



Prof. Dr. Raja Ram Yadav

Vice-Chancellor, Veer Bahadur Singh Purvanchal University Jaunpur-222003

Professor, Physics Department (U.G.C. Centre of Advanced Studies)

University of Allahabad (Central University), Allahabad- 211002 (*on lien*)

Voice: +91- 05452-252222 (O); +91-9838177777(O)

Email: vc_vbspuniversity@rediffmail.com

Personal Information

- Nationality : Indian Sex : Male
- Date of Birth : January 04, 1957 Place of Birth : Village & P.O.- Singhanpur Baghari, Mahoba (Bundelkhand)

Education

Qualifications	Subjects	Year	University/College	Rank
Ph.D.	Study of Ultrasonic Attenuation	1988	Allahabad University, Allahabad	
M.Sc.	Physics (Spectroscopy)	1979	Allahabad University, Allahabad	<i>First Position</i>
B.Sc.	Physics, Chemistry, Maths	1977	Allahabad University, Allahabad	
High School & Intermediate		1971-74	Shri Vidya Mandir Inter College, Hamirpur (U.P.)	
Junior High School		1969-71	Sri Gopal Madhyamic Vidyalaya-Karahiya, Hamirpur (U.P.)	
Primary Education		1965-69	Gurdaha, Hamirpur (U.P.)	

Positions held (*in chronological order*):

University/ Organization	Year	Position
Allahabad University	1980-1983	Junior Research Fellow
Oil and Natural Gas Commission (ONGC), India	1983-1988	Geophysicist (Wells)
National Organization	1988-1992	Social Worker
Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya Chitrakoot, Distt. Satna (M.P.)	1992-1996	Lecturer
Allahabad University	1996-2004	Reader
Allahabad University	2004-contd.	Professor

Administrative Experience:

Name of the Institution/Department	Designation	Nature of Post	Nature of Assignment	Period	Length of Experience
Oil and Natural Gas commission, Govt. of India (ONGC)	Geophysicist (Wells)	Permanent	Scientific Operations, Research and Managerial	7 Jul 1983 to 3 Oct.1988	5 Yrs 3 months
Chitrakoot Gramodaya Vishvidyalaya, Chitrakoot	HOD Physics, Dean Science and Dean Student Welfare Officer		Administrative	July 1992 To Nov. 1996	More than 4 Years
Allahabad University, Allahabad	Laboratory Incharge of B.Sc. and M.Sc.		Administrative + Technical	Dec.1996 to Dec.1998 (in B.Sc.II lab) Jul. 2005 to April 2017 (in M.Sc. (Prev.) general lab)	2 Yrs 12 yrs
Allahabad University, Allahabad	Superintendent of Sir G.N. Jha Hostel		Administrative +Financial Management	Sept. 2003 to Sept. 2005	2 Yrs
Allahabad University, Allahabad	Programme Officer of National Service Scheme (NSS)		Administrative + Socialistic Managerial	Sept. 2004 to 2012	8 Yrs
Allahabad University, Allahabad	Principal, All India Services Pre Examination Training Centre		Administrative + Financial management	July 2011 to May 01, 2017	7 Yrs
Hindusthan Samachar (Multilingual News Service Agency)	Director	By election	Administrative and managerial	2010 - 2016	7 Yrs

Remarkable achievements in Administration:

- Established the whole Science faculty particularly the laboratories of all the departments of the faculty in record time working as a Dean-Science and Head of Physics Department- Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya-Chitrakoot, Distt.-Satna (M.P.), India.
- During the tenure as a Superintendent of Sir G.N. Jha Hostel, Allahabad University. Record new admissions more than 90 out of total capacity 200 students were made in one year and presented the +2 lakh rupees budget in place of -3 lakhs at the time of taking charge and renovation work was done of more than 3 lakhs by managing the donations. Since then, the hostel is producing IAS/Scientists every year.

Research Interests: Nanoscience & Technology, Laser Spectroscopy, Ultrasonics, Nondestructive Characterization Sciences of Nanofluids, Nanocomposites, Nanocomposites-GMR materials, Materials Science for Biomedical Applications.

