

CURRICULUN VITAE

Dr. Dinesh Patidar

Assistant Professor

Department of Physics

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Research Interest

Special research interests include synthesis of low dimension materials, organic/inorganic nanocomposites, synthesis and characterization of energy storage materials, photocatalytic water purification

Education

2003-2007 *Ph.D. in Physics on “Electro-Optical Studies of Some Cd-Zn Chalcogenide Films”* Semi-Conductor and Polymer Science Group, Department of Physics, University of Rajasthan, Jaipur (Raj) India

2001-2003 *M.Sc. in Physics (Specialization in Microwave Electronics)* Department of Physics, M.L.V. Govt. College, Bhilwara affiliated to M.D.S. University, Ajmer (Raj), India

1998-2001 *B.Sc. (Physics, Chemistry and Mathematics)* Govt. College, Jhalawar affiliated to M.D.S. University, Ajmer (Raj), India,

Employments

Assistant Professor (July 2018 to till date): Department of Physics, Mohanlal Sukhadia University, Udaipur (Raj), India

Assistant Professor (January 2015 to May 2018): Department of Physics, Seth G.B. Podar College, Nawalgarh, Jhunjhunu (Raj), India

Guest Faculty and Nano Lab In-charge (April 2015 to Dec. 2015): Centre for Converging Technology, University of Rajasthan, Jaipur (Raj), India

Part-time Lecturer (Sept. 2012 to May 2015): Department of Physics, S.S. Jain Subodh P.G. College, Jaipur (Raj), India

Research Scientist DST (April 2012 to March 2015): Semi-Conductor and Polymer Science Group, Department of Physics, University of Rajasthan, Jaipur (Raj), India

Research Associate (Feb 2009 to March 2012): Semi-Conductor and Polymer Science Group, Department of Physics, University of Rajasthan, Jaipur (Raj), India

Assistant Professor (Nov 2007 to Jan 2009): Department of Physics, Jagan Nath Gupta Institute of Engineering and Technology, Jaipur (Raj), India

Guest Faculty (July 2007 to Dec 2007): Department of Physics, Malaviya National Institute of Technology, Jaipur (Raj), India

Senior Research Fellow (Oct 2006 to July 2007): Semi-Conductor and Polymer Science Group, Department of Physics, University of Rajasthan, Jaipur (Raj), India

Junior Research Fellow (Oct 2004 to Sept 2006): Semi-Conductor and Polymer Science Group, Department of Physics, University of Rajasthan, Jaipur (Raj), India

Scholarships/Awards

July 2011 **DST Fact Track Project for Young Scientist**, Department of Science and Technology (DST), Govt. of India, New Delhi

March 2011 **Post-Doctoral Fellowship**, Ministry of New and Renewable Energy (NMRE), Govt. of India, New Delhi (not availed)

Sept. 2009 **Travel Grant** from PCAM School, Italy to attend an International School on “Chemistry and Physics of Materials for Energetics. A European School in Materials Sciences”

2009 –2012 **Research Associate**, Council for Scientific and Industrial Research (CSIR), Govt. of India, New Delhi

2006 – 2007 **Senior Research Fellowship**, Defence Research and Development Organization (DRDO), Govt. of India, New Delhi

2004 – 2006 **Junior Research Fellowship**, Defence Research and Development Organization (DRDO), Govt. of India, New Delhi

Project Ongoing/Completed

RUSA 2.0 project entitled “Development and optimization of energy conversion and storage materials based on Perovskites, Ferrites and Graphene” funded by MHRD, Govt. of India (Rs.95.50 lakhs) (Ongoing) (Co-P.I.)

UGC-BSR research project (Start-Up-Grant) entitled “Development of Metal Oxide-Graphene Nanocomposites with Enhanced Photocatalytic Activity” funded by UGC Govt. of India (Rs. 10 lakhs) (Ongoing) (P.I.)

DST Fact Track project entitled “Nanostructured Inorganic/Organic Solar Cell: Fabrication and Characterization” funded by Department of Science and Technology (DST), Govt. of India (Rs. 20.16 lakhs) (2012 –15) (P.I.)

