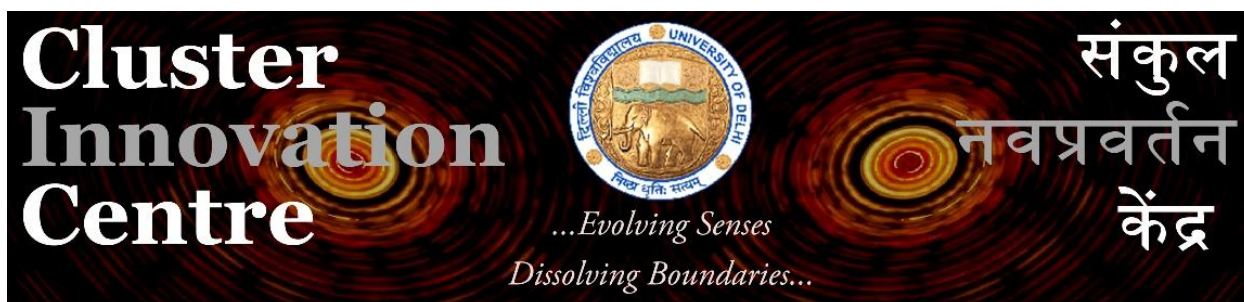




Faculty Profile : July 2026

Title	Prof.	First Name	PANKAJ	Last Name	TYAGI	Photograph
Designation		PROFESSOR				
Office Address:		Cluster Innovation Centre University Stadium University of Delhi, Delhi-110007				
Residence Address:		N-13, Second Floor, Riviera Apartment, Mall Road, Delhi -110054				
Phone No. Office		011-27666702				
Residence		-				
Mobile		9810726750				
Email		pankajtyagi@cic.du.ac.in pankajtyagicicdu@gmail.com				
Web-Page		https://sites.google.com/cic.du.ac.in/pankajtyagi https://cic.du.ac.in				
Educational Qualifications						
Degree		Institution				Year
Ph.D.		Department of Physics & Astrophysics, University of Delhi				2002
PG: M.Sc. (Physics with Electronics)		Department of Physics & Astrophysics University of Delhi				1993
UG: B.Sc. (Hons) Physics		Hans Raj College, University of Delhi				1991
Career Profile						
12 March 2015 till present date: Professor, Cluster Innovation Centre (CIC), University of Delhi, Delhi – 110007 4th July 2012 to 11 March 2015 (On Deputation): Associate Professor in Physics & Electronics, Cluster Innovation Centre (CIC), University of Delhi, Delhi – 110007 13th Jan 2012 to 3rd July 2012(On Deputation): Fellow in Physics, Institute of Lifelong Learning (ILL), University of Delhi, Delhi – 110007 26th August 1996 to 12th Jan 2012: Teaching faculty (Lecturer, Senior Lecturer, Reader and Associate Professor), Acharya Narendra Dev College (ANDC), University of Delhi, Delhi 17th July 1995 to 25th August 1996: Temporary Lecturer, Acharya Narendra Dev College (ANDC), University of Delhi, Delhi						

Areas of Interest / Specialization
• Physics • Vedic Mathematics • Innovative Pedagogy • Innovation in Education • Information Technology • Innovations at Undergraduate Level • Mathematics Education • Electronics and Devices • Thin films & Optical properties
Teaching Assignments
• Vedic Mathematics-I, Value Addition Course (CIC, DU) • Vedic Mathematics-II, Value Addition Course (CIC, DU) • Innovation in Education, M. Sc. (Mathematics Education) (CIC, DU) • Electronics at work & Circuit Simulation (CIC, DU) • Circuit Analysis and Synthesis (CIC, DU) • Digital Electronics and Logic Design – Innovation Lab (CIC, DU) • Physics at work I & II: Deconstructing Machines (CIC, DU) • Innovation Project-I: Interlinking mathematics and real-life problems (CIC, DU) • Mechanics, Thermal Physics, Optics, Modern Physics, Electricity & Magnetism Electronic Devices, Waves & Oscillation, Digital Electronics, Quantum Mechanics, Atomic and Molecular Physics, Solid State Physics, Nuclear and Particle Physics, Physics & Electronics Practical (ANDC, DU)
Administrative Assignments
• 2026.01.18 Nominated as Executive Council Nominee on Managing Committee of Central Institute of Education Hostel by Hon'ble Vice Chancellor University of Delhi for a period of two years from 18 January 2026. • 2025.05.19 Chaired the Selection Committee for Promotion from Associate Professor to Professor in Department of Commerce at Dr. Bhim Rao Ambedkar College, University of Delhi on 19.05.2025 • 2025.04.17 Participated in U21 Global Leadership Program, from Feb 21 - March 20, 2025, delivered by Common Purpose and was awarded Global Leadership micro-credential on 17 April 2025 • 2024.12.04 Appointed as Co-coordinator for Value Addition Courses' Committee, University of Delhi for effective implementation of VAC Course - Vedic Mathematics -I from 4 Dec 2024. • 2024.12.03 Appointed as V C Nominee for the Departmental Research Council (DRC) of Faculty of Technology, University of Delhi from 03.12.2024 till 26.10.2026. • 2024.09.29 Appointed as University Representative on Governing Body of Dr. Bhim Rao Ambedkar College, University of Delhi. Selected as Chairman from 29 September 2024 for a period of one year. • 2024.08.21 Appointed as Observer by Sports Council, University of Delhi for the conduct of sports trial for UG admissions in Handball at SPM College on 21 & 22 August 2024. • 2024.05.04 Nominated as Electronics Subject Expert member of Selection Committee for promotion to Professor Level (Department of Instrumentation) at Bhaskaracharya College

of Applied Science, University of Delhi held on 4 May 2024.