Most Innovative Contribution in the Scientific Research:

Prof. R.R. Yadav has developed the theoretical approach for calculation of temperature dependent non-linear elastic properties of cubic/ hexagonal structured intermetallics, alloys (ternary/ quaternary), nanowires and nanotubes.

Ultrasonic attenuation was modeled and implemented for different technologically important engineering material systems such as nuclear fission products, nanofluids/ nanocomposites and the intermetallics emerging new physics. The work is important to extract the information about the nanostructured characteristic features, fundamental processes and the characteristic thermophysical properties of the advanced materials.

Dr. Yadav successfully synthesized first time the nanofluidic GMR materials developing ultrasonic based chemical method. Dr. Yadav developed the ultrasonic mechanism to predict anomalous enhancement of the temperature dependent thermal conductivity of the nanofluids and theoretically modeled the experimental results very important for coolant technology in microchannels and medical applications.

Dr. Yadav developed the ultrasonic spectroscopy method replacing the expensive TEM/ SEM to determine the size of nanoparticles lowest up to ~ 10nm and their distribution in liquids. This method does not require any sample preparation.

Prof. Yadav successfully coupled the ultrasonics with the nanoscience and technology recognized as new area “Ultrasonics in Nanoparticles- Liquid Suspensions” in the field of acoustics.

Research Guidance:

Ph.D. Completed	:	16
Ph.D. in Progress	:	6
M.Phil.	:	05

Research Publications/Invited Talks:

- **117** Research papers are published in the journals of international repute.
- **05** Research papers are communicated for publications
- **More than 100** Invited Talks in International/National conferences.

Research Projects (Principal Investigator- Dr. R. R. Yadav):

Agency	Title of Project	Total Amount (In Rupees)	Period of Support	Status
U.G.C. New Delhi	Ultrasonic Evaluations in Condensed Materials	40000	2002-2003 (3 yrs)	Completed
DST New Delhi (SP/S2/M-16/2001)	Ultrasonic Investigations in Condensed Materials	746472	2003-2006 (3 yrs)	Completed
U.G.C. New Delhi (32-18/2006SR)	Synthesis and Ultrasonic Characterization of New Series of Optical and GMR materials of Metal Nanoparticles embedded in Insulator Ceramics or Polymers	7 lakhs	2007-2010 (3 yrs)	Completed
DST New Delhi (SR/S2/ CMP-069/2006)	Synthesis and Ultrasonic Characterization of Advanced Materials	13 lakhs	2007-2010 (3 yrs)	Completed
DRDO New Delhi (ERIP/ER/053543/M/01)	Synthesis and Ultrasonic Characterization of Novel Short Fibres Reinforced Nanocomposites and their Applications	43.55 lakhs	2009-2012 (3 yrs)	Completed
UGC Under CAS Program (530/3/CAS/2008/(SAP-I))	Synthesis and Ultrasonic Characterization of Nanoparticles reinforced Polymer Nanocomposites and their applications	22.00 lakhs	5 years	Completed
DST New Delhi (SR/S2/CMP-0038/2011)	“Development and Characterization of Nanomaterials for Biomedical Applications”	22.50 Lakhs	3 years (2013-2017.)	Completed

- **Dr Yadav established the new NDE Research Lab procuring Acoustic Particle Sizer, Ultrasonic Transducer and Hot Disk Thermal Conductivity Equipments.**

Awards/ Distinctions:

- **National Scholarship** by UP Government in 1972.
- **1st position in M.Sc. Physics** (Spectroscopy) in Allahabad University (1979).
- **Junior Research Fellowship** (1980-83) under UGC scheme for Ph.D. work.
- **Visiting Scientist Fellowship** under Visitor Program of Centre of Theoretical Studies, IIT-Kharagpur to work on Nanomaterials.
- **Honored by Vishwa Ayurved Parishad** (International Forum of Medical Sciences) in 2009 on delivering a popular lecture as a chief guest on Gold nanoparticles in Ayurvedic Sciences.
- **Swadeshi Vigyan Puruskar** (National Level Award-2001) conferred during the National Conference held at National Physical Laboratory (NPL), New Delhi-India.
- **Prayag Gaurav Samman (2010)** for the **outstanding contribution in the field of education**. The selection of Dr. R.R. Yadav for the award was made by a nine member's jury chaired by the Hon'ble Justice of Allahabad High Court.
- **Best Research Paper award (2004)** in our work by Acoustical Society of America during the National Symposium on Acoustics held at Mysore (India). The news was published in the "Journal of Acoustical Society of America" (USA).
- **Dr. M. Pancholi Award for Best Research Paper** in our work by **Ultrasonics Society of India** during the National Symposium on Ultrasonics held at Varanasi India, (2008).
- **Best Research Paper award (2010)** in our work by Acoustical Society of America during the National Symposium on Acoustics held at Rishikesh (India).
- Prestigious **M.S. Narayanan Memorial Lecture Award-2011** by Acoustical Society of India.
- Prestigious **"INSA Teacher Award-2012"** by **Indian National Science Academy, New Delhi**.
- **Member of Governing Council** – Aryabhata Research Institute of Observational Sciences (ARIES), Govt. of India, Nainital, Uttarakhand.
- **Member of governing council-** Indian Academy of Social Sciences.
- **Member of governing council-** Vikram University, Ujjain (M.P.)
- **Secretary –Materials Research Society of India (MRSI), Allahabad Chapter.**
- **Life member – The National Academy of Sciences, India (NASI), Allahabad.**
- **All India Vice-President-** Ultrasonics Society of India

- **Advisor- The National Academy of Sciences, India (NASI) – Allahabad Chapter.**
- **Fellow**-Ultrasonics Society of India.
- **Fellow** – Acoustical Society of India
- **Fellow** – Indian Academy of Social Sciences
- **Visiting Fellow – Science and Engineering Research Council (SERC), DST, New Delhi** to work at IIT-Roorkee (2007).
- **Fellow** – The Institute of Applied Science (**NGO for Rural Development & Water Management**), Allahabad on 25th March, 2008.
- Life Member- Vigyan Bharati, New Delhi.
- Life Member- Polymer Society of India.
- Life Member & Former Treasurer- International Order-Disorder System Society.
- Life Member- Academy of Microscope Science and Technology.
- Life Member- Materials Research Society of India.
- **Examiner of Ph.D. works** in different Universities like University of Hyderabad, Osmania University-Hyderabad, Rohilkhand University-Bareilly, Kanpur University, Bundelkhand University, Rashtra Sant Tukdo Ji Maharaj University-Maharashtra, Madurai Kamraj University-Madurai, Jawahar Lal Nehru University (JNU), New Delhi, Banaras Hindu University, Vikram University Ujjain, Anna University.
- Dr. R.R. Yadav has become a **Member of the Board of Studies** of the Physics Department of the following Universities:
 - o University of Allahabad
 - o Kanpur University Kanpur
 - o APS University, Rewa (M.P.)
 - o Chitrakoot Gramodaya Vishwavidyalaya Chitrakoot. Distt-Satna (M.P.)
 - o Himanchal Pradesh Central University, Dharmshala.
- Dr. Yadav is an **Expert Member of the Research Degree Committee (RDC)** of Kanpur University.
- **Subject Expert Member of U.P. Public Service Commission, Public Service Commission (Jharkhand), Public Service Commission (Chhattisgarh), Indian Institute of Information Technology- Allahabad.**
- **Dr. Yadav is one of the referees of several International Research Journals.**
- Dr. Yadav has delivered more than **100 Invited Talks** on the area of the Nondestructive characterization of the Materials including Nanomaterials in different reputed institution

like DMSRDE (National Laboratory of Defence research & Development Organization) Kanpur, Material Science Center IIT Kharagpur, National Physical Laboratory (NPL) New Delhi, Rohilkhand University Bareilly, Bundelkhand University, Cochin University of Science and Technology, K.S.R. Institute of Technology, Tiruchengode, Erode (Tamilnadu), Kathmandu- Nepal, Katholieke Universiteit- Leuven, Metz- France.