Books published

B.Sc. Part-II “Optics” Author of Learning Material, Vardhman Mahaveer Open University, Kota (Raj) India

B.Sc. Part-III “Solid State Physics” Author of Learning Material, Vardhman Mahaveer Open University, Kota (Raj) India

B.Sc. Part-III “Practical Physics” Author of Learning Material, Vardhman Mahaveer Open University, Kota (Raj) India

Chapter-01 “Classification, Processing and Application of Polymer Nanocomposites” in “*Nanomaterials and Nanostructures*” (Nanotechnology Volume - 4), Studium Press LLC, Houston, USA

Ph.D. Supervision

Mr. Anil Kumar Yadav has awarded thesis entitled “*Synthesis and Characterization of Chalcogenide Nanomaterials for Optoelectronic Applications*” to Deenbandhu Chhotu Ram University of Science & Technology, Murthal, under co-supervision (2018).

Mr. Pramod Kumar Arya has awarded thesis entitled “*Study of Mechanical Properties of Some Thermoplastic based Zinc Oxide and Titanium Oxide Polymeric Nanocomposites*” to the ICFAI University, Jaipur under co-supervision (2017).

Training Programme/School/ Orientation/ Refresher Course

Two week Refresher Course on Physics (Online mode) organized by Ramanujan College, University of Delhi during 09/06/2023 to 23/06/2023

Two week Interdisciplinary Refresher Course on Research Methodology (Online mode) organized by Ramanujan College, University of Delhi, Delhi during 22/02/2022 to 06/03/2022

2nd Faculty Induction Programme organized by University of Rajasthan, Jaipur from 23/11/2020 to 22/12/2020.

Faculty Development Programme on Recent Trend in Material Science and Engineering (Online mode) organized by Swami Keshvanand Institute of Technology, Jaipur during 20/08/2020 to 21/08/2020

Faculty Induction Programme held at Mohanlal Sukhadia University, Udaipur during 08/08/2018 to 10/08/2018

Short Term Course on Applications of Nanotechnology in Current Scenario held at Malviya National Institute of Technology, Jaipur during September 22-26, 2014.

International School on “Chemistry and Physics of *Materials for Energetics*: A European School in Materials Science” held at University of Milano-Bicocca, Milano, Italy during Sept. 14–19, 2009.

Seminar on Induction Training Programme on Capacity Building in Teaching-Learning and Research Techniques held at Global Institute of Technology, Jaipur during January 07-18, 2008.

Life Membership of Scientific Bodies

Life member of **Thermo-Physical Society of India (TPSI)**

Life member of **Material Research Society of India (MRSI)**

Life member of **Indian Academic of Physical Science (IAPS)**

Organizational Experience

Mini Symposium on “Innovations in Condensed Matter Physics” held at Department of Physics, Mohanlal, Sukhadia University, Udaipur on 31-5-2022

National Conference and Workshop on Recent Advances in Modern Communication Systems and Nanotechnology held at University of Rajasthan, Jaipur during January 06-08, 2011 as member

2nd National Conference on Condensed Matter and Materials Physics held at University of Rajasthan, Jaipur during February 01-03, 2007 as member.

15th National Symposium & Workshop on Thermal Analysis (THERMANS-2006) (Organized by BRNS, DAE & ITAS) held at University of Rajasthan, Jaipur during February 06-10, 2006 as member.

Conference/Symposium/Workshop Attended/Paper Presented

International Conference on Renewable Energy (Online mode) organized by University of Rajasthan, Jaipur during February 25-27, 2022

ICAM Global Summit 2020 organized by ICAM during July 22-24, 2020

VII-Rajasthan Science Congress organized Mohanlal Sukhadia University, Udaipur, during October 14-16, 2019

UGC-SAP Sponsored Workshop on “Vermicomposting Biotechnology: An improved Technique for Institutional Waste Management” organized by Mohanlal Sukhadia University, Udaipur on September 08, 2018.

Faculty Induction Programme organized by Mohanlal Sukhadia University, Udaipur during August 08-10, 2018.