- **2024.03.07** Nominated as Vice Chancellors Nominee of Selection Committee for promotion from Assistant Professor to Associate Professor Level (Department of Punjabi) at Dyal Singh College, University of Delhi on 7 March 2024.
- **2024.03.04** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Hindi) at Sri Aurobindo College, University of Delhi from 4 to 9 March 2024.
- **2024.02.06** Appointed University Representative on Governing Body of School of Rehabilitation Sciences, University of Delhi for a period of one year from 6 February 2024.
- **2023.11.20** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Political Science) at Shivaji College, University of Delhi from 20 to 25 November 2023.
- **2023.11.13** Nominated as Subject Expert, Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Physics) at Shivaji College, University of Delhi from 13 to 18 November 2023.
- **2023.10.26** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Geography) at Kalindi College, University of Delhi from 26 to 29 October 2023.
- **2023.10.18** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Chemistry) at Gargi College, University of Delhi from 18 to 20 October 2023.
- **2023.10.12** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Biochemistry) at Lady Irwin College, University of Delhi from 12 to 13 October 2023.
- **2023.10.08** Appointed as University Observer, Delhi University Sports Admission Committee 2023 for Sports Supernumerary Quota in UG programs 2023-24 in Handball.
- **2023.09.29** Appointed University Representative on Governing Body of Dr. Bhim Rao Ambedkar College, University of Delhi. Selected as Chairman from 29 September 2023 for a period of one year.
- **2023.09.11** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Biochemistry) at Shivaji College, University of Delhi from 11 to 14 September 2023.
- **2023.08.18** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Economics) at PGDAV College, University of Delhi from 18 to 21 August 2023.
- **2023.08.28** Nominated as Subject Expert, Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Physics) at Institute of Home Economics, University of Delhi from 28 to 29 August 2023.
- **2023.07.27** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Political Science) at Janki Devi Memorial College, University of Delhi from 27 July to 1 August 2023.
- **2023.07.10** Appointed as Joint Coordinator, Design Innovation Centre, University of Delhi on 10 July 2023
- **2023.04.05** Nominated as a member of Planning and Programming Committee (PPC) of National Science Centre, Delhi for a period of 02 years.
- **2023.03.27** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Political Science) at Sri Venkateshwara College, University of Delhi from 27 march to 3 April 2023
- **2023.02.06** Appointed University Representative on Governing Body of School of

Rehabilitation Sciences, University of Delhi for a period of one year from 6 February 2023.

- **023.01.03** Nominated as Vice Chancellors Nominee in Selection Committee for appointment of Assistant Professor Level (Department of Computer Science) at Ram Lal Anand College, University of Delhi from 3 to 8 January 2023.
- **2021.11.30** Member of Selection Committee for Scientist D and Scientist E at STPI, New Delhi
- **021.06.17** Member of Selection Committee for Promotion to Associate Professor Level in Miranda House, DU.
- **2021.05.25** Member of Selection Committee for Promotion to Professor Level in Dayal Singh College, DU.
- **2021.02.27** Certificate of Participation Pankaj Tyagi (CIC), Webcast and Digital requirement Committee, 97th Annual Convocation, University of Delhi
- Coordinator, M.Sc. (Mathematics Education), Meta University Concept Programme Jointly offered by the University of Delhi and Jamia Millia Islamia, From 11th October 2012 since 25th February 2021
- Member of Selection Committee for Scientist E at STPI, 2020
- Member of committee of the Swachh Bharat Summer Internship Programme, University of Delhi -2018
- Member of Technical Committee to monitor VPN connectivity in colleges of University of Delhi and North & South Campus from March 2015-2020.
- Member of Screening Committee for promotion of Group 'A' S&T officers under MFCS at Software Technology Park of India, Delhi in May 2016.
- Member of the Organizing Committee University of Delhi's Cultural & Academic Program "Antardhvani" 2015, 2014, 2013.
- Coach Coordinator in "Gyanodaya Express III: An Educational Train Journey of University of Delhi" from 02-08 September 2013.
- Nominated Member of Empowered Committee for framing curriculum/syllabus of three Foundation Courses under FYUP: Information Technology, Building Mathematical Ability and Science & Life, 2013.
- Observer for DUSU Polls 2013, 2012.
- Fellow in Physics at Institute of Lifelong Learning (ILL), University of Delhi From Jan 2012 till July 2012.
- Examination Tabulator at South Campus for Delhi University Annual Examination –2006-2011

Academic Activities / Invited Talks / Academic Assignments

- **2026.05.11** Participated in "National Technology Day - 2026" organised by Indraprastha Vigyan Bharti & Faculty of Technology at University of Delhi on 11 May 2026
- **2026.04.07** Delivered an invited talk in Shri Ram College of Commerce (SRCC), University of Delhi on 7 April 2026 on topic "Creativity in Action: Mathematical Innovations".
- **2026.03.27** Invited as Judge during Northern India Science Fair at National Science Centre, Delhi on 27 March 2026
- **2026.02.27** Invited as Keynote Speaker for National Symposium on "Innovation Sprints: Building Future with AI" in Hans Raj College on 27 February 2026. Delivered a talk on "Innovate with AI: Transforming Today, Creating Tomorrow"
- **2026.02.25** Deliver a Lecture on 25 February 2026 at the GURU-DAKSHTA Faculty Induction programme organized jointly by Moti Lal Nehru College & Ramanujan College,

University of Delhi. The talk was on topic " Innovate, Collaborate, Educate: A New Paradigm of Academic Leadership Programme "

