


Bio-Data

PROF. DEVRAJ SINGH

Permanent Address: 104, Home Green Apartments Bamnoli, Dwarka Sector-28 New Delhi-110077 Date and place of Birth: 30/06/1974, Etawah, U.P., India. Martial Status:	Correspondence Address: B-1, Sangam Teachers Residential Complex, VBS Purvanchal University Jaunpur-222003, U.P., India Cell No.:+91-9810549461 E-mail: devraj2001@gmail.com Married	
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Education Qualifications:

Exam. Passed	Board / University	Year	Subjects	%age
High- School	U.P.Board, Allahabad	1989	Hindi, English, Mathematics-2, Science-2, Social Science, Biology	74.3
Inter- mediate	U.P.Board, Allahabad	1991	Gen. Hindi, English, Physics, Chemistry, Mathematics	64.2
B.Sc.	Kanpur University	1995	Physics, Chemistry, Mathematics & General English	66.1
M.Sc.	C.S.J.M.Univ., Kanpur	1999	Physics with Electronics specialization	63.9
D.Phil.	University of Allahabad, Allahabad	2002	Title: " Study of ultrasonic attenuation in condensed materials " under supervision of Prof. Raja Ram Yadav, Physics Department., A.U. Barcode: 5010010155128	Thesis adjudged Excellent
A.N.S.I. (Sugar Technology)	National Sugar Institute, Kanpur	1998	Sugar Technology, Sugar Chemistry, Sugar Engg., Instrumentation, Management Awareness etc.	68.46

Experience:

(a) Teaching Experience:

- Department of Physics
Iswar Saran Degree College
(University of Allahabad)
Allahabad-211004, India
Lecturer
21st September, 2002-31st May, 2007
- Department of Applied Sciences (PHYSICS)
Amity School of Engineering and Technology,
Bijwasan, New Delhi-110 061, India
Lecturer
1st June, 2007-28th Dec., 2010
- Department of Applied Sciences (PHYSICS)
Amity Institute of Applied Sciences
Amity University Uttar Pradesh,
Noida-201313, India
Assistant Professor-III
1st August, 2018-31st December, 2019
- U.P.Rajarshi Tandon Open University,
Allahabad, India
Counsellor of B.Sc. Physics
December, 2003 –May, 2007
- Department of Applied Sciences (PHYSICS)
Amity School of Engineering and Technology
Bijwasan, New Delhi-110 061, India
Assistant Professor-III
28th Dec, 2010-31st July, 2018
- Department of Physics
Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study & Research, VBS Purvanchal University, Jaunpur-222003
Professor
1st January, 2020-

- (b) **Research Experience:** • Ultrasonics Group, Dept. of Physics
University of Allahabad, Allahabad, India
Research Fellow
December, 1999- September, 2002

(c) Technical Experience:

- Experimental Sugar Factory (National Sugar Institute), Kanpur, India
Crushing season 1996-1997, Capacity of plant=100TCD

Student of A.N.S.I. (Sugar Technology) 1st year

Work: Preliminary all experimental knowledge about process of manufacturing of cane sugar

• The Saraswati Sugar Mills, Yamuna Nagar (Haryana), India

Crushing season 1997-1998, Capacity of plant=10000TCD

Student Chemist

Work: Supervision of all process of cane sugar manufacturing and to collect all information of the sugar plant.

Interested in Research Fields:

- Ultrasonics
- Acoustics
- Materials Science
- Lattice Dynamics
- Nondestructive Evaluations

Courses taught:

- Mechanics (B.Sc.) • Optics (B.Sc.)
- Physics of Semiconductor Devices (M.Sc.)
- Microwaves (M.Sc.)
- Thermal Physics (B.Sc.)
- Quantum Mechanics (B.Sc.)
- Applied Physics (B.Tech.)

References:

- Prof. Raja Ram Yadav,
Former VC-VBSPU
Ex. Head of Department of Physics
University of Allahabad, Prayagraj, India
E-mail: rroyadav1@rediffmail.com
Tel. No.: +91-9415347913
- Dr. Sanjay Yadav, Ex.-Senior Principal Scientist and Head
Pressure, Vacuum and Ultrasonic Metrology Section
& Professor-AcSIR, Faculty of Physical Sciences
CSIR-National Physical Laboratory (CSIR-NPL)
New Delhi – 110 012, India
E-mail: ysanjay62@gmail.com, Tel : +91-11-4709 1206

- Prof. Dr. V. Rajendran
Vice-Chancellor
AMET University,
East Coast Road,
Kanathur 603112, Tamil Nadu, India
E-mail: veerajendran@gmail.com
- Dr. Nico F. Declercq. Professor
Woodruff School of Mechanical Engineering
Georgia Institute of Technology
Atlanta, GA 30332, USA
E-mail: nico.declercq@me.gatech.edu
Tel. No.: +33(0)38720-3924

Publications: Papers in Journals: **141**, Papers in conference proceedings: **09**; Books: **24**, Book chapters: **02**,

D.Sc. Guidance:

Guiding

S. No.	Name of D.Sc. student	Enrolment No. and University	Topic of the thesis	Role as supervisor/Co-supervisor
1.	Dr. Mukesh Kumar Zope	PU22/260036	STUDY OF PHYSICAL AND DOSIMETRIC ASPECTS OF INTENSITY MODULATED AND RAPID ARC RADIATION DELIVERY IN HEAD AND NECK CANCER: A PROSPECTIVE STUDY	Advisor

Ph.D Guidance:

S. No.	Name of Ph.D. student	Enrolment No. and University	Topic of the thesis	Role as supervisor/Co-supervisor	Year of award
GUIDED:					
1.	Dr. Raj Kumar	NIMSUR/Dir./Ph.D./ 2009/9124 NIMS University, Jaipur	ULTRASONIC STUDY OF SMART MATERIALS FOR ENGINEERING APPLICATIONS	Co-supervisor	2015
2.	Dr. (Mrs.) Shivani Kaushik	NIMSUR/Dir./Ph.D./ 2009/9117 NIMS University, Jaipur	ULTRASONIC NON-DESTRUCTIVE TESTING CHARACTERISATION OF CONDENSED MATERIALS	Co-supervisor	2016
3.	Dr. (Mrs.) Vyoma Bhalla	a4431413005 Amity University Uttar-Pradesh, NOIDA	INVESTIGATION OF ULTRASONIC AND THERMOPHYSICAL PROPERTIES FOR SOME ADVANCED MATERIALS	Supervisor	2017
4.	Dr. Amit Kumar	AS1631416001 Amity University Haryana, Manesar	ULTRASONIC AND THERMOPHYSICAL PROPERTIES OF CONDENSED MATERIALS	Co-supervisor	2019
5.	Dr. (Mrs.) Chinmayee Tripathi	14-PHY-001 The Ravenshaw University, Cuttack, Odisha	STUDY OF MECHANICAL AND THERMAL PROPERTIES OF fcc STRUCTURED MATERIALS USING ULTRASONICS	Co-supervisor	2019
6.	Dr. (Mrs.) Jyoti Bala	00316490416 Guru Gobind Singh Indraprastha	STUDY OF ULTRASONIC AND BIO-SENSING PROPERTIES OF CONDENSED MATERIALS	Supervisor	2022