8rd National Conference on Thermo-physical Properties held at Malviya National Institute of Technology, Jaipur during December 14-16, 2015

26th AGM Material Research Society of India Theme Symposium: Materials for Inclusive Development held at University of Rajasthan, Jaipur during February 9-11, 2015

17th Conference of the International Academy of Physical Sciences (CONIAPS XVII) held at University of Rajasthan, Jaipur during January 16-18, 2015

National Conference on Energy Materials and Their Energy Applications (NCNE-2014) held at S.S. Jain Subodh PG (Autonomous) College, Jaipur during December 22-24, 2014

7rd National Conference on Thermo-physical Properties held at C.S.J.M University, Kanpur during January 19-20, 2013

National Conference on Current Trends in Materials Research (CTMR-12) held at University of Rajasthan, Jaipur during March 17-19, 2012

12th Conference of the International Academy of Physical Sciences (CONIAPS XII) held at University of Rajasthan, Jaipur during December 22-24, 2010

International Conference on Polymer Processing and Characterization (ICPPC-10) to be held at Mahatma Gandhi University, Kottayam during January 15-17, 2010

5th National Conference on Thermo Physics Properties (NCTP-09) held at M.S. University of Baroda, Vadodara during October 7-9, 2009

National Workshop on Experimental Methods in Condensed Matter Physics held at University of Rajasthan, Jaipur during March 26-27, 2009

National Workshop on Recent trends in Condensed Matter Physics held at Laxmi Niwas Mittal Institute of Technology, Jaipur during March 21, 2009

International Conference on Condensed Matter Physics held at University of Rajasthan, Jaipur during Nov 25-28, 2007

2nd National Conference on Condensed Matter and Materials Physics held at University of Rajasthan, Jaipur during February 01-03, 2007

International Seminar on Surface and Interfaces (Techniques and Applications) (ISSI- 2006) at University of Rajasthan, Jaipur during November 10-13, 2006.

Intentional workshop on Hydrogen Energy: Production, Storage & Applications (IWHE- 2006) at University of Rajasthan, Jaipur during November 05-09, 2006.

National Conference on Recent Advance in Material Science held at University of Kurukshetra, Kurukshetra during September 27-29, 2006

15th National Symposium & Workshop on Thermal Analysis (THERMANS-2006) (Organized by BRNS, DAE & ITAS) held at University of Rajasthan, Jaipur during February 06-10, 2006.

Seminar on Overview of Major Development in Physics in 20th Century held at University of Rajasthan, Jaipur during November 28- 29, 2005

Awareness workshop on the facilities of UGC-DAE Consortium for Scientific Research held at University of Rajasthan, Jaipur during November 18- 19, 2005

National Conference on Optics and Related Phenomena (Jyothirgamaya-05) held at Sree Narayana College, Kollam during August 29-30, 2005

National Seminar on Materials Processing and Characterization Techniques (NS-MPCT-2005) held at Shivaji University, Kolhapur, during March 28-29, 2005.

National Symposium on Science Technology & Application of Nano-materials (NSNM-05) held at M.S. University of Baroda, Vadodara during March 21-22, 2005

3rd National Conference on Thermo-physical Properties held at Goa University, Goa during January 19-20, 2005

74th Annual Session and National Symposium on Science and Technology for Dessert Development (Organized by NASI, India) held at University of Rajasthan, Jaipur, during December 2-4, 2004

Seminar on Frontier in Physics held at University of Rajasthan, Jaipur during May 28- 29, 2004.

List of publications

Journal

1. Composition dependence of effective thermal conductivity and effective thermal diffusivity of $\text{Se}_{100-x}\text{In}_x$ ($x = 0, 5, 10, 15$ & 20) chalcogenide glasses, K. Singh, D. Patidar and N.S. Saxena, Journal Physics & Chemistry of Solids, ISSN: 0022-3697, (2005), 66, 946-948, DOI.org/10.1016/j.jpcs.2004.11.005 (**I.F. 3.995**).
<https://www.scopus.com/sourceid/28564>
2. Measurement of structural and optical band gap of $\text{Cd}_{1-x}\text{Zn}_x\text{S}$ ($x = .4$ & $.6$) nano-materials, T.P. Sharma, D. Patidar, N.S. Saxena and K.B. Sharma, Indian Journal of Pure and Applied Physics, ISSN: 0019-5596, (2006), 44, 125-128 (**I.F. 0.932**).