- **2026.02.13** Participated in faculty workshop on Advancing Responsible AI in Academic Contexts, held at American Centre, Delhi on 13 February 2026.
- **2026.02.06** Chaired a session in National Conference on Recent Trends in Mathematical Sciences: An Interdisciplinary Approach, organised by Acharya Narendra Dev College, University of Delhi on 6 February 2026.
- **2026.01.28** Attended Artificial intelligence Prospects and Impact Summit: Pre-Summit Event 2026 at Bharat Mandapam , New Delhi on 28 January 2026, organised by ASN Senior Secondary School, Delhi. Also published an article titled " Handshaking of Artificial Intelligence and Educational Learning Environment" in its official Booklet.
- **2025.10.31** Judged as an Expert the Paper Presentation by teachers on 'Artificial Intelligence (AI): Empowering All' during a Summit on 31st October 2025 at A S N Senior Secondary School, Mayur Vihar Delhi.
- **2025.10.13** Participated as Resource Person in Capacity Building Workshop on Value Addition Course - "Vedic Maths" from 13-14 October 2025 at University of Delhi.
- **2025.09.02** Attended SEMICON India 2025, held from September 2-4, 2025, in New Delhi, was India's largest semiconductor conference, focusing on establishing the country as a global semiconductor powerhouse.
- **2025.08.12** Under my Mentorship a team of five students of B. Tech. (IT & Mathematical Innovations) namely Anhad Mahrotra, Abhay Pawar, Dev Mishra, Mahima Agarwal and Nitin Kumar Singh from Cluster Innovation Centre, University of Delhi are participating in Tata Technologies InnoVent 2026 and has made to Round II i.e. among top 31 teams from 2822 participated teams.
- **2025.08.04** As Chairman, Governing Body participated in the Orientation Program in Dr. Bhimrao Ambedkar College, DU on 4 Aug 2025.
- **2025.05.20** Participated as Moderator in setting of question paper for the Value Addition Course (VAC) - Vedic Mathematics-II during semester end examinations of May-June 2025.
- **2025.05.20** Participated as Paper Setter in setting of question paper for the Value Addition Course (VAC) - Vedic Mathematics-I during semester end examinations of May-June 2025
- **2024. 08.27** Invited speaker for talk to celebrate First National Space Day program at Dyal Singh College, University of Delhi on 27th August, 2024.
- **2024.07.12** Chaired the session on "Angdaan Mahadaan" during Lokaarpan of conference hall at Dr. Bhim Rao Ambedkar College, University of Delhi on 12 July 2024.
- **2024. 02.28** Guest of Honour at National Science Day Celebrations at Dyal Singh College, University of Delhi on 28th and 29th February, 2024.
- **2024.02.08** Chaired the 33rd Annual Day & Prize Distribution function of Dr. Bhim Rao Ambedkar College, University of Delhi on 8 February 2024.
- **2024.02.02** Participated in the Annual Cultural Festival 2023-24 of Dr. Bhim Rao Ambedkar College, University of Delhi organised on 1-2 February 2024.
- **2023.04.27** As special invitee for Alumni Interaction with NAAC (National Assessment and Accreditation Council) Peer Team at Hans Raj College, University of Delhi on 27 April 2023.
- **2023.03.23** Inaugural lecture of QUEST 23, Fest of Physics Society of Maitreyi College, University of Delhi on "Innovations: Self Learning" on 23 March 2023.
- **2023.03.13** As Convener, organised National Seminar on Innovation in Higher Education through Public - Private - Partnership (PPP) Model at Cluster Innovation Centre, University of Delhi from 13-15 March 2023.
- **2023.02.08** Participated / Organised International Conference on Electron Microscopy & XLI Annual Meeting of Electron Microscope Society of India, EMSI-2023 held at University of

Delhi, India, during *February 08 - 10, 2023* and made an oral presentation on "Structural, electronic, optical and thermodynamic properties of tungsten diselenide (WSe₂) under pressure: First-principle Calculations" Authors: Pankaj Tyagi, Pradeep Kumar and Agnikumar G. Vedeshwar, University of Delhi.

- **2023.01.18** As Co-PI, participated in Delhi Effective Education and Pedagogy Cluster (DEEP-C)'s "Blue Planet Sustainability Fellowships" three-day orientation program held at Design Innovation Centre, University of Delhi from 18-20 January 2023.
- **2022.12.22** Talk on "Innovation and Mathematics" on National Mathematics Day 2022 at Cluster Innovation Centre, University of Delhi, Delhi on 22 December 2022.
- **2022.12.12** Conducted an hands-on Workshop on "Entrepreneurship Skill, Attitude and Behaviour Development" on 12th December, 2022 organised by Institution's Innovation Council (IIC) of Ramanujan College, University of Delhi with undergraduate students.
- **2022.07.09** Research Paper "Innovative Science Practices for Mentoring Potentially Gifted Students in India" published in Indian Journal of Science and Technology, Volume 15, Issue 25, Pages 1234-1243, July 2022.
- **2022.05.29** Under Commonwealth of Learning, on 29 May 2022 completed an online course on "Introduction to AI for IT and Non-IT professionals" offered by Virtual University for Small States of the Commonwealth.
- **2021.06.30** Online Popular Lecture on "Play : Innovate : : Learn : Earn" as Chief Guest in National e-Conference on Empowering Rural Children in science and Technology for Innovation Leading to Entrepreneurship organised by Institute of Management and Advanced Studies (IMAS), Lucknow on 30 June 2021.
- **2021.05.11** Popular Science Lecture (online), Topic "Let's Innovate to Learn" on the occasion of National Technology Day, Organised by National Science Centre, Delhi on 11 May 2021.
- **2021.03.22** Participated in a Webinar on Academic Leadership Program for Academicians on the theme "Role of Teachers in National Education Policy: Awareness, Orientation, Challenges & Responses on 22 March 2021 organised by Bhartiya Shikshan Mandal & NITI AYOJ in collaboration with CPDHE, University of Delhi.
- **2021.02.25** Online Talk on "Innovation & Research at Undergraduate Level" for Physics and Electronics Society, Hans Raj College, University of Delhi.
- Participated in e-Yantra Symposium at ERTS Lab, Department of CSE, IIT Bombay, Powai, Mumbai from 5-6th April 2019.
- Jury Member for INSPIRE Awards-MANAK 7th National level Exhibition and Project Competition (NLEPC) Program of Department of Science & Technology (DST), Ministry of Science & Technology on February 14, 2019 at IIT Delhi.
- Member of screening committee for shortlisting entries for Innovation Festival 2019 held at National Science Centre, Delhi from 7th to 9th February 2019.
- Member of Local organizing committee of International Conference on Nano-Structured Materials & Devices organized by Society for Technologically Advanced Materials of India (STAMI) & University of Delhi from December 17-20, 2018.
- Participated in a workshop on Revamping Exam Standards in India: Improving Evaluation and Assessments for Higher Education and Professionals held on 30 November 2018 hosted by India-ATP in Delhi.
- Participated in workshop of Design Innovation Centers during Festival of innovation and Entrepreneurship 2018 held at Rashtrapati Bhavan, New Delhi on 22 March 2018.
- Member of committee to select Innovators for Innovation Festival 2017 at National Science Centre, Delhi.
- Jury of 6th National Level Exhibition and Project Competitions (NLEPC) 2016 of DST-