- **Member of National Advisory Committee** of An International Conference on Acoustics-2013, National Physical Laboratory, New Delhi, Nov. 10-15, 2013 (organized by India and France)
- **Organizer of Special Structured Session** on “Ultrasonics in Small Particles and their Liquid Suspensions” to be held in Nov. 10-15 Acoustics-2013.
- Dr. Yadav delivered the **Invited talk** on “Nondestructive Characterization of nanoparticles- Polymer Suspensions” in **Kathmandu (Nepal)** during May 23-25, **2008**.
- Dr. R. R. Yadav delivered a talk on “**Ultrasonic Properties of Nanoparticles-Liquid suspensions**” in the *Leuven University, Belgium*. During 13-16 April, 2007.
- Dr. Yadav **chaired the session in NANO-2005 (International Conference on Nanoscience and Technology)** at Shivakashi (Tamilnadu) India during 13-15 July, 2005.
- Dr. Yadav has been selected to be **CHAIRMAN** at the Mini-Symposium on Computational Acoustics at the **9th US National congress on Computational Mechanics** held in **San Francisco, CA (USA)** July 23-26, 2007
- **Convener- 15th National Symposium on Ultrasonics (NSU-XV)** held at Physics Department, University of Allahabad on 01-03 November 2006.
- **Convener-International Mini Workshop on Nondestructive Characterization Science** held at Physics Department, University of Allahabad, Allahabad, India on 03 Dec. 2008.
- **The Nomination** of Dr. R.R.Yadav was sent to the Council of Science and Technology, U.P. for the “**Vigyan Ratna Award- 2008**” by the competent authority.
- **Special Lecture** in NSA-2010 conference on invitation of **Acoustical Society of America-Madras India Chapter (MIRC-ASA)**.
- More than **100 National/International conferences** participated (60 National, 40 International).
- **Invited member in Kathmandu Humboldt Kolleg** held at Kathmandu, Nepal during Nov. 15 -18, 2010.

- **Chief Guest** in the “Valedictory Function” of the National Conference on Emerging Interfaces of Physics and Technology (EIPT-2011) held at School of Studies in Physics, **Vikram University, Ujjain** (M.P.) on March 30, **2011**.
- **Inaugural Lecture** as **Chief Guest** in the National Workshop on Biological Effects of Mobile Radiation in Jaipur National University, Rajasthan 31March, 2012.
- **Convener-** Lecture Workshop on “Experimentation in Physics” in ISDC, University of Allahabad, 2012.
- **Keynote address** in the Inauguration of National workshop on Materials Characterization by Ultrasonics in Amity School of Engineering and Technology (Indraprasth University) New Delhi, 3-4 April, 2012.
- **Convener-** National workshop on- “Non-destructive Characterization Sciences” with special reference to Synthesis of Science and Spirituality on Feb. 27 2013 in Physics Department, University of Allahabad, Allahabad.
- **Co- chairman-** International Symposium on Ultrasonics- 2015 to be held at Nagpur, India.
- **Member-** Expert Committee in **UGC**, New Delhi.

Academic Visits of Foreign Countries:

Prof. Yadav visited the countries –USA, Canada, Germany, France, Italy, Spain, Austria, Belgium, Sweden, Japan, Finland, Nepal and Singapore to deliver the research contributions in different international conferences.