<https://www.scopus.com/sourceid/28036>

3. Temperature dependence of dc conductivity in polyaniline-metal halide composites, N. Jain, D. Patidar, N.S. Saxena and K.B. Sharma, Indian Journal of Pure and Applied Physics, ISSN: 0019-5596, (2006), 44, 767-770 (**I.F. 0.932**).
<https://www.scopus.com/sourceid/28036>
4. Optical and structural properties of CdS thick film, D. Patidar, S. Kumar, R. Sharma, N.S. Saxena, K.B. Sharma and T.P. Sharma, Indian Journal of Pure and Applied Physics, ISSN: 0019-5596, (2006), 44, 729-731 (**I.F. 0.932**).
<https://www.scopus.com/sourceid/28036>
5. Electrical properties of CdS/polyaniline heterojunction, D. Patidar, N. Jain, N.S. Saxena, K.B. Sharma and T.P. Sharma, Brazilian Journal of Physics, ISSN: 0103-9733, (2006), 36, 1210-1212, DOI.org/10.1590/S0103-97332006000700016 (**I.F. 1.326**).
<https://www.scopus.com/sourceid/27404>
6. Optical properties of CdS sintered film, D. Patidar, R. Sharma, N. Jain, T.P. Sharma and N.S. Saxena, Bulletin of Material Science, ISSN: 0250-4707, (2006), 29, 21-24, DOI.org/10.1007/BF02709350 (**I.F. 1.783**).
<https://www.scopus.com/sourceid/20500>
7. Energy band gaps of $\text{Se}_{100-x}\text{In}_x$ chalcogenide glasses, K. Singh, N.S. Saxena, O.N. Srivastava, D. Patidar and T.P. Sharma, Chalcogenide Letters, ISSN 1584-8663, (2006), 3, 33-36 (**I.F. 0.885**).
<https://www.scopus.com/sourceid/19200156904>
8. Conduction mechanism in CdZnS thick films, D. Patidar, N.S. Saxena, K.B. Sharma and T. P. Sharma, Optoelectronics Advanced Materials: Rapid Communications, ISSN: 1842-6573, (2007), 1, 329-332 (**I.F. 0.441**).
<https://www.scopus.com/sourceid/18800156712>
9. Structural, optical and electrical properties of CdZnS thin films, D. Patidar, N.S. Saxena and T.P. Sharma, Journal of Modern Optics, ISSN: 0950-0340, (2008), 55, 79-88, DOI.org/10.1080/09500340701292720 (**I.F. 1.464**).
<https://www.scopus.com/sourceid/12181>
10. Energy band gap and conductivity measurement of CdSe thin films, D. Patidar, K.S. Rathore, N.S. Saxena, K.B. Sharma and T.P. Sharma, Chalcogenide Letters, ISSN: 1584-866, (2008), 5, 21-25 (**I.F. 0.885**).
<https://www.scopus.com/sourceid/19200156904>
11. Electrical study of Cu-CdS and Zn-CdS Schottky junctions, S. Gupta, D. Patidar, N.S. Saxena, K.B. Sharma and T.P. Sharma, Optoelectronics Advanced Materials: Rapid Communications, ISSN: 1842-6573, (2008), 2, 205-208 (**I.F. 0.441**).
<https://www.scopus.com/sourceid/18800156712>