INSPIRE AWARD at NPL New Delhi during December 10-11, 2016

- Judged Atal Tinkering Labs (ATL) - Innovation Challenge organized under Atal Innovation Mission by NITI Aayog, Government of India in Delhi in Nov 2016
- Participated in International Conference on Technologically Advanced Materials (ICTAM) held in University of Delhi from November 7-11, 2016
- Keynote Speaker in 2nd International Conference on Science, Technology and Management organized by Conference World AR Research Publication and held on 27th September 2015 at University of Delhi. Title of talk “Innovation at undergraduate Level: Need for Industrial and Academic Linkage”.
- Participated in National Workshop on “Best Practices in Citizen Centric Governance” organized by Ministry of Personnel, Public Grievances & Pensions at Vigyan Bhavan, New Delhi on 10-11 September 2015.
- Participated in “One Day Sensitization Workshop” organized by Centre for Innovation in Public Systems (CIPS) on e-Governance initiatives under “Capacity Building Programmes of Innovatives/Best Practices under Mission Mode Projects of State Governments and Government of India” held on 28 August 2015 at New Delhi.
- Participated in the “World Conference on Global Innovation” organized by Human Life Advancement Foundation (HLAF) held on 27th March 2013 at Putra World Trade Centre, Kuala Lumpur, Malaysia.
- Resource Person in the Workshops on Foundation Course “Building Mathematical Ability” (Five Cycles: 15 days: May-July 2013) .
- Resource Person in the Workshops on Foundation Course “Information Technology” (Five Cycles: 15 days: May-July 2013) .
- Participated in the International Conference “The Legacy of Srinivasa Ramanujan” organized by University of Delhi from 17-22 December 2012 and worked as member of Local Organizing Committee.
- Participated in the Academic Congress “Enabling the Young : Redefining Education” organized by University of Delhi from September 6-7, 2012 and acted as rapporteur for the session “Integrating Mind, Body, and Heart” with Mr. Sanjeev Bhargava, Founder, SEHER, and Mr. K. Srikanth, Chief Selector of the Indian Cricket team as speaker.
- Acted as Co-convener in organizing “International Conference and Workshop on Nanostructured Ceramics and other Nanomaterials ” (ICWNCN-2012), March 13-16th , 2012 by Department of Physics & Astrophysics, University of Delhi, Delhi, India
- Acted as Co-convener in organizing “International Conference on Electroceramic (ICE-2009)”, December 13-17th 2009, Department of Physics & Astrophysics, University of Delhi.

Publications Profile

PAPERS PUBLISHED IN INTERNATIONAL/NATIONAL JOURNALS

1. “*Quantum image representation-based quantum neural networks for binary classification*” The Journal of Supercomputing, Vol. 82, Issue 8, Pages 495 (1-72), Publisher: Springer US, Date of online Publication: 11 June 2026
Authors: A Tiwari, S Siyanwal, S Sakhuja, S Kumar, Pankaj Tyagi
2. “*Pedagogical framework for social science-based mathematics practices in higher education*” (Book Chapter)
Book: Roadmap for Humanities and Social Sciences in STEM Higher Education,
Publisher: Springer Nature Singapore, Page 159-173, Date of publication: 02-09-2024
Authors: Jyoti Sharma, Pankaj Tyagi
3. “*University-based Mentoring Program for School Going Gifted Students*” Journal: Gifted and Talented International(<https://doi.org/10.1080/15332276.2023.2289455>) Published online: 08 Dec 2023

Authors: Jyoti Sharma, Bibhu Biswal, Pankaj Tyagi and Shobha Bagai

4. "Innovative Science Practices for Mentoring Potentially Gifted Students in India" published in Indian Journal of Science and Technology, Volume 15, Issue 25, Pages 1234-1243, July 2022.
Author: Pankaj Tyagi

5. "*Writing Mathematical Theorems: Towards an Innovative Pedagogy*" Indian Journal of Science and Technology, Volume 14, Issue 15, Pages 1205-1211, April 2021.
Author: Pankaj Tyagi

6. "*Parenting Gifted Children: Voices from India*" Magazine PHP (Parenting for high potential), Volume 7, Issue 4, December 2019, Published by National Association for Gifted Children, Washington, DC, USA

Authors: Jyoti Sharma, Shobha Bagai, Pankaj Tyagi and Bibhu Biswal

7. "*Triggering Innovative Output through Hands-On Learning at Undergraduate Level*" International Journal of Interdisciplinary Research and Innovations, Vol. 6, Issue 2, pp: (126-133), Month: April - June 2018 (ISSN: 2348-1218 (print), 2348-1226 (online))

Author: Pankaj Tyagi

8. "*Multiple dimensions of functional relevance of genosensors*", INTEGRATED FERROELECTRICS, 2017, VOL.185,134-143 (ISSN: 1058-4587 (Print) 1607-8489 (Online)), Publisher: Taylor and Francis

Authors: Mahima Kaushik, Sonia, Swati Mahendru, Pankaj Tyagi & Shrikant Kukreti

9. "*Optical band gap demarcation around 2.15 eV depending on preferred orientation growth in red HgI₂ films*", Physica B 510 (2017) 1–6 Publisher: Elsevier