		University, Dwarka Sector 16C, New Delhi			
7.	Dr. (Mrs.) Bhawan Jyoti	00116496416 Guru Gobind Singh Indraprastha University, Dwarka Sector 16C, New Delhi	ELASTIC, ULTRASONIC AND THERMOPHYSICAL PROPERTIES OF CONDENSED MATERIALS	Supervisor	2022
GUIDING					
8.	Mr. Anurag Singh	PU20/4440 Veer Bahadur Singh Purvanchal University, Jaunpur	MECHANICAL AND THERMOPHYSICAL PROPERTIES OF ADVANCED MATERIALS FOR INDUSTRIAL APPLICATIONS	Supervisor	
9.	Ms. Jyotsana Chauhan	PU16/091850 Veer Bahadur Singh Purvanchal University, Jaunpur	STUDY OF ULTRASONIC, MECHANICAL AND THERMAL PROPERTIES OF SOLID MATERIALS AND NANOFLUIDS	Supervisor	
10.	Mr. Praveen Singh	PU22/286002 Veer Bahadur Singh Purvanchal University, Jaunpur	ULTRASONIC AND THERMOPHYSICAL INVESTIGATIONS ON CONDENSED MATERIALS	Supervisor	
11.	Mr. Neeraj Kumar Singh	PU22/286107 Veer Bahadur Singh Purvanchal University, Jaunpur	STUDY OF ACOUSTICAL AND THERMOPHYSICAL PROPERTIES OF MATERIALS	Supervisor	
12.	Mr. Rakesh Kumar	PU/286126 Veer Bahadur Singh Purvanchal University, Jaunpur	ULTRASONIC TECHNIQUE AS A TOOL FOR MATERIALS CHARACTERIZATION	Supervisor	

Research Project:

- Centre of Excellence, U.P. State Higher Education Board, Lucknow on the "Design & Development of perovskite Solar Cells on Biodegradable Paper Substrates" [Rs. 475000/- for the session 2022-2023]

Scholarships:

- National Integrated Scholarship- during High School
- National Scholarship-U.P.Govt.-during Intermediate
- U.P.Chhatra Kalyan Nidhi- during D.Phil.

Extra-Curricular Activities:

- Head, Physics Department, Iswar Saran Degree College, Allahabad from July 1, 2003 to May 31, 2007.
- Convener, A Seminar on Latest Trends in Computer Technology (LATCOT-2004) at Iswar Saran Degree College, Allahabad on January 11, 2004.
- Assistant Dean Student Welfare, Iswar Saran Degree College, Allahabad from December 1, 2004 to May 31, 2007.
- Member, Organizing committee, National Symposium on Ultrasonics (NSU-XV) at Physics Department, University of Allahabad, Allahabad during 1-3 Nov., 2006.
- Member, Organizing committee, National Seminar on Latest Developments in Computer Technology (4-5 February, 2007) at Iswar Saran Degree College of University of Allahabad, Allahabad.
- Member, B.Sc. Admission committee during sessions 2003-2004, 2004-2005 and 2005-2006 at Iswar Saran Degree College of University of Allahabad, Allahabad.
- Head, Applied Physics Department, Amity School of Engineering & Technology, Bijwasan, New Delhi since March, 2009.
- Member, Organizing committee, National Symposium on Ultrasonics (NSU-XIX) at National Physical Laboratory, New Delhi during 30-31 October., 2012.
- Faculty Advisor, Indian Society for Technical Education (ISTE)- ASET chapter from 2008-2012.
- Scientific Memberships:
Life Fellow of Ultrasonics Society of India (LF-104).
Life Fellow of Acoustical Society of India (LF-261)
Life Member of India Association of Physics Teachers (LM-9777, L7008).
Life Member of Materials Research Society of India (LM-1251B).
Life Member of Ultrasonics Society of India (LM-168).
Life Member of Metrology Society of India (LM-976).
Life Member of Indian Physics Association (DEL/LM/13248).
Life Member of Ion Beam Society of India (LM249)
- Journal Referee–
Indian Journal of Pure & Applied Physics
Journal of Pure & Applied Ultrasonics

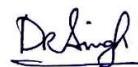
Results in Physics (Elsevier)
 Platinum Metals Review (Now Johnson Matthey Technical Review)
 International Journal of Applied Mechanics (World Scientific)
 MAPAN-Journal of Metrology Society of India (Springer)
 Advanced Materials Letters
 African Journal of Pure and Applied Chemistry
 Research Journal of Earth and Planetary Sciences
 Walailak Journal of Science and Technology
 Applied Acoustics (Elsevier).
 Arabian Journal of Chemistry (Elsevier)
 Journal of Physics and Chemistry of Solids (Elsevier)
 Optoelectronics and Advanced Materials
 Journal of Molecular Liquids
 Journal of Analytical Science and Technology
 Journal of Acoustical Society of India
 Sensors and Actuators A: Physical (Elsevier)
 Particulate Science and Technology: An International Journal (Taylor & Francis)
 Ceramics International (Elsevier)
 RSC Advances
 Experimental Thermal and Fluid Science (Elsevier)
 Journal of Physical Science
 Zeitschrift für Physikalische Chemie (Degruyter)
 Physica B: Condensed Matter (Elsevier)
 Materials Science & Engineering B (Elsevier)
 Journal of Physical Science
 Journal of Magnetism and Magnetic Materials (Elsevier)
 Nano-Micro Letters (Elsevier)
 Zeitschrift für Naturforschung A – A Journal of Physical Sciences (Degruyter)
 Indian Journal of Chemistry, Section A
 Journal of the Electrochemical Society
 Indian Journal of Engineering and Materials Science
 Materials Today (Elsevier)
 Egyptian Journal of Petroleum
 Indian Journal of Chemistry: Section A (IJCA)
 Materials Today: Proceedings
 Phase Transition
 Molecular Symposia
 Journal of Scientific and Industrial Research (JSIR)
 Indian Journal of Engineering & Materials Science (IJEMS)
 Intermetallics (Elsevier)
 Pramana-Journal of Physics (Springer)
 Materials Letters (Elsevier)
 Solid State Sciences (Elsevier)
 Measurements (Elsevier)
 Water, Air, & Soil Pollution (Springer)
 International Journal of Thermal Sciences (Elsevier)
 Ultrasonics Sonochemistry (Elsevier)
 Chemistry Inorganic Materials (Elsevier)

● **Editor in**

Journal of the Acoustical Society of India
 Journal of Pure & Applied Ultrasonics

- **Associate Editor:** MAPAN-Journal of Metrology Society of India (Springer)
- Publication Secretary: Executive Council of *Ultrasonics Society of India (2012-2022)*
- Member: Regional Council (RC1: Delhi & Haryana) of *Indian Association of Physics Teachers: (2012-2019)*
- Treasurer: Regional Council (RC1: Delhi & Haryana) of *Indian Association of Physics Teachers: (2019)*
- Convener, National Seminar on Materials Characterization by Ultrasonics, **NSMCU-2012** at Amity School of Engineering & Technology, Bijwasan, New Delhi on 3-4 April, 2012.
- Recognized supervisor at Guru Gobind Singh Indraprastha University, New Delhi. (2015-2018)

- Recognized supervisor at Amity University, Noida.(2012-2019)
- Member: Organising Committee, The 2nd Conference on New Advances in Acoustics (NAA 2016), February 28 to March 1, 2016 in Beijing, China
- Jury Member: National Level Exhibition and Project Competition (NLEPC) under INSPIRE Awards component of Department of Science & Technology, Govt. of India
- Member: Organising Committee, International Conference on Engineering Physics, Materials and Ultrasonics (ICEPMU) , on 3-4 June 2016 at The Northcap University (NCU), Gurgaon,
- Session organizer in 13th Western Pacific Acoustics Conference (WESPAC-2018) on 11-15 November, 2018 at the CSIR-National Physical Laboratory, New Delhi
- Session chair, SPIN – 2019: 6th International Conference on Signal Processing and Integrated Networks on 7th and 8th March, 2019 at ASET, Amity University, Noida.
- Co-Chairman, ICUMSAT-2019, VBSP University, Jaunpur
- Director, Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study & Research, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh, India from 13th January, 2020 to 7th June, 2023.
- **Director**, Dattopant Thengadi Law Institute, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh, India since 7th June, 2023.
- Member: Executive Council of ***Acoustical Society of India (2024-2026)***