12. Measurement of thermal properties of polyaniline salt from room temperature 30 to 140 °C, N. Jain, D. Patidar, N.S. Saxena and K.B. Sharma, Indian Journal of Pure and Applied Physics, ISSN: 0019-5596, (2008), 46, 385-389 (**I.F. 0.932**).
<https://www.scopus.com/sourceid/28036>
13. Structural and optical characterization of chemically synthesized ZnS nano-particles, K.S. Rathore, D. Patidar, Y. Janu, N.S. Saxena, K.B. Sharma and T.P. Sharma, Chalcogenide Letters, ISSN: 1584-8663, (2008), 5, 105–110 (**I.F. 0.885**).
<https://www.scopus.com/sourceid/19200156904>
14. A robust variable structure position control of DC motor, M.K. Gupta, A.K. Sharma and D. Patidar, Journal of Theoretical and Applied Information Technology, ISSN: 1992-8645, (2008), 4, 900-905.
<https://www.scopus.com/sourceid/19700182903>
15. Determination of optical and electrical properties of ZnSe thin films, D. Patidar, K.S. Rathore, N.S. Saxena, K.B. Sharma and T.P. Sharma, Journal of Modern Optics, ISSN: 0950-0340, (2008), 55, 3041–3047, DOI.org/10.1080/09500340802315347 (**I.F. 1.464**).
<https://www.scopus.com/sourceid/12181>
16. Energy band gap studies of CdS nanomaterials, D. Patidar, K.S. Rathore, N.S. Saxena, K.B. Sharma and T.P. Sharma, Journal of Nano Research, ISSN: 1662-5250, (2008), 3, 97-102, DOI.org/10.4028/www.scientific.net/JNanoR.3.97 (**I.F. 0.589**).
<https://www.scopus.com/sourceid/17600155202>
17. Investigation of electrical properties of PANI/chalcogenide junctions, V. Shaktawat, D. Patidar, K.B. Sharma, N.S. Saxena and T.P. Sharma, Central European Journal of Chemistry (Open Chemistry), ISSN:2391-5420), ISSN: 1895-1066, (2009), 7, 769-773 DOI.org/10.2478/s11532-009-0072-5. (**I.F. 1.554**).
<https://www.scopus.com/sourceid/21100384025>
18. Electrical study of thin film Al/n-CdS Schottky junction, S. Gupta, D. Patidar, N.S. Saxena and K.B. Sharma, Chalcogenide Letters, ISSN: 1584-8663, (2009), 6, 723-731 (**I.F. 0.885**).
<https://www.scopus.com/sourceid/19200156904>
19. Effect of Cu doping on the structural, optical and electrical properties of CdS nanoparticles, K.S. Rathore, Deepika, D. Patidar, N.S. Saxena and K.B. Sharma, Journal of Ovonic Research, ISSN: 1584-9953, (2009), 5, 175-185 (**I.F. 1.165**).
<https://www.scopus.com/sourceid/21100206004>
20. Investigation of Al Schottky junction on n-type CdS film deposited on polymer substrate, S. Gupta, D. Patidar, M. Baboo, K.B. Sharma and N.S. Saxena, Frontiers of Optoelectronics, ISSN: 2095-2767, (2010), 3, 321-327, DOI.org/10.1007/ s12200-010-0102-0.

<https://www.scopus.com/sourceid/21100228564>

21. Stress-strain behavior of CdS/PMMA nano-composite, D. Patidar, S. Agrawal and N.S. Saxena, Journal of Polymer Engineering, ISSN: 0334-6447, (2010), 30, 565-573, DOI.org/10.1515/POLYENG.2010.30.9.565 **(I.F. 1.367)**.
<https://www.scopus.com/sourceid/13571>
22. Storage modulus and glass transition behaviour of CdS/ PMMA nano-composites, D. Patidar, S. Agrawal and N.S. Saxena, Journal of Experimental Nanoscience, ISSN: 1745-8080, (2011), 6, 441- 449, DOI.org/10.1080/17458080.2010.509870 **(I.F. 3.075)**.
<https://www.scopus.com/sourceid/5800207372>
23. Thermo-mechanical properties and thermal conductivity of CdS- trans-polyisoprene polymer nanocomposite, M. Baboo, M. Dixit, D. Patidar, K.B. Sharma and N.S. Saxena, Journal of Polymer Engineering, ISSN: 0334-6447, (2011), 31, 181-184, DOI.org/10.1515/polyeng.2011.039 **(I.F. 1.367)**.
<https://www.scopus.com/sourceid/13571>
24. Glass transition activation energy of CdS/PMMA nano-composite and its dependence on composition of CdS nano-particles, D. Patidar, S. Agrawal and N.S. Saxena, Journal of Thermal Analysis and Calorimetry, ISSN: 1388-6150, (2011), 106, 921-925, DOI.org/10.1007/s10973-010-1150-9 **(I.F. 4.626)**.
<https://www.scopus.com/sourceid/26983>
25. Glass transition temperature and thermal stability of ZnS/PMMA nanocomposites, S. Agrawal, D. Patidar and N.S. Saxena, Phase Transition, ISSN: 0141-1594, (2011), 84, 888-900, DOI.org/10.1080/01411594.2011.563152 **(I.F. 1.452)**.
<https://www.scopus.com/sourceid/29082>
26. Investigation of temperature dependent mechanical properties of CdS/PMMA nanocomposites, S. Agrawal, D. Patidar and N.S. Saxena, Journal of Composite Materials, ISSN: 0021-9983, (2011), 45, 2507-2514, DOI.org/10.1177/0021998311401101 **(I.F. 2.591)**.
<https://www.scopus.com/sourceid/21140>
27. II-VI semiconductor-polymer nanocomposites: Mechanical and thermal properties, N.S. Saxena and D. Patidar, International Review of Chemical Engineering, ISSN: 2035-1755, (2011), 3, 500-514.
28. Effect of ZnS nano-filler and temperature on mechanical properties of poly (methyl methacrylate), S. Agrawal, D. Patidar and N.S. Saxena, Journal of Applied Polymer Science, ISSN: 0021-8995, (2012), 123, 2431-2438, DOI.org/10.1002/app.34800 **(I.F. 3.125)**.
<https://www.scopus.com/sourceid/13554>