Author: Pankaj Tyagi

10. "*Trig-Disc: An innovative device for determination of values of trigonometric functions with single measurement*" International Journal of Innovation and Scientific Research, Vol. 27 No. 1 Oct. 2016, pp. 216-224, Publisher: Innovative Space of Scientific Research Journals, Morocco

Authors: Pankaj Tyagi, Jyoti Sharma, Kamal Ranjan, Vikas Tomar and R. Tripathi

11. "*Designing of a Basic Mathematical Kit to Assist Mathematical Skill Development Among Children with Autism*" International Journal of Advanced Research in Education & Technology Vol. 3, Issue 3 (July - Sept. 2016) , pp. 153-158

Authors: Himanshi Vashishth, Sangeeta, Jyoti Sharma, Pankaj Tyagi^{[1][SEP]}

12. "*Effects of in-situ heat-treatment on residual stress dependent optical properties of ZnI₂ thin films*" Indian Journal of Science and Technology, Vol 9(3), DOI: 10.17485 /ijst/2016/ v9i3 /80489, January 2016

Author: Pankaj Tyagi

13. "*Development of Target-Group Specific Innovative Android-Based Mathematics Educational Modules*" DU Journal of Undergraduate Research and Innovation (2015)^{[1][SEP]}, Publishers: University of Delhi, India

Authors: Shikhar Sharma , Raghavendra Tripathi, Pankaj Tyagi

14. "*Revival and Innovations in Mathematics Pedagogy: A Case Study*" International Journal of Innovative Trends in Engineering, Volume- 01, Number-01, 13-16, (2014)^{[1][SEP]}, Publishers: Foundation of Modern Research, India

Authors: Jyoti Sharma and Pankaj Tyagi

15. "*Dependence of optical band gap on residual stress in group IIB iodide (ZnI₂, CdI₂, HgI₂) Films*" Integrated Ferroelectrics, 122:1, 52 -62 (2010) , Publisher: Taylor and Francis

Authors: Pankaj Tyagi, R K Misra , N.C.Mehra & A.G. Vedeshwar

16. "*Excitonic absorption in ZnI₂ films*" Journal of Applied Physics 100 083522(1-6) (2006), Publisher: American Institute of Physics

Authors: A. G. Vedsehar and Pankaj Tyagi

17. "*Occurrence of hysteresis-like behavior of Sb₂Te₃ film in dynamical measurement of heating-cooling cycle*" Physica B 362 158-166 (2005), Publisher: Elsevier

Authors: P. Arun, Pankaj Tyagi and A. G. Vedeshwar

18. “Effect of residual stress on the optical properties of CdI_2 films”, Physical Review B, 66, 075422 (1-8) (2002) Publisher: The American Physical Society
Authors: Pankaj Tyagi and A. G. Vedeshwar
19. “Residual stress dependent optical properties of ZnI_2 films” Physica Status Solidi (a), 191, 633-642 (2002), Publisher: Wiley-VCH, Berlin
Authors: Pankaj Tyagi and A. G. Vedeshwar
20. “Grain size dependent optical properties of CdI_2 films”, The European Physical Journal of Applied Physics, 19, 3-13 (2002) Publisher: EDP Sciences
Authors: Pankaj Tyagi and A. G. Vedeshwar
21. “Large grain size dependence of the resistance of polycrystalline films” Physica B 322, 289-296 (2002) Publisher: Elsevier
Authors: P. Arun, Pankaj Tyagi and A. G. Vedeshwar
22. “Anisotropic optical band gap of (102) - and (002) - oriented films of red HgI_2 ”, Physical Review B 63, 245315 (1-6) (2001), Publisher: The American Physical Society
Authors: Pankaj Tyagi and A. G. Vedeshwar
23. “Thickness dependent optical properties of CdI_2 films”, Physica B 304, 166-174, (2001), Publisher: Elsevier
Authors: Pankaj Tyagi, A. G. Vedeshwar and N. C. Mehra
24. “Grain size dependent optical band gap of CdI_2 films”, Bull. Mater. Sci. 24(3), 297-300 (2001), Publisher: Indian Academy of Sciences
Author: Pankaj Tyagi and A. G. Vedeshwar
25. “Optical properties of ZnI_2 films”, Physical Review B 64, 245406(1-7) (2001), Publisher: The American Physical Society.
Authors: Pankaj Tyagi and A. G. Vedeshwar
26. “Aging effects of Sb_2Te_3 thin films” Physica B 307, 105-110 (2001), Publisher: Elsevier
Authors: P. Arun, Pankaj Tyagi, A. G. Vedeshwar and Vinod Kumar Paliwal

II. PAPERS PUBLISHED IN NATIONAL/INTERNATIONAL CONFERENCES

27. Paper presented in 2nd International Conference on Sustainable Smart Computing and Communications - 2026 titled “FPGA-Based Quantum Error Correction Using Density Matrix Simulation”. The conference was organised by Dr. Vishwanath Karad MIT World Peace University, Pune on March 13-14, 2026.
Authors: A Tiwari, S Kumar, Pankaj Tyagi, S Siyanwal, S Sakhuja
28. “Structural, electronic, optical and thermodynamic properties of tungsten diselenide (WSe_2) under pressure: First-principle Calculations” International Conference on Electron Microscopy & XLI Annual Meeting of Electron Microscope Society of India, EMSI-2023 held at University of Delhi, India, during February 08 - 10, 2023
Authors: Pankaj Tyagi, Pradeep Kumar and Agnikumar G. Vedeshwar
29. “Study on effect of argon ion irradiation on Sb_2Se_3 thin films” International Conference on Electron Microscopy (EMSI-2014), July 7-11, 2014, University of Delhi, Delhi^{[1][2][3][4][5][6][7][8][9][10][11][12][13][14][15][16][17][18][19][20][21][22][23][24][25][26][27][28][29][30][31][32][33][34][35][36][37][38][39][40][41][42][43][44][45][46][47][48][49][50][51][52][53][54][55][56][57][58][59][60][61][62][63][64][65][66][67][68][69][70][71][72][73][74][75][76][77][78][79][80][81][82][83][84][85][86][87][88][89][90][91][92][93][94][95][96][97][98][99][100]}
Author: Pankaj Tyagi
30. “Anisotropic nature of optical band gap of SrI_2 thin films” “International Conference and Workshop on Nanostructured Ceramics and other Nanomaterials” (ICWNCN-2012), pp – 203-204, March 13-16th, 2012 by Department of Physics & Astrophysics, University of Delhi, Delhi, India
Author: Pankaj Tyagi*, Vikas Gulia, N.C.Mehra & A.G. Vedeshwar
31. “Nano-Tubes and Tapes like formation in heat treated PbI_2 thin films” in “International

Conference on Electron Nanoscopy ” (EMSI-2011), pp – 333-334, July 6-8th, 2011 by Defence Metallurgical Research Laboratory (DMRL), Hyderabad, India.