(Dr. Devraj Singh)

List of Publications of Dr. Devraj Singh

A. Papers in Referred Journals

S.No	Authors	Year	Title	Complete reference of journal
1.	R.R.Yadav and Devraj Singh	2000	Temperature dependence of ultrasonic absorption in lanthanum monochalcogenides	Journal of the Acoustical Society of India Vol. 28, No.1-4, pp.191-198
2.	R.R.Yadav and Devraj Singh	2001	Behaviour of ultrasonic attenuation in intermetallics https://doi.org/10.1016/S0966-9795(00)00089-3	Intermetallics (Elsevier) Vol.9. No.3, pp.189-194 (IF=4.3)=SCOPUS
3.	R.R.Yadav and Devraj Singh	2001	Ultrasonic attenuation in lanthanum monochalcogenides DOI: 10.1143/JPSJ.70.1825	Journal of the Physical Society of Japan .Vol.70, No.6, pp.1825- 1832 (IF= 1.579)=SCOPUS
4.	S.K.Kor, G.Pandey and Devraj Singh	2001	Ultrasonic attenuation in semimetallic GdX single crystal (X=P,As,Sb and Bi) in the temperature range 10 to 300K.	Indian Journal of Pure & Applied Physics Vol.39, No. 8, pp.510-513 (IF=0.7)=SCOPUS
5.	R.R.Yadav and Devraj Singh	2001	Absorption at low temperatures	Journal of the Acoustical Society of India Vol. 29, No.1-2, pp.220-224
6.	Devraj Singh , R.R.Yadav and A.K.Tiwari	2002	Ultrasonic attenuation in semiconductors	Indian Journal of Pure & Applied Physics Vol.40,No.12, pp.845-849 (IF=0.7)=SCOPUS
7.	R.R.Yadav, Devraj Singh and A.K. Tiwari	2002	Ultrasonic evaluations in rare-earth metals	Journal of the Acoustical Society of India Vol. 30, No.1-2, pp.59 – 63
8.	S.K.Kor,R.R.Yadav and Devraj Singh	2003	Ultrasonic studies of CTAB in glycol https://doi.org/10.1080/10587250216176	Molecular Crystals and Liquid Crystals (Taylor & Francis) Vol.392, pp 75-81 (IF= 0.7)=SCOPUS
9.	S.K.Kor, G.Pandey and Devraj Singh	2003	Ultrasonic attenuation in lanthanum monochalcogenides from 5K to 500K	Acta Acustica united with Acustica Vol.89, pp.105-109 (IF= 1.510)=SCOPUS
10.	R.R.Yadav and Devraj Singh	2003	Effect of thermal conductivity on ultrasonic attenuation in praseodymium monochalcogenides https://doi.org/10.1134/1.1608987	Acoustical Physics (Moscow) Vol.49,No.5, pp 595-604 (IF= 0.9)=SCOPUS
11.	Devraj Singh and R. R. Yadav	2003	The thermal conductivity and ultrasonic absorption in dielectric crystals	Journal of Pure & Applied Ultrasonics Vol.25,No.3, pp. 82-87: UGC
12.	R.R.Yadav, A.K. Tiwari and Devraj Singh	2003	How the ultrasonic parameters of Ce-monopnictides are so sensitive to pressure	Journal of the Acoustical Society of India Vol. 31,No.1-4, pp.317-319
13.	S.K.Kor, Devraj Singh and A.K. Srivastava	2004	Ultrasonic attenuation in PrS, PrSe and PrTe	Journal of the Acoustical Society of India Vol. 32, No.1-2, pp.238-242
14.	Devraj Singh and R.R.Yadav	2004	Ultrasonic properties of SmS	Journal of the Acoustical Society of India Vol. 32, No.1-2, pp.279-281
15.	R.R.Yadav, P.Awasthi and Devraj Singh	2004	Ultrasonic attenuation in Fe ₃ O ₄	Journal of the Acoustical Society of India Vol. 32, No.1-2, pp.282-286

16.	Devraj Singh, R.R.Yadav and A.K.Gupta	2004	Acoustical attenuation in scandium antimonide	Journal of the Acoustical Society of India Vol. 32, No.1-2, pp.252-254
17.	S.K.Kor, Devraj Singh and A.K.Srivastava	2005	Ultrasonic studies of thulium monochalcogenides	Indian Journal of Pure & Applied Physics Vol.43,No.5, pp.355-358 (IF=0.7)=SCOPUS
18.	R.R.Yadav, A.K.Gupta and Devraj Singh	2005	Ultrasonic attenuation in Ni-Pd alloys at high temperature phase 2005JPhSt...9..227Y	Journal of Physical Studies Vol.9,No.3, pp.227-232 (IF=0.131)=SCOPUS
19.	R.R.Yadav, A.K.Tiwari and Devraj Singh	2005	Effect of pressure on ultrasonic attenuation in Ce-monopnictides at low temperature https://doi.org/10.1007/s10853-005-4397-y	Journal of Materials Science Vol.40,No.19, pp.5319-5321 (IF= 3.5)=SCOPUS
20.	R.R.Yadav, P.Awasthi and Devraj Singh	2005	Akhieser damping in refractory compounds	Journal of the Acoustical Society of India Vol. 33, No. 1-4. Pp. 177-181
21.	D.K.Pandey, Devraj Singh and R.R. Yadav	2007	Ultrasonic wave propagation in IIIrd group nitrides https://doi.org/10.1016/j.apacoust.2006.04.004	Applied Acoustics (Elsevier) Vol. 68, No.7, pp.766-777 (IF=3.4)=SCOPUS
22.	D.K.Pandey, Devraj Singh, P.K.Yadawa and R. R. Yadav	2007	Ultrasonic velocity and absorption in lyotropic liquid crystal systems	Macromolecule-An Indian Journal Vol. 3, No.3, pp.75-78
23.	D.K.Pandey, Devraj Singh, R. R. Yadav and P.K.Yadawa	2007	Ultrasonic studies of CTAB/decanol/water systems	Macromolecule-An Indian Journal Vol. 3, No.3, pp.79-82
24.	Devraj Singh and D.K.Pandey	2008	Acoustic investigations on intermetallics	Materials Science-An Indian Journal Vol. 4, No.2, pp.67-71
25.	A.K.Yadav, R.R.Yadav, D.K.Pandey and Devraj Singh	2008	Ultrasonic study of fission products precipitated in the nuclear fuel doi:10.1016/j.matlet.2008.02.036	Materials Letters (Elsevier) Vol.62, pp.3258-3261 (IF=2.7)=SCOPUS
26.	Devraj Singh, D.K.Pandey, P.K.Yadawa and A.K.Yadav	2009	Attenuation of ultrasonic waves in V, Nb and Ta at low temperatures https://doi.org/10.1016/j.cryogenics.2008.08.008	Cryogenics (Elsevier) Vol. 49, No.1, pp. 12-16 (IF=1.8)=SCOPUS
27.	Devraj Singh and D.K.Pandey	2009	Ultrasonic investigations in intermetallics https://doi.org/10.1007/s12043-009-0034-7	Pramana-journal of Physics (Springer)Vol. 72, No.2, pp. 389-398 (IF=1.9)=SCOPUS
28.	Devraj Singh, D.K.Pandey and P.K.Yadawa	2009	Ultrasonic wave propagation in rare-earth monochalcogenides DOI: 10.2478/s11534-008-0130-1	Central European Journal of Physics [Now <i>Open Physics</i> -DE GRUYTER] (Springer/Versita) Vol.7, pp. 198-205 (IF=0.765)=SCOPUS
29.	D.K.Pandey, Devraj Singh and P.K.Yadawa	2009	Ultrasonic study of osmium and ruthenium DOI: 10.1595/147106709X430927	Platinum Metals Review Vol. 53, pp. 91-97 (IF= 2.704) SCOPUS
30.	Devraj Singh	2009	Behaviour of acoustic attenuation in rare-earth chalcogenides doi:10.1016/j.matchemphys.2008.11.025	Materials Chemistry & Physics (Elsevier) Vol. 115, No. 1, pp. 65-68 (IF=4.3)=SCOPUS