29. Characterization of single phase copper selenide nanoparticles and their growth mechanism, D. Patidar and N.S. Saxena, Journal of Crystal Growth, ISSN: 0022-0248, (2012), 343, 68–72, DOI.org/10.1016/j.jcrysgr.2012.01.026 (I.F. 1.797).
<https://www.scopus.com/sourceid/24703>
30. Influence of CdS nano additives on the thermal conductivity of poly(vinyl chloride)/CdS nanocomposites, D. Patidar and N. S. Saxena, Advances in Nanoparticles, ISSN: 2169-0529, (2013), 2, 11-15, DOI:10.4236/anp.2013.21003
31. Cost effective synthesis of carbon nanotubes and evaluation of their antibacterial activity, V. Sharma, R.S. Rajaura, S. Purohit, D. Patidar and K.B. Sharma, Nano Trends: A Journal of Nanotechnology and its Applications, ISSN: 0973-418X, (2013), 14, 1-5.
32. Study on glass transition temperature and mechanical properties of cadmium sulphide/polystyrene nanocomposites, S. Agarwal, D. Patidar and N.S. Saxena, Polymer Engineering & Science, ISSN: 1548-2634, (2013), 53, 1223-1229, DOI.org/10.1002/pen.23382 (I.F. 2.428).
<https://www.scopus.com/sourceid/13695>
33. Effective thermal conductivity of CdS/ZnS nanoparticles embedded polystyrene nanocomposites, S. Agarwal, D. Patidar and N.S. Saxena, Heat and Mass Transfer, ISSN: 0947-7411, (2013), 49, 947–953, DOI.org/10.1007/s00231-013-1138-7 (I.F. 2.464).
<https://www.scopus.com/sourceid/13749>
34. Effect of II-VI nano fillers on storage modulus, glass transition temperature and activation energy of poly(vinyl chloride), D. Patidar and N.S. Saxena, International Review of Chemical Engineering, ISSN: 2035-1755, (2013), 5, 172-178.
35. Hollow CdSe nanospheres synthesized using solvothermal approach: Structural and optical characterization, D. Patidar and N. S. Saxena, Advanced Porous Materials, ISSN: 2327-395X, (2013), 1, 219-223, DOI.org/10.1166/apm.2013.1016.
36. Kinetics of phase transformations and thermal stability of $\text{Ge}_x\text{Se}_{70}\text{Sb}_{30-x}$ ($x=5, 10, 15, 20$) chalcogenide glasses, A. Kaswan, V. Kumari, D. Patidar, N.S. Saxena and K.B. Sharma, New Journal of Glass and Ceramics, ISSN: 2161-7562, (2013), 3, 99-103, DOI: 10.4236/njgc.2013.34016
37. Review on thermal characterization of polymer nanocomposites, D. Patidar and N. S. Saxena, ITAS Bulletin 6 (2013) 51-67.
38. Monodispersed ZnO nanoparticles and their use in heterojunction solar cell, D. Patidar, A. Kaswan, N.S. Saxena and K.B. Sharma, The Scientific World Journal, Volume 2013, ISSN: 1537-744X, Article ID 260521, 1-6, DOI.org/10.1155/2013/260521.
<https://www.scopus.com/sourceid/24219>
39. Kinetics of crystallization of $\text{Ge}_{30-x}\text{Se}_{70}\text{Sb}_x$ ($x = 15, 20, 25$) chalcogenide glasses, A. Kaswan, V. Kumari, D. Patidar, N.S. Saxena and, K.B. Sharma, Processing and