Author: Pankaj Tyagi, A.G. Vedeshwar, V. Gulia & N.C.Mehra

32. “*Nucleation and Growth in PbI₂ thin films*” in “International Conference on Advances in Electron Microscopy and Related Techniques” (EMSI-2010), pp – 180-181, March 8-10th, 2010 at Bhabha Atomic Research Centre (BARC), Mumbai, India.

Author: Pankaj Tyagi, A.G. Vedeshwar, V. Gulia & N.C.Mehra

33. “*Single crystal growth of BiI₃ by thermal evaporation: TEM investigations*” National Conference on Electron Microscopy & Allied Fields (EMSI-2009), pp-83-84, January 17-20, 2009, Bundelkhand University, Jhansi.

Author: Pankaj Tyagi, Chhavi Ranjan, Karnik Pandya, N.C.Mehra & A.G. Vedeshwar

34. “*Morphology of different (hkl) oriented films of some metal iodides*” National Conference on Electron Microscopy & Allied Fields (EMSI-2007), pp-82-83, November 26-28, 2007, University of Delhi, Delhi.

Author: Pankaj Tyagi, Vinod Paliwal, Vikash Gulia, N. C. Mehra and A. G. Vedeshwar

35. “*Thickness dependent morphology of BiI₃ films*” National Conference on Electron Microscopy & Allied Fields (EMSI-2007), pp-86-87, November 26-28, 2007, University of Delhi, Delhi.

Author: Karnik Pandya, C. Ranjan, Pankaj Tyagi, N. C. Mehra and A. G. Vedeshwar

36. “*Morphological study of argon ion irradiated Sb₂Se₃ films in a dense plasma focus device*” Proceedings of 2nd International conference on current developments in atomic, molecular and optical physics with applications (CDAMOP), March 21-23, 2006, University of Delhi, Delhi

Author: Pankaj Tyagi, N. C. Mehra and A. G. Vedeshwar

37. “*Laser induced exit surface damage morphology in Yttrium Aluminum Phosphate*” XXVI Annual Conference on Electron Microscopy & Allied Fields, (EMSI-2003), April 16-18, 2003, CPRI, Shimla (H.P.)

Author: Amit Garg, Avinashi Kapoor, K.N. Tripathi, Pankaj Tyagi and N. C. Mehra

38. “*Faster optical data storage in Sb₂Te₃ films*” XXVI Annual Conference on Electron Microscopy & Allied Fields, (EMSI-2003), April 16-18, 2003, CPRI, Shimla (H.P.)

Author: Pankaj Tyagi, A. G. Vedeshwar, V.K.Paliwal, Amit Garg and N. C. Mehra

39. “*Experimental observation of energy band gap variation with grain size for CdI₂ films*” XXVI Annual Conference on Electron Microscopy & Allied Fields, (EMSI-2003), April 16-18, 2003, CPRI, Shimla (H.P.)

Author: Pankaj Tyagi, A. G. Vedeshwar, V.K.Paliwal, Amit Garg and N. C. Mehra

40. “*Residual stress dependent optical properties of CdI₂ films*” XXV Annual Conference of EMSI on Electron Microscopy & Allied Fields, (EMSI-2002) Abs. No.- 95, Feb 19-22, 2002, IIT Bombay, Powai, Mumbai.

Author: Pankaj Tyagi, A. G. Vedeshwar, V.K.Paliwal and N. C. Mehra

41. “*Thickness dependent optical properties of ZnI₂ films*” XXV Annual Conference of EMSI on Electron Microscopy & Allied Fields, (EMSI-2002) Abs. No.-94, Feb 19-22, 2002, IIT Bombay, Powai, Mumbai.

Author: N. C. Mehra, Pankaj Tyagi and A. G. Vedeshwar

42. “*Excitonic absorption and its residual stress dependence in ZnI₂ films*” Proceedings of National Symposium on Science and Technology of Vacuum and Thin Films, pp-46, Sept 5-7, 2001, Indian Institute of Science, Bangalore.

Author: A.G. Vedeshwar, Pankaj Tyagi and V.K. Paliwal

43. “Effect of heat treatment in CdI_2 films” XXIV Annual Conference of EMSI on Electron Microscopy & Allied Fields, (EMSI-2001) pp-165, Feb 9-11, 2001, RSIC/CIL, Punjab University, Chandigarh.