31.	P.K.Yadawa, Devraj Singh , D.K.Pandey and R.R.Yadav	2009	Elastic and acoustic properties of heavy rare-earth metals DOI: 10.2174/1874837600902010061	The Open Acoustic Journal , Vol. 2, pp.61-67
32.	Devraj Singh and P.K.Yadawa	2010	Effect of platinum addition to coinage metals on their ultrasonic properties doi:10.1595/147106710X500602	Platinum Metals Review Vol. 52, pp.172-179 (IF=2.704: SCOPUS)
33.	Devraj Singh , P.K.Yadawa & S.K.Sahu	2010	Effect of electrical resistivity on ultrasonic attenuation in NpTe doi:10.1016/j.cryogenics.2010.04.005	Cryogenics (Elsevier) Vol. 50, pp.476-479 (IF=1.8) = SCOPUS
34.	P.K.Yadawa, D.K.Pandey, Devraj Singh , R.R.Yadav & G.Mishra	2010	Computations of ultrasonic parameters of lanthanide metals Ti, Zr and Hf doi:10.3906/fiz-0902-7	Turkish Journal of Physics Vol.34, pp. 23-31 (IF=0.202) = SCOPUS
35.	Devraj Singh , D.K.Pandey, D.K.Singh and R.R.Yadav	2011	Propagation of ultrasonic waves in neptunium monochalcogenides doi:10.1016/j.apacoust.2011.04.002	Applied Acoustics (Elsevier) Vol. 72, pp. 737-741 (IF=3.4) = SCOPUS
36.	G.Mishra, S.K.Verma, Devraj Singh , P.K.Yadawa and R.R. Yadav	2011	Synthesis and ultrasonic characterization of Cu/PVP nanoparticles-polymer suspension doi:10.4236/oja.2011	Open Journal of Acoustics (Scientific Research, USA) Vol.1, pp.9-14
37.	P.K.Yadawa, Devraj Singh , D.K. Pandey, G. Mishra and R.R. Yadav	2011	Acoustic wave propagation in nanocrystalline RuCo alloys DOI:10.4236/ampc.2011.12003	Advances in Materials Physics and Chemistry Vol.1, pp.14-19
38.	Devraj Singh , Raj Kumar and D.K. Pandey	2011	Temperature and orientation dependence of ultrasonic parameters in americium mononictides DOI:10.4236/ampc.2011.12006	Advances in Materials Physics and Chemistry Vol.1, pp. 31-38
39.	J.Kumar, Kailash, S.K.Shrivastava, Devraj Singh and V.Kumar	2011	Ultrasonic attenuation in calcium oxide DOI:10.4236/ampc.2011.12008	Advances in Materials Physics and Chemistry Vol.1, pp. 44-49
40.	Devraj Singh , S.Tripathi, D.K.Pandey, A.K.Gupta, D.K. Singh and J.Kumar	2011	Ultrasonic wave propagation in semimetallic single crystals DOI: 10.1142/S0217984911027686	Modern Physics Letters B (World Scientific) Vol. 25, No. 31, pp.2377-2390 (IF=1.8: SCOPUS)
41.	A.K.Gupta, A.Gupta, Devraj Singh and S.Tripathi	2011	Sensitivity of nanostructured iron metal on ultrasonic properties DOI:10.4236/ojmetal.2011.12005	Open Journal of Metal , Vol. 1, No.1, pp. 34-40
42.	R. Kumar, Devraj Singh and G. Mishra	2011	Ultrasonic wave propagation in californium mononictides DOI: 10.4236/ojapps.2011.11001	Open Journal of Applied Sciences Vol. 1, No.1, pp. 1-7
43.	D.K.Singh, D.K.Pandey, R.R.Yadav and Devraj Singh	2012	A study of nanosized zinc oxide and its nanofluids DOI: 10.1007/s12043-012-0275-8	Pramana- journal of physics (Springer) Vol. 78, No. 5, pp. 759–766 (IF=1.9)=SCOPUS
44.	D.K.Singh, D.K.Pandey, R.R.Yadav and Devraj Singh	2012	Characterization of CrO ₂ - poly-vinyl pyrrolidone magnetic nanofluids DOI:10.1016/j.jmmm.2012.05.020	Journal of Magnetism and Magnetic Materials (Elsevier) Vol. 324, No. 22, pp. 3662-3667 (IF=2.5)=SCOPUS