Application of Ceramics, ISSN: 2406-1034, (2014), 8, 25–30, DOI.org/10.2298/PAC1401025K **(I.F. 1.804)**
<https://www.scopus.com/sourceid/21100370874>

40. Storage modulus and glass transition temperature of MWNT/PMMA polymer nanocomposite films with different wt% of MWNT, M. Verma, D. Patidar, M. Baboo, K.B. Sharma and N.S. Saxena, Journal of Nano-Science, Nano-Engineering & Applications, ISSN: 2231-1777, (2014), 4, 28-33.
41. Electrical properties of GeSeSn chalcogenide glassy system, V. Kumari, A. Kaswan, D. Patidar, N.S. Saxena and K.B. Sharma, Advanced Electrochemistry, ISSN: 2330-1554, (2014), 2, 79-83, DOI.org/10.1166/adel.2014.1045.
42. Effect of post-fabrication annealing on P3HT/ZnO photovoltaic devices, D. Patidar, A. Kaswan, N.S. Saxena and K.B. Sharma, Advanced Electrochemistry, ISSN: 2330-1554, (2014), 2, 66-70, DOI.org/10.1166/adel.2014.1034.
43. Effect of nano CdS dispersion on thermal conductivity of PS/PVC & PS/PMMA polymeric blend nanocomposites, V. Mathur, D. Patidar and K.B. Sharma, Applied Nanoscience, ISSN: 2190-5509, (2015), 5, 623-628, DOI.org/10.1007/s13204-014-0357-7 **(I.F. 3.674)**.
<https://www.scopus.com/sourceid/21100886227>
44. Temperature dependence of thermal transport properties of $\text{Ge}_{30-x}\text{Se}_{70}\text{Sb}_x$ chalcogenide glasses, V. Kumari, A. Kaswan, D. Patidar, N.S. Saxena and K.B. Sharma, International Journal of Thermo-Physics, ISSN: 1572-9567, (2015), 36, 722-732, DOI:10.1007/s10765-014-1816-9 **(I.F. 1.608)**
<https://www.scopus.com/sourceid/13762>
45. I-V measurement of Ge-Se-Sn chalcogenide glassy alloys, V. Kumari, A. Kaswan, D. Patidar, N.S. Saxena and K.B. Sharma, Processing and Application of Ceramics, ISSN: 2406-1034, (2015), 9, 61-66, DOI:10.2298/PAC1501061K **(I.F. 1.804)**.
<https://www.scopus.com/sourceid/21100370874>
46. Effective thermal conductivity and diffusivity of GeSeSb glasses measured simultaneously as a function of temperature and fit to empirical equations, V. Kumari, A. Kaswan, D. Patidar, N.S. Saxena and K.B. Sharma, Journal of Asian Ceramic Societies, ISSN: 2187-0764, (2015), 3, 339-344, DOI.org/10.1016/j.jascer.2015.06.006. **(I.F. 3.125)**.
<https://www.scopus.com/sourceid/21100823276>
47. Synthesis, characterization and optical properties of CdSe and ZnSe quantum dots, M. Verma, D. Patidar, K.B. Sharma and N.S. Saxena, Journal of Nanoelectronics and Optoelectronics, ISSN: 1555-1318, (2015), 10, 320-326, DOI.org/10.1166/jno.2015.1768 **(I.F. 1.069)**.
<https://www.scopus.com/sourceid/18500166400>

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LIST OF CANDIDATES PURSUING Ph.D.

S.No.	PHOTO	NAME	TITLE OF THESIS	JOINED ON	CURRENT POSITION
1.		Pankaj Suthar	<i>Study of reduced graphene oxide (rGO) based transition metal chalcogenides (TMCs) nanocomposites and their applications towards high performance hybrid supercapacitors</i>	09-05-2022	DST-INSPIRE Fellow
2.		Shiv Kumar Meena	<i>Synthesis characterization and photocatalytic performance of metal oxides-graphene nanocomposites</i>	13-05-2022	UGC-JRF
3.		Dharmishtha Tolambia	<i>UNDER COURSE WORK</i>	23-08-2023	UGC-JRF
4.		Pradeep Kumar Saini	<i>UNDER COURSE WORK</i>	25-08-2023	UGC-JRF