Author: N. C. Mehra, Pankaj Tyagi and A. G. Vedeshwar

44. “The growth of (102) and (002) preferred orientations of crystallites in HgI_2 films : The thickness dependence” XXIV Annual Conference of EMSI on Electron Microscopy & Allied Fields, (EMSI-2001) pp-87-88, Feb 9-11, 2001, RSIC/CIL, Punjab University, Chandigarh.,

Author: Pankaj Tyagi, A. G. Vedeshwar and N. C. Mehra

III. BOOKS Published

45. Foundation Course “Information Technology” University of Delhi by D.V. Singh, Shailendra Kumar, Neeraj Tyagi, Pankaj Tyagi, Sanjeev Singh, Manoj Saxena, Ranjan Kumar (2014)
(ISBN:978-81-7371-900-4)^[SEP]

Publisher: Universities Press, Hyderabad, India

46. “I Discover: A Workbook for ICSE Physics Class 8” by Pankaj Tyagi & Rahul Mehra (2013)
(ISBN: 978-1-107-67192-8)

Publisher: Cambridge University Press, New Delhi, India

47. “I Discover: A Workbook for ICSE Physics Class 7” by Pankaj Tyagi & Rahul Mehra (2013)
(ISBN: 978-1-107-69930-4)

Publisher: Cambridge University Press, New Delhi, India

48. “I Discover: A Workbook for ICSE Physics Class 6” by Pankaj Tyagi & Rahul Mehra (2013)
(ISBN: 978-1-107-69004-2)

Publisher: Cambridge University Press, New Delhi, India

49. “I Discover: A Textbook for ICSE Physics Class 8” by Pankaj Tyagi & Rahul Mehra (2012)
(ISBN: 978-1-107-66922-2)

Publisher: Cambridge University Press, New Delhi, India

50. “I Discover: A Textbook for ICSE Physics Class 7” by Pankaj Tyagi & Rahul Mehra (2012)
(ISBN: 978-1-107-68127-9)

Publisher: Cambridge University Press, New Delhi, India

51. “I Discover: A Textbook for ICSE Physics Class 6” by Pankaj Tyagi & Rahul Mehra (2012)
(ISBN: 978-1-107-68412-6)

Publisher: Cambridge University Press, New Delhi, India

52. “Visualised Science (Term I) –CBSE X” by P N Kapil, Pankaj Tyagi, Sarita Kumar (2011)
(ISBN: 978-81-8350-352-5)

Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers, Delhi

53. “Visualised Science (Term II) –CBSE X” by P N Kapil, Pankaj Tyagi, Sarita Kumar (2011)
(ISBN: 978-81-8350-353-2)

Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers, Delhi

54. “Visualised Science (Term I) –CBSE IX” by P N Kapil, Pankaj Tyagi, Sarita Kumar (2011)
(ISBN: 978-81-8350-354-9)

Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers, Delhi

55. “Visualised Science (Term II) –CBSE IX” by P N Kapil, Pankaj Tyagi, Sarita Kumar (2011)
(ISBN: 978-81-8350-355-6)

Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers, Delhi

56. "I Explore: A Science Textbook for Class 8" by Shobhita Johri, Pankaj Tyagi & Parminder Chopra (2010) (ISBN: 978-0-521-18602-5) (with CD ROM)
Publisher: Cambridge University Press, New Delhi, India
57. "I Explore: A Science Textbook for Class 7" by Shobhita Johri, Pankaj Tyagi & Parminder Chopra (2010) (ISBN: 978-0-521-18600-1) (with CD ROM)
Publisher: Cambridge University Press, New Delhi, India
58. "I Explore: A Science Textbook for Class 6" by Shobhita Johri, Pankaj Tyagi & Parminder Chopra (2010) (ISBN: 978-0-521-18597-4) (with CD ROM)
Publisher: Cambridge University Press, New Delhi, India
59. "Self Tutor : Visualised Science – CBSE X" (Term I) by Pankaj Tyagi, Vinod Kumar & Beena Jain (2009) (ISBN: 978-81-8350-289-4)
Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers , Delhi
60. "Self Tutor : Visualised Science – CBSE X" (Term II) by Pankaj Tyagi, Vinod Kumar & Beena Jain (2009) (ISBN: 978-81-8350-343-3)
Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers , Delhi
61. "Visualised Physics – CBSE IX" by Pankaj Tyagi (2009) (ISBN: 978-81-8350-277-6)
Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers , Delhi
62. "Global Warming: Ek Karva Sach "(in HINDI) by Pankaj Tyagi, (2009) (ISBN: 978-81-8838-745-8) Publisher: Pallav Prakashan, Delhi
63. "Email – Aadhunik Chithi " (in HINDI) by Pankaj Tyagi, (2009) (ISBN: 978-81-8865-231-0)
Publisher: Shanti Prakashan, Delhi
64. "Visualised Physics – CBSE X" by Pankaj Tyagi (2008) (ISBN: 978-81-8350-235-0)
Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers , Delhi
65. "Self Tutor Science Physics – CBSE X" by Pankaj Tyagi, (2007) (ISBN: 978-81-8350-228-8)
Publisher: Sultan Chand and Son(s) Pvt Ltd.- Educational Publishers , Delhi
66. "Ekkisvin Sadi Ka Vigyan" (in HINDI) by Pankaj Tyagi, (2002) (ISBN: 81-88387-19-3)
Publisher: Pallav Prakashan, Delhi

1.

Research Projects (Major Grants/Research Collaboration)

1. Co-PI in a project "Establishing Process Based Identification and Mentoring Practices for Potentially Gifted Children in Science and Mathematics" funded by DST through PSA, GoI (2014-2017) (Grant Rs.1.27 Crore) ^[1]_[SEP]
2. PI in Innovation Project of University of Delhi for the project "Innovatively designed physics experimental modules with link to interactive website and mobile apps": 2015-16 (Grant Rs. 5.00 Lakh)
3. PI in Innovation Project of University of Delhi for the project "Designing innovative working models to explain concepts of physics and mathematics along with IT based module": 2013-14 (Grant of Rs. 7.50 Lakh)
4. Co-PI in Innovation Project of University of Delhi under the scheme "Programs for Enhancing undergraduate Learning and Teaching Experiences through Innovative Projects" for the project titled "IT model for parking space management: optimal and efficient parking-retrieval of vehicles": 2012-13 (Grant of Rs. 10 Lakh)