45.	R. Kumar, Devraj Singh and S. Tripathi	2012	Crystal anharmonicity in strontium monochalcogenides	Asian Journal of Chemistry Vol. 24, No. 12, pp. 5652-5654 (IF=0.270)=SCOPUS
46.	S. Kaushik, Devraj Singh and G. Mishra	2012	Elastic and ultrasonic studies XBi (X: B, Cm and U)	Asian Journal of Chemistry Vol. 24, No. 12, pp. 5655-5658 (IF=0.270)=SCOPUS
47.	D.K. Singh, D.K. Pandey, R.R. Yadav and Devraj Singh	2013	A study of ZnO nanoparticles and ZnO-EG nanofluids DOI:10.1080/17458080.2011.602369	Journal of Experimental Nanoscience Vol. 8, No. 5, pp. 731-741 (IF=2.8)=SCOPUS
48.	G. Mishra, Devraj Singh , P. K. Yadawa, S. K. Verma, R. R. Yadav	2013	Study of copper/palladium nanoclusters using acoustic particle sizer DOI:10.1595/147106713X667632	Platinum Metals Review Vol.57, No. 3, pp. 186-191 (IF=2.704:SCOPUS)
49.	V. Bhalla, R. Kumar, C. Tripathy and Devraj Singh	2013	Mechanical and thermal properties of praseodymium monopnictides: an ultrasonic study DOI: 10.1142/S0217979213501166	International Journal of Modern Physics B(World Scientific) Vol. 27, No. 22, 1350116 (28 pp.) (IF=1.770:SCOPUS)
50.	A.K. Yadav, Devraj Singh , V.Bhalla and S.Tripathi	2013	Temperature dependent elastic and ultrasonic properties of iron aluminide DOI: 10.13189/ujms.2013.010208	Universal Journal of Materials Science Vol. 1, No. 2, pp. 56-62
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131.	D. Patil, M. K. Zope, D. K. Saroj, S. Devi, D. K. Sinha and Devraj Singh	2025	Comparative dosimetric evaluation of hybrid volumetric modulated arc therapy techniques for oesophageal cancer: a treatment planning study doi: 10.1017/S1460396925000160	Journal of Radiotherapy in Practice (Cambridge University Press) Vol. 24, No. e19, pp. 1-12, SCOPUS/Embase
132.	D. B. Patil, M. K. Zope and Devraj Singh	2025	Dosimetric Comparison of 3DCRT, IMRT, and Rapid Arc Treatment Techniques in Cervical Cancer: Evaluating Plan Quality and Organ-at-Risk Sparing https://doi.org/10.1007/s12647-024-00797-4	MAPAN: Journal of Metrology Society of India Vol. 40, No. 2, pp. 409-419, (IF=1.3)=SCOPUS
133.	P. Singh, A. Singh and Devraj Singh	2025	Tailoring elastic, mechanical, thermophysical and ultrasonic properties of TMCs (TM=V, Nb, Ta) https://doi.org/10.56042/iipap.v6i6.16436	Indian Journal of Pure & Applied Physics Vol. 63, No. 6, pp. 508-516, (IF=0.7) SCOPUS
134.	M. Zope, D. Patil and Devraj Singh	2025	Dosimetric and radiobiological analysis of VMAT treatment plan with flattened and flattening filter-free photon beams for postoperative oral cavity cancer treatment https://doi.org/10.5505/tjo.2025.4496	Turkish Journal of Oncology (Turk Onkoloji Dergisi) Vol. 40, No. 2, pp. 120-132, SCOPUS /Embase
135.	M. K. Zope, D. B. Patil and Devraj Singh	2025	A comprehensive analysis of plan quality and normal tissues complications in head and neck https://doi.org/10.5505/tjo.2025.4507	Turkish Journal of Oncology (Turk Onkoloji Dergisi) Vol. 40, No. 2, pp. 151-162, SCOPUS /Embase
136.	R. Kumar, Devraj Singh , S. Tripathi, R. Khenata and S. Bin-Omran	2025	Ultrasonic Interactions with Microstructural Defects in Platinum Group Metal Nitrides: Osmium nitride, iridium nitride and platinum nitride https://doi.org/10.1595/205651325X17236415666329	Johnson Matthey Technology Review Vol. 69, No. 3, pp. 437-452, (IF=2.3)=SCOPUS
137.	M. K. Zope, D. Patil, R. Raj, S. Ansari, R. Madhawi, A. Kumar, S. Devi, D. Sinha, R. Singh and Devraj Singh	2025	Analytical study of radiotherapy techniques in left-sided breast irradiation using integrated scoring and risk assessment method https://doi.org/10.1017/S1460396925000081	Journal of Radiotherapy in Practice (Cambridge University Press) Vol. 24, No. e26, pp. 1-10, SCOPUS/Embase
138.	C. Bourahla, F. Chikier, H. Khachai, R. Khenata, A. Bouhemadou, Devraj Singh , S. Bin-Omran, R.D. Eithiraj, H. R. Jappor, S. A. Khan	2025	Unveiling the structural, optical coating and thermoelectric characteristics of kesterite-quaternary chalcogenides Ag_2InGaX_4 (X = S, Se, Te) via DFT study https://doi.org/10.1016/j.jpcs.2025.112970	Journal of Physics and Chemistry of Solids (Elsevier) Vol. 207, No. Dec., pp. 12970, (IF=4.9): SCOPUS
139.	D. Patil, M. Zope, R. Madhawi, S. Devi and Devraj Singh	2025	Comparative dosimetric analysis of three radiotherapy fractionation schedules in synchronous bilateral	Journal of Medical Physics (Wolters Kluwer) Vol., No., pp.,

			breast cancer: Evaluation of lung and heart NTCP	Impact Factor.: 0.7: SCOPUS/EMBASE/PubMed Central (Accepted for publication)
140.	P. Singh, A. Singh and Devraj Singh	2025	Tailoring the elastic, mechanical and thermoacoustic properties of transition metal carbides	Zeitschrift für Naturforschung A (DeGruyter) Vol., No., pp., (IF=1.3)=SCOPUS (Accepted for publication)
141.	R. Kumar, Devraj Singh , S. Tripathi, M. Boudjelal and R. Khenata	2025	Structure–Property Correlation in XAl (X = Ru, Ir, Ni): Effect of Temperature and Crystallographic Orientation on Physical Properties https://doi.org/10.1595/205651326X17510235734462	Johnson Matthey Technology Review Vol., No., pp., (IF=2.0): SCOPUS (Accepted for publication)

B. Book chapters

S.No	Author(s)	Year	Title of the chapter	Name of the book and	Publisher
1.	S. Tripathi, R. Agarwal, R. Vashisth and Devraj Singh	2020	Diameter dependent ultrasonic investigation of SiC nanowires	Innovative Applications of Nanowires for Circuit Design	IGI Global, Hershey PA, USA
2.	V. Bhalla and Devraj Singh	2023	Mechanical and thermo-physical properties of rare-earth materials, pp. 809-841 https://doi.org/10.1007/978-981-19-1550-5_40-1	Handbook of Metrology and Applications: Section 5: Industrial Metrology: Opportunities and Challenges (D. K. Aswal, S. Yadav, T. Takatsuji P. Rachakonda, H. Kumar (eds)	Springer, Singapore
3.	S. Tripathi, Devraj Singh , R. K. Saluja and R. Vashisth and	2024	Evaluation of Elastic, mechanical and thermophysical properties of nanostructured aluminides for aviation industries	Recent Advances in Aerospace Engineering MRAE 2023. Lecture Notes in Mechanical Engineering	Springer, Singapore

C. Papers published in conference proceedings

S.No.	Author(s)	Year	Title of the Paper	Name and place of conference
1.	R. R. Yadav and Devraj Singh	2000	Ultrasonic characterization in intermetallics	15 th World Conference on Nondestructive Testing, Roma, 15-21 October
2.	Devraj Singh and R. R. Yadav	2006	Ultrasonic studies of terbium chalcogenides	15 th National Symposium on Ultrasonics, University of Allahabad, 1-3 Nov.
3.	P. K. Yadawa, Devraj Singh , and S. K. Sahu	2009	Ultrasonic properties of hexagonal nanocrystalline ZnO and BeO	Eighteenth National Symposium on Ultrasonics (NSU-XVIII), VIT University, Vellore, Dec. 21-23, pp. 189-194
4.	Devraj Singh , P. K. Yadawa, R. S. Singh and S. K. Sahu	2010	Ultrasonic wave propagation in refractory materials, pp.182-188	National Symposium on Acoustics (NSA-2010), Govt. College, Rishikesh, 12-14 Dec. www.nsa2010.gpgcrishikesh.com
5.	P. K. Yadawa and Devraj Singh	2010	Ultrasonic wave propagation in II-IV hexagonal semiconductor compounds, pp.189-200	National Symposium on Acoustics (NSA-2010), Govt. College, Rishikesh, 12-14 Dec. www.nsa2010.gpgcrishikesh.com
6.	P. K. Yadawa and Devraj Singh	2010	Ultrasonic behavior of velocities and higher order elastic constants in Zener alloys, p.112	The 20 th International Congress on Acoustics (ICA-2010), Sydney, Australia, Aug. 23-27

				www.acoustics.asn.au/conference_proceedings/ICA2010/cdrom.../p112.pdf
7.	C. Tripathy, Devraj Singh , R. Paikaray	2015	Temperature Dependent Elastic and Ultrasonic Properties of Superhard Metal and its Carbide and Nitride: Os, OsC, and OsN	Proceedings of International Symposium on Ultrasonics (ISU-2015) at RTM Nagpur University, Nagpur during 22-24 January, 2015
8.	V. Bhalla, Devraj Singh , A. Mathur, M. Wan, P.K. Dhawan, A.K. Jaiswal and R.R. Yadav	2016	Experimental investigation on the thermal conductivity and ultrasonic velocity of propylene glycol based TiO ₂ nanofluids	19 th World Conference on Nondestructive Testing, Internationales Congress Center München Messegelände – 81823 Munich – Germany, 13-17 June
9.	S. Tripathi, R. Agarwal, R. Vashisth and Devraj Singh	2020	Deflection analysis of capacitive micromachined ultrasonic transducer with InP nanowires doi: 10.1109/SPIN48934.2020.9070881	IEEE Xplore: 2020 7th International Conference on Signal Processing and Integrated Networks (SPIN), Amity University, Noida: 27-28 Feb. 2020, , pp. 355-358, Published: 20 April 2020

