTA3NzA2ODA3ODA3?cjc=slrozbv>

❖ Other Relevant Information

Invited as Chief Guest/ Resource Person:





Guest Speaker at Gadchiroli University



Judge for Poster Competition at Gadchiroli University



Dance competition Judge at LIT UNIVERSE



National Award for Best Teacher



Judge & Chief Guest at RAISONI's Dhamaal Dandiya



Women of the year Award 2023





- Invited as the Guest of Honour for the Installation Ceremony of “The Tuning Fork”, the Cultural Club of Priyadarshini College of Engineering , held on 1st August 2025 (Friday) in the PCE Auditorium.
- Invited as Chief Guest for the Annual function of Somalwar School “INDRADHANUSH” on 11th Feb 2025.
- Invited as Chief Guest and Judge for the GARBA COMPETITION organised My Little Star School on 27th September 2024.
- Invited as Chief Guest and Resource person at ANJUMAN School for the Farewell Program on 29th Feb 2024.
- Invited as Resource person to deliver a lecture on “Mathematics in a Play way Method” at Zilla Parishad School at Mahurjhari Village organized by NSS unit_II of L.A.D College on 27th Feb 2024.
- Invited as Resource Person for Guest Lecture on the Topic “ Integral Transforms” and Judge for Poster and Model Making Competition at “Gondwana University,Gadchiroli” for the Celebration of National Mathematics Day on 6th Feb 2024.
- Invited as Chief Guest for “GANIT- Growing Aptitude in Numerical Innovations & Training 2023”, at Bhavan’s B.P. Vidya Mandir on 29th Dec 2023.

- Invited as Chief Guest and Judge at “Diwali Milan” program organised My Little Star School on 5th November 2023

Invited as Judge:

- Invited as Judge for the “Talent Round of Miss LAD 2026” on Monday, 2nd March.
- Invited as External Judge for Best Student Competition organised by Anjuman College of Engineering & Technology on 14th Feb, 2026.
- Invited as Judge for the “Talent Round of Miss LAD 2025” on Friday, 31st January 2025.
- Invited as a Judge for “Garba Workshop Finale Competition” organised by My Little Star kindergarten school on 27th September 2025.
- Invited as a Judge for “7th Sri.A.Sundaresan Memorial Inter-School Science talk 2024-25” in Saraswati Vidyalaya H.S & Junior College held on 21st Sept 2024.
- Invited as a Judge for Intercollegiate Dance competition (Annual Social Gathering _ LITUNITE 2K24) at Laxminarayan Institute of Technological University, Nagpur on 24th February 2024.
- Invited as a Judge at “Dhamaal Dandiya” Organised by RAISONI Group of Institutions on 23th October 2023.
- Invited as a Judge at “Toast-Fest 2023” in RAISONI College for the annual event of Toast Master’s Club on 8th May 2023.
- Invited as a Judge for “Multi Talent Contest”(Annual Social Gathering) at Priyadarshini Institute of Engineering and Technology (PIET).
- Invited as a Judge at Annual social gatherings of Raison College of Engineering, Priyadarshini College of Engineering
- Invited as a Judge for Various Garba competitions, Dance Competitions, Singing Competitions etc.
- Invited as a Judge at Yearly Mega Dance Events by Mahindra & Mahindra Group etc.
- **Extra-Curricular Achievements-**
- Compered (Anchored) various Events, viz.. Inauguration ceremony of NBPL(Nasa Basketball Premiere League), Season-1,2023, Induction Programmes, Closing ceremony of Sports Events etc.
- Team Owner of Basketball in NASA Basketball Premiere League 2023.
- Received Appreciation letter from LAD College for Valuable contribution during organisation of Intercollegiate Cultural festival AURA 2023.
- Received 99.5% Feedback by students for teaching in S.V.S.S college of Engineering.
- Actively participated in Intercollegiate Quiz competition in Mathematics organised by SHIVAJI SCIENCE COLLEGE IN COLLABORATION WITH NAGPUR UNIVERSITY MATHEMATICS TEACHER’S ASSOCIATION (NUMTA)
- Participated in “KHUSHIYAN 3.0” an event (of painting 12000 diyas) registered in “THE GREAT INDIAN BOOK OF RECORDS” & “ASIAN BOOK OF RECORDS” organized by Matrix Warriors Organization.
- LIFE MEMBER OF Indian Society of Technical Education

- Participated in “MEGHOTSAV”, an Inter Institutional Cultural Event for Teachers organized by MEGHE GROUP OF INSTITUTIONS.
- Performed Various Dance / Stage Shows on the Theme “MAHARASHTRA DARSHAN” in Pune, Jalgaon, Chandrapur etc. on District Level.
- Received Dared to Jump Certificate by Jumpin Heights for BUNGY JUMPING from a height of 83 meters (272 ft) with only a rubber cord.
- Secured 3rd Position in Nagpur University’s Inter Collegiate Yogasan Tournament (2003-04)
- Represented Institute of Science in Volley ball, Ball Badminton, Yogasan, Badminton as a captain for 4 consecutive yrs.
- Won 2nd Prize in Group dance category in Boogie - Woogie dance competition.
- Won various prizes for Dance, Antakshri, Fashion shows, Drama, Fancy Dress Competition etc. ducators Training camp”
- Vice President of LACF (literary & cultural forum) 2002-2003
- Social Media Handles:

Handle :

- <https://youtube.com/@Dr.PayalHiranwar>
- Instagram Handle : @dr.payalhiranwar
- Facebook : DrPayal Chaudhary Hiranwar
- Twitter Handle: Dr.Payal Hiranwar
- Telegram: Dr.Payal Hiranwar
- LinkedIn: Dr.Payal Hiranwar