Awards and other Distinctions

- Under Commonwealth of Learning, on 29 May 2022 completed an online course on "Introduction to AI for IT and Non-IT professionals" offered by Virtual University for Small States of the Commonwealth.
- "Teaching Excellence Award for Innovation" by University of Delhi during academic session 2014-15 for Innovation Project "Designing Innovative Working Models to Explain concepts of Physics and Mathematics along with IT based modules".
- Represented University of Delhi at 2nd National Knowledge Network Workshop Entitled "Enhancing Research Collaborations through NKN" held from 17-19th October 2013 at IISc Bangalore.
- Participated as Invited Guest to the official launching of the Human Life Advancement Foundation & World Conference on Global Innovation held on 27th March 2013 at Putra World Trade Centre, Kuala Lumpur, Malaysia.
- Participated in the Jury Process of INSPIRE AWARD National Level Exhibition and Project Competition (NLEPC) conducted by Department of Science and Technology (DST), Ministry of Science and Technology, Government of India held at New Delhi in 2014, 2013, 2012.
- Nominated for "The 2006 Man of The Year's Commemorative Medal" by Board of International Research of the American Biographical Institute (ABI), North Carolina, USA.
- Nominated for "The 2005 Man of The Year's Commemorative Medal" by Board of International Research of the American Biographical Institute (ABI), North Carolina, USA.
- Graduate Aptitude Test in Engineering (GATE) – 1993, Percentile Score 88.48
- Qualified at Joint CSIR/UGC National Level Test for Junior Research Fellowship (JRF) and Eligibility for Lectureships (NET) -1993
- Delhi University Science Meritorious Award (in UG) 1990-91.
- Certificate of Junior National Mathematics Olympiad Contest-1986

Association With Professional Bodies

1. Life membership of "Ramanujan Mathematical Society" (Registered No. 64/1985), Thiruchippali, India (Membership No. 1139)
2. Life membership of "Electron Microscope Society of India (EMSI) " (Registered No. SC/5228), India (Membership No. LM-476)
3. Life membership of "Society for Technologically Advanced Materials of India" (STAMI- Regd. No. MH/589/07).
4. Honorary appointment as member of the Research Board of Advisors, The American Biographical Institute (ABI), North Carolina, USA since 2003.
5. Guest faculty in University of Petroleum & Energy Studies (UPES), Delhi for B.Tech. during academic session 2003-04.
6. Guest faculty in Keshav Mahavidhyalaya, University of Delhi, Delhi for B.Sc.(H) Electronics and B.Sc.(G) during the academic session 2003-04, 2004-05, 2005-06.

Departmental Activities

Convener/Member of various committees at Cluster Innovation Centre

- Member Student Advisory & Grievance Committee: 2024-26 (Convener)
- Member of Website and Computer Committee: 2024-26, 2023-24
- Member IQAC and Annual Report Committee: 2023-24
- Member of Admission Committee: 2023-24
- Convener of Academic Committee, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2015 -16 (Member)
- Convener of Infrastructure and Space Committee 2019-20, 2020-21

- Convener of Grievance Committee, 2015-16
- Nodal Officer of Innovation Project Monitoring Committee, 2015-16
- Member of Departmental Purchase Committee, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21
- Member of Infrastructure and Space Committee, 2015-16, 2017-18, 2018-19
- Member of Computer and Website Committee, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22
- Member of Anti-Ragging Committee, 2023-24 (Convener) 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22
- Member of Examination Committee for entrance examination of CIC, 2017-18
- Member of Anti-Smoking committee 2018-19, 2019-20, 2020-21, 2021-22
- Member of Disciplinary Committee 2019-20, 2020-21

Student Project Mentored at Cluster Innovation Centre

- “Smart MCQ Generator for Exams”, B. Tech. (IT & MI), Sem VII - VIII, (Aditya Singh, Pranav, Raj Shakya, Vikrant Mishra) Jul – Dec 2025, Jan – May 2026.
- “Applications of Artificial Intelligence and Web Development in Real Life”, B. Tech. (IT & MI), Sem VII - VIII, (Dev Mishra, Nitin Kumar Singh, Siddharth) Jul – Dec 2025, Jan – May 2026.
- “Application Development for Public Service Solutions”, B. Tech. (IT & MI), Sem VII - VIII, (Abhay Pawar, Mohit, Shweta Meena) Jul – Dec 2025, Jan – May 2026.
- “A Machine Learning & Deep Learning Approach to Predict Stock Market Movement”, B. Tech. (IT & MI), Sem VI, (Aayush S Rathore, Ahrnish P Dahal, Nitish Kumar, Priyanshu Yadav) Jan - May 2026
- “Stock Market Chart Simplification using AI & ML”, B. Tech. (IT & MI), Sem IV, (Abhishek Kumar Rai, Alok Silswar, Komal, Ritin Sundriyal) Jan - May 2026
- “NextMove: A comprehensive Machine Learning – Based Career Guidance Platform”, B. Tech. (IT & MI), Sem IV, (Pranav Raj, Aditya Raj) Jul – Dec 2024.
- “Arogya AI: An Intelligent Healthcare Platform”, B. Tech. (IT & MI), Sem VI, (Abhinav Painull, Dev Mishra, Nitin Kumar Singh) Jan – May 2025.
- “Community Nexus Tool: Simplifying documents and professional growth for all”, B. Tech. (IT & MI), Sem IV, (Dev Mishra, Nitin Kumar Singh) Jul – Dec 2024.
- “Stock Price Prediction Using ML”, B. Tech. (IT & MI), Sem IV, (Mayank Arora, Harshit Gupta) Jan – May 2023.
- “Face Recognition System using Advance Security Systems”, B. Tech. (IT & MI), Sem VI, (Ankit Kumar Jha, Devendra Darji, Nishant Tomar, Saurabh Kumar) Jan – May 2023.
- “Revolutionizing Voting: A Smart Voting Machine With Online Voting Capability”, B. Tech. (IT & MI), Sem IV, (Manu Dev, Abhishek Kumar) Jan – May 2023.
- “Mathematical Game: Sudoku”, B. Tech. (IT & MI), Sem VI, (Akash Pal, Pradeep Natrajan) Jan – May 2022.
- “Used car price prediction using ML”, B. Tech. (IT & MI), Sem VII, (Rakesh Meena) Jul – Dec 2022.

Signature
Prof. Pankaj Tyagi
July 2026