D. Attended symposium, but not presented paper

S.No	Year	Name of Sympoium	Place
1.	2000	The National Academy of Sciences, India; 70 th Annual Session (3 to 6 November)	University of Allahabad, Allahabad

E.Papers presented in symposia

S.No	Year	Title	Name of Symposium	Place
1.	2001	Ultrasonic attenuation in gadolinium monopnictides	National Symposium on Acoustics, 18-20 October	Vellore Institute of Technology, Vellore (TN)
2.	2002	Acoustical investigations on plutonium monochalcogenides	National Symposium on Acoustics, 22-24 October	Aligarh Muslim University, Aligarh (U.P.)
3.	2002	Effect of composition on ultrasonic attenuation in metallic alloys at room temperature	National Symposium on Acoustics, 22-24 October	Aligarh Muslim University, Aligarh (U.P.)
4.	2002	Ultrasonic evaluation in rare-earth metals	National Symposium on Acoustics, 22-24 October	Aligarh Muslim University, Aligarh (U.P.)
5.	2002	Application of Morse Potential to the ultrasonic attenuation in BCC metals	National Seminar on NDE, 5-7 December	Hotel Taj Connemara, Chennai
6.	2003	Acoustical properties of rare-earth monochalcogenides	National Symposium on Acoustics, 30 October-1 November	The Automotive Research Association of India, Pune
7.	2003	Low temperature study of metallic alloys	National Symposium on Ultrasonics, 3-5 November	Guru Nanak Dev University, Amritsar (Pb.)
8.	2004	Ultrasonic characterization of thulium monochalcogenides in the temperature range 100 to 300K	The National Academy of Sciences, India; 74 th Annual Session, 2 to 4 December	University of Rajasthan, Jaipur+ BISR, Jaipur (RJ)
9.	2004	Acoustic attenuation in scandium antimonides	The National Academy of Sciences, India; 74 th Annual Session, 2 to 4 December	University of Rajasthan, Jaipur+ BISR, Jaipur(RJ)
10.	2004	Ultrasonic wave propagation in some B2-structured intermetallics	7 th conference of International Academy of Physical Sciences (CONIAPS-VII), 21-23 December	University of Allahabad, Allahabad
11.	2005	Ultrasonic attenuation studies in some BCC structured intermetallics	National Symposium on Acoustics , 14—16 December	National Aerospace Laboratory, Bangalore

12.	2005	Acoustic wave propagation in chalcogenides of Tm	National Symposium on Acoustics (14—16 December)	National Aerospace Laboratory, Bangalore
13.	2005	Akhieser damping in refractory compounds	National Symposium on Acoustics(14—16December)	National Aerospace Laboratory, Bangalore
14.	2005	Low temperature ultrasonic study of metallic alloys	National Symposium on Acoustics (14—16 December)	National Aerospace Laboratory, Bangalore
15.	2006	Ultrasonic studies of terbium chalcogenides	National Symposium on Ultrasonics, 1-3 November	University of Allahabad, Allahabad
16.	2007	A computer program for Evaluation of Nonlinear Nondestructive Testing Properties of Lanthanum Monochalcogenides	National Seminar on Latest Developments in Computer Technology (4-5 February)	Iswar Saran Degree College of University of Allahabad , Allahabad
17.	2007	Attenuation of ultrasonic waves in V, Nb and Ta at low temperatures	National Conference on Scientific Application of Mathematics (NACSAM-2007) (26-27 Dec.2007)	V.S.Mehta College of Science, Bharwari, Kausambhi, U.P.
18.	2010	Synthesis and ultrasonic characterization of ZnO nanofluid	National Conference on Nanotechnology for Sustainable Development (NANO, 2010) (Dec. 9-10, 2010)	Kulbhaskar Ashram PG College, Allahabad
19.	2011	Crystal Anharmonicity in Strontium Monochalcogenides	National Conference on “Emerging Trends of Research in Materials Science” (Nov. 12-13, 2011)	Swami Keshvanand Institute of Technology, Management and Gramothan+ University of Jaipur
20.	2011	Ultrasonic Study of Rare Earth Materials for Engineering Applications (Invited)	National Symposium on Acoustics (NSA-2011) Nov. 17-19, 2011	Bundelkhand University, Jhansi
21.	2011	How the ultrasonic parameters are so sensitive to magnetic fields in case of CeAs	National Conference on “Recent Trends in Synthesis and Applications of Advanced Materials” Dec. 5-6, 2011	Maharaja Agrasen Institute of Technology, Sector 22, Rohini , New Delhi
22.	2012	Elastic and Ultrasonic Properties of Xbi (X: B, Cm and U)	International Conference on Global Trends in Pure & Applied Chemical Sciences, 3-4 March, 12	Hotel Inder Residency, Udaipur , Rajasthan
23.	2012	Ultrasonic wave propagation in bifluorides XF ₂ (X: Ca, Sr, Cd and Ba)	National Symposium on Ultrasonics (30-31 October)	National Physical Laboratory, New Delhi
24.	2013	Crucial role of NDT in present scenario	Annual Convention of IAPT, 15 April, 2013	RC-1 of IAPT at Bal Bhawan , New Delhi
25.	2013	Sensitivity of ultrasonic properties to the magnetic, electrical and thermal parameters	International conference on Recent Trend & Devices (ICRTMD-2013) , 30-31 October, 2013	Amity Institute of Applied Sciences, Amity University Uttar-Pradesh, Noida
26.	2014	Materials Characterization by Ultrasonics (Invited)	UGC Sponsored National Conference on Materials Characterization and Their Applications, 6 th Feb., 2014	Anand Niketan College, Anandwan -Warora, Chandrapur (Maharashtra)
27.	2014	Mechanical and thermal properties of rare-earth monoarsenides: An ultrasonic study	21 st National Conference on Liquid Crystals; 10-12 November	V.S.S.D College, CSJM University, Kanpur , U.P.
28.	2014	Temperature dependent elastic and ultrasonic properties of silver halides (Invited)	UGC Sponsored National Conference on Future Perspectives of Science & Technology in Society and Governance (FPSTSG-2014) 29-30 November, 2014	SSV College, Hapur , U.P.

29.	2014	Tap Mapan kee Upyogita (Importance of Temperature Measurement) (Invited)	Rashtriya Sangoshthi: Mapiki-2014 8-9 December, 2014	National Physical Laboratory, New Delhi
30.	2015	Role of Ultrasonic NDE for the characterisation of materials at different physical conditions (Invited)	International Symposium on Ultrasonics (ISU-2015) 22-24 January, 2015	RTM Nagpur University, Nagpur
31.	2015	Mechanical and thermal properties of single crystalline materials (Invited)	National Conference on Novel Synthesis of Advanced Materials and Their Applications (NSAMA-2015) February 16, 2015	Arts, Commerce & Science College, Maregaon (Road), Yavatmal, Maharastra
32.	2015	Effect of different physical conditions on materials' ultrasonic NDE for the advanced applications	National Seminar on Recent Advances in Physical Sciences February 28, 2015	Udai Pratap (Autonomous) College, Varanasi
33.	2015	Ultrasonic non-destructive testing characterization of rare-earth materials (Invited)	National Conference on Recent Advances in Materials & Field Theory (NCRAMFT-2K15) December 28-29, 2015	Bhagwan Parshuram Institute of Technology, Rohini, Delhi
34.	2016	Role of Mechanical and Thermophysical Properties for Rare-earth Materials (Invited)	National Conference on Role of Science and Technology in Socio-economic Development, Feb. 28-29, 2016	Dr. B. R. Ambedkar Govt. Degree College, Mainpuri, U.P.
35.	2017	Behaviour of mechanical and ultrasonic properties of rare-earth materials (Invited)	National Conference on Recent Advances in Materials Science and Nano-Technology (RAMST-2017) on 21 April 2017	Amity University, Manesar, Gurgaon
36.	2017	Elastic, ultrasonic and thermophysical properties of materials for advanced applications (Invited)	National Symposium on Advances in Ultrasonics and Materials Research 8 th to 10 th November 2017	Central University Himanchal Pradesh, Dharamshala
37.	2018	Advanced Materials: Mechanical and Thermophysical Properties (Invited)	National Seminar on Environmental Hazards and Their Management 8 th December, 2018	Gramarishi Pt. Ram Kumar Pandey Gramodaya Ashram P. G. College, Beersinghpur, Saya, Ambedkar Nagar, U.P.
38.	2019	Ultrasonic studies of the nonlinear behavior of solid materials: a brief review (Invited)	Internal Conference of Ultrasonics and Materials Science for Advanced Applications 16 th to 18 th November 2019	VBS Purvanchal University, Jaunpur, U.P.
39.	2020	Theoretical Investigations of Engineering Materials for their Potential Applications (Invited)	International Conference on Advances in Physical, Chemical & Mathematical Sciences 13-16 February, 2020	Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
40.	2020	Perspectives and Prospectives of Ultrasonics (Invited)	e-Lecture series on Recent Advances in Sciences & Technology (April 20, 2020 – May 3, 2020) on 20/04/2020	Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study & Research, VBS Purvanchal University, Jaunpur
41.	2021	Role of Ultrasound for Materials Characterisation (Invited)	International e- Conference on Recent Advances in Material Science and Nanotechnology (RAMAN-2021) during February 7-9, 2021 on 09/02/2021	Art, Commerce and Science College, Maregaon Road, Yavatmal, Maharastra
42.	2021	Mechanical and Thermophysical Properties of Advanced Materials (Invited)	Virtual Online Meeting on the National Symposium on Acoustics (NSA 2020-21) during 22 - 23 March 2021 on 23 rd March, 2021	CSIR-National Physical Laboratory, Dr. K. S. Krishnan Road, New Delhi 110012, India

43.	2022	Elastic, Mechanical and Thermal Properties of Rare-Earth Materials by Ultrasonic Analysis (Invited)	International e- Conference on Recent Advances in Material Science and Nanotechnology (RAMAN-2022) during May 12-14, 2022 on 14/05/2022	G.S. Tompe Arts, Commerce & Science College, Chandur Bazar, Amravati, Maharashtra
44.	2023	Mechanical, thermo-physical and ultrasonic properties of condensed materials (Invited)	Virtual Online Meeting on International Faculty Development Programme on Advanced Functional Materials: Energy, Environment & Sustainable Development during 28-02-2023 -09-03-2023 on 06-03-2023	Department of Physics, SRM TRP Engineering College, Tiruchirapalli in Association with Science Club.
45.	2024	Evaluation of Uncertainty Associated with Measurements (Expert talk)	National Workshop/Seminar on "Evaluation of Uncertainty Associated with Measurements" on 06 January, 2024	Regional Reference Standard Laboratory, Ahmedabad
46.	2024	Tailoring of Elastic, Mechanical, Thermophysical and Ultrasonic Properties of Condensed Materials (Expert Talk)	A One -day National Conference on Exploring the Frontier of Smart Materials (NCEFSM-2024) on 15 th March, 2024	Marian Star Centre, department of Physics, St Mary's College (Autonomous), Thoothikudi-628001, Tamil Nadu
47.	2024	Ultrasonic Interaction with Microstructural Defects in Condensed Materials (Invited Talk)	International Conference on Material Physics and Electronics for Sustainable Development (ICMPE-2024) 01-02 July, 2024	Government Vidharbha Institute of Science and Humanities, Amravati, Maharashtra
48.	2024	Insights into the Elastic, Mechanical, Thermal and Acoustic Features of Condensed Materials (Invited Talk)	International Conference on Frontiers in Materials Science and Technology (ICFMST) December 5 & 6, 2024	Department of Physics, SRM TRP Engineering College, Tiruchirappalli – 621105, Tamil Nadu

F. Submitted Papers in Referred Journals

S.No.	Authors	Year	Title	Complete reference of journal
1.	A.K. Maddheshiya, J. Bala, S.P. Singh, Devraj Singh , P.S. Yadav and R.R. Yadav	2024	Tailoring mechanical, thermophysical and ultrasonic properties of the B2 structured scandium based intermetallics ScM (M: Ni, Cu, Pt, Hg)	Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (Springer)
2.	Rakesh Kumar; Devraj Singh ; Rabah Khenata; Shakti Pratap Singh; Akila Boumazza; Hamad R. Jappor and S. Goumri-Said	2025	Temperature-dependent elastic, thermophysical, and acoustic properties of thallium mononitrides across different crystallographic directions	Computational Condensed Matter (Elsevier)
3.	Y. Saksak, R. Moussa, R. Khenata, H. Meradji, Devraj Singh , A. Bouhemadou, W. Ahmed, S. Ugur, G. Ugur	2025	Beryllium dopant atom influence on the structural, electronic, optical and thermodynamic features of the zinc blende structured Be _x Mg _{1-x} O ternary alloys by DFT	Materials Science and Engineering B (Elsevier)
4.	H. Meradji, Y. Megdoud, L. Tairi, R. Meneceur, S. Ghemid, S. Uger, Devraj Singh , R. Khenata	2025	Theoretical investigation of the physical features of ternary (emphectite) CuBiS ₂ and (chalcocite) CuSbS ₂ : photovoltaic applications	Russian Journal of Physical Chemistry A (Springer)
5.	R. Kumar, Devraj Singh , R. Khenata, S. Bin-Omran, A. Boumaaza, S. Kaushik and R. Kaushik	2025	Exploring the mechanical, thermal, and ultrasonic properties of CrC and MoC compounds: Insights from theoretical analysis	Pramana-Journal of Physics (Springer)
6.	C. P. Yadav, D. K. Pandey and Devraj Singh	2025	Temperature dependent mechanical, ultrasonic and thermo-physical properties of indium phosphide nano-material	Physica Status Solidi A: Applications and Materials Science (Wiley)
7.	A. Singh, S. Tripathi, Devraj Singh and R. Kumar	2025	Elastic and ultrasonic properties of wurtzite zinc chalcogenides: A computational approach	Materials Chemistry and Physics (Elsevier)
8.	A. Singh; Devraj Singh ; R. Khenata; A. K. Maddheshiya;	2025	Comprehensive investigation of the elastic, mechanical, thermophysical, and ultrasonic properties of LiPb compound	Physica Status Solidi B: Basic Solid State Physics (Wiley)

	S. Drablia; A. Boumaza and S. Goumri-Said			
9.	A. Singh and Devraj Singh	2025	Nonlinear thermoacoustical attributes of B1-dysprosium mononictides	Engineering and Applied Science Research (EASR)
10.	J. Chauhan, A. Singh, Devraj Singh , R. Khenata, S. Drablia, R. Boulechfar, A. Boumaza	2025	Impact of orientation and temperature on Grüneisen parameters of MgO and NiO	Vietnam Journal of Science and Technology
11.	R. Aya, L. Abbes, B. Fatima, M. Mohamed, B. Fatiha, B. Ghania, R. Khenata, Devraj Singh , R. D. Eithiraj, S. Bin-Omran	2025	Structural, Optoelectronic, Thermodynamic and Thermoelectric Properties of LiScNiZ (Z = Si, Ge, Sn) Quaternary Heusler Compounds	Computational Condensed Matter (Elsevier)
12.	J. Chuahan, Devraj Singh , A. Singh, S. Tripathi, R. Khenata, M. Boudjelal, A. Boumaza and H. Meradji	2025	Investigation of the Mechanical, Thermal, and Acoustic Performance of Titanium and Chromium Nitride	Acoustical Physics (Springer)
13.	A. Sehil; M. Khenata; F. Chiker; H. Khachai; F. Semari; A. Yakoubi; A. Dehbi; D. Singh; A. Bouhemadou; Rabah Khenata	2025	Density functional theory-based modelling on the physical properties of Copper-based perovskites CuMCl ₃ (M = Ca and Sr) for thermoelectric applications	The European Physical Journal B (Springer)
14.	A. Singh, Devraj Singh , R. Khenata, M. Boudjelal, H. Meradji, A. Boumaza	2025	Insight into the elastic, mechanical, thermal and ultrasonic properties of YbAu	Chemical Physics (Elsevier)
15.	P. Singh, A. Singh, Devraj Singh , R. Khenata, M. Boudjelal, A. Boumaza, H. Meradji, A. K. Maddheshiya and S. Tripathi	2025	Elastic, mechanical, thermophysical and ultrasonic properties of lead monochalcogenides	To be decided
16.	P. Singh, D. Singh, A. K. Srivastava, R. Khenata	2025	Elastic, mechanical, thermophysical and ultrasonic properties of rhenium nitride and carbide	To be decided
17.H. Meradji, R. Khenata and Devraj Singh	2025	Ab-initio analysis of structural, electronic, elastic, and optical characteristics of Y _x B _{1-x} As alloys using the FP-LAPW approach	To be finalized
18.	J. Chauhan, D. Singh, R. Khenata	2025	Investigation of Temperature Effects on Elastic, Mechanical, and Thermal Properties of TbX (X = As, Sb, Bi)	To be finalized
19.	R. Khenata, Devraj Singh,	2025	Structural, optoelectronic, thermodynamic characteristics of gold-based perovskite AuMCl ₃ (M-Ca, Sr) via conceptual DFT study	To be finalized
20.	Rabah Khenata, Devraj Singh	2025	Two approaches of density functional theory to investigate structural, elastic, electronic, optical and thermodynamic properties of Zintl-phase Ba ₅ As ₄	To be finalized
21.	N. K. Singh and Devraj Singh	2025	Elastic and ultrasonic properties of magnesium monochalcogenides	Under preparation
22.	S. Tripathi, C. Tripathy, S. P. Singh, Devraj Singh and R. Paikaray	2025	Mechanical and thermophysical properties of CoN and NiN	Under preparation

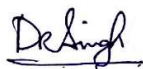
G. Published Books

S.No.	Authors	Year	Title	Name of the publisher
1.	Devraj Singh	2022	Engineering Physics Vol.I-5th Edn. (For GGSIP University, Delhi) ISBN: 9788177000191	Dhanpat Rai & Co. Pvt. Ltd., New Delhi
	Contents→		1. Introduction to Thermodynamics, 2. Waves and Oscillations, 3. Introduction to Electromagnetic Theory, 4. Interference of Light Waves, 5. Diffraction of Light waves, 6. Polarisation of Light Waves, 7. The Special Theory of Relativity, 8. Lasers Fundamentals, 9. Experiments	
2.	Devraj Singh	2022	Engineering Physics, Vol.II-6th Edn (For GGSIP University, Delhi) ISBN: 9788177000207	Dhanpat Rai & Co. Pvt. Ltd., New Delhi
	Contents→		1. Wave-Particle Duality, Matter Waves & Uncertainty Principle, 2. Modern Quantum Mechanics, 3. Statistical Mechanics, 4. Crystal Structure, 5. Crystal Planes, X-Rays Diffraction and Defects in Solids, 6. Band Theory of Solids and 7. Experiments	
3.	Devraj Singh	2011	Fundamentals of Engineering Physics, Vol-I-2nd Edn (For Haryana)	Dhanpat Rai & Co. Pvt. Ltd., New Delhi

	Contents→	1.Interference of Light waves , 2. Diffraction of Light waves, 3. Polarization of Light waves, 4. Laser Fundamentals, 5. Fibre Optics ,6. Electromagnetic Theory, 7. Dielectric Materials, 8. The Special Theory of Relativity, 9. Nuclear Physics, 10.. Superconductivity		
.	Devraj Singh	2012	Fundamentals of Engineering Physics, Vol-II-3rd edn. (For Haryana) ISBN: 9788177000566	Dhanpat Rai & Co. Pvt. Ltd., New Delhi
	Contents→	1. Crystal Physics, 2. Quantum Mechanics, 3. Free Electron Theory of Metals, 4. Band Theory of Solids, 5. Photoconductivity and Photovoltaics, 6.Magnetic Properties of Solid Materials, 7. Superconductivity, 8. Nanoscience and Nanotechnology, 9. Thermal Physics, 10. Semiconducting Materials and 11. Experiments.		
5.	Devraj Singh, R. B. Gautam, A. K. Shukla & P. K. Mishra	2014	Applied Physics (For Amity University)- Second Edition ISBN: 9789380386881	University Science Press (An imprint of Laxmi Publications Pvt. Ltd.) New Delhi (www.laxmipublications.com)
	Contents→	1. Physics of Vibrations, 2.Progressive Waves, 3. Ultrasonics, 4. Interference of Light , 5. Diffraction of Light, 6. Polarization of Light, 7. Vector Analysis, 8. Electromagnetism, 9. Special Theory of Relativity, 10. Wave Mechanics, 11. Atomic Physics, 12. Solid State Physics and 13. Experiments		
6.	Devraj Singh	2015	Fundamentals of Optics-Second Edition Print Book ISBN : 9788120351462 eBook ISBN : 9789354435799	PHI Learning Pvt. Ltd, Delhi (www.phindia.com)
	Contents→	1.Fermat's Principle, 2. Geometrical Optics, 3. Dispersion of Light, 4. Lens Aberration, 5. Optical Instruments, 6. Fundamentals of Vibrations, 7. Wave Motion, 8. Interference of Light Waves, 9. Diffraction of Light waves,10. Polarization of Light Wave, 11. Electromagnetic Waves		
7.	Devraj Singh	2012	Principles of Engineering Physics, Vol.-I-2nd Edition (For Rajasthan Technical University) ISBN: 9788177000306	Dhanpat Rai & Co. Pvt. Ltd., New Delhi
	Contents→	1. Interference of Light Waves, 2. Polarization of Light waves, 3. Diffraction of Light Waves, 4. The Elements of Materials Science, 5. The Special Theory of Relativity , 6. Experiments		
8.	Devraj Singh	2016	Introductory Engineering Physics, 2nd Edition (For Punjab Technical University) ISBN: 9788177000351	Dhanpat Rai & Co. Pvt. Ltd., New Delhi
	Contents→	1. EM Waves and Dielectrics, 2. Magnetic Materials and Superconductivity, 3. Elements of Crystallography, 4. Laser Fundamentals, 5.Fibre Optics, 6. The Special Theory of Relativity, 7.Quantum Theory, 8. Nanophysics 9. Experiments		
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