Literary/Cultural achievements:

Performed **Vocal Classical/ Semi-Classical Indian Music** in so many public programs-

- In Cultural Evening of 15th National Symposium on Ultrasonics held at Physics Department, University of Allahabad, Allahabad during 01-03 Nov.2006.
- Shri Vidya Mandir Inter College, Hamirpur (U.P.).
- KDMIPE Auditorium, Oil and Natural Gas Commission, Dehradun.
- Cultural Evening in Doiwala, Distt. Haridwar (Uttarakhand).
- Jeevandeep Ashram, Roorkee (Uttarakhand).
- Oil and Natural Gas Commission, Nazira (Assam).
- Chitrakoot, Distt. Satna (M.P.)
- Triveni Theatre, Tansen Marg, Sadbhawana Sanskritic Parishad, New Delhi (2009).
- Vivekananda Association, Gurgaon, Haryana.
- Delivered Special Invited Lecture on Science and Indian Cultural Heritage (A parallel study) during the **Foreign Students Conference** (from 20 different countries) in Rishikesh (Uttarakhand).
- Gandhi Auditorium, Bundelkhand University, Jhansi (U.P.)

Affiliation in Social Organizations:

- **President-** Gramin Vikas evam Paryavaran Sansthan.
- **President-** Swami Shanti Deo Seva Mandal.
- **Former Regional Secretary-** Sanskritik Gaurav Sansthan
- **Member of the Trust-** Bundelkhand Gramoday Sansthan
- **UP State Pradhan** – Kesari Nandan Seva Sansthan.

Names of Referees/ Collaborations

- ❖ **Prof. S.K. Joshi**- F.N.A., F.N.A.Sc., Padma Bhushan
Former Director General- CSIR, N. Delhi
250, National Physical Laboratory (N.P.L.-New Delhi),
Dr. K.S. Krishanan Marg, New Delhi-110012
Ph.: (011) 45609363 (O)
E- mail: skjoshinpl@gmail.com

- ❖ **Dr. Krishan Lal**-F.N.A.
President- Indian National Science Academy (INSA), New Delhi
DST Ramanna Fellow and Former Director,
National Physical Laboratory (NPL) New Delhi, India
Ph. 011- 45609104, 45608513
E-mail: klal@mail.nplindia.ernet.in

- ❖ **Dr. Baldev Raj**-F.N.A., F.N.A.Sc., F.N.A.E., F.A.Sc., Padma Bhushan
Distinguished Scientist and Former DIRECTOR
Indira Gandhi Centre for Atomic Research (**IGCAR**)
Kalpakkam (Tamilnadu), India
President- PSG Institutions, Peelamedu, Coimbatore-641004
E-mail: baldev.dr@gmail.com
Ph.: (0422) 4344201 (O)

- ❖ **Prof. M.S. Sodha**- F.N.A.
Padmashri
Former Deputy Director and Professor of Physics, IIT Delhi
Former Vice-Chancellor, DAVV Indore, Lucknow and Bhopal Universities
Phone: 91-9839705081
Email: msodha@rediffmail.com

- ❖ **Prof. R.P.Singh**- F.N.A.Sc.
Former Vice-Chancellor, Lucknow University
Former Head- Material science Centre, IIT Kharagpur.
D3/2, Gera's Emerald City (Near Pancard Club) Baner, Pune- 411045
Ph. 02027219124
E-mail: singh.prakash.ram@gmail.com

- ❖ **Prof. Rajen Harshe**
Former Vice Chancellor- University of Allahabad
Former Faculty- Dept. of Political Science University of Hyderabad
Ph. (011) 26535457 I
Email: rgarshe@gmail.com

- ❖ **Prof. Jacob Phillip**
Former Director-STIC
Cochin University of Science and Technology
Cochin-682002, India

- ❖ **Prof. (Mrs.) Vijaya Agarwala**
Department of Metallurgical & Materials Engineering Centre of
Nanotechnology
IIT- Roorkee, India

- ❖ **Dr. C. Raman Suri**
Head, Bio Sensors Division
Institute of Microbial Technology (CSIR)
Sector 39A, Chandigarh 160036, India

- ❖ **Dr. S.B. Yadav**
Head-Composite Materials
DMSRDE (DRDO), Kanpur.

- ❖ **Dr. T. Jayakumar/Dr. P. Palanichamy**
Director, Metallurgy and Materials Group
and Head, Non Destructive Evaluation Division
Professor and Dean (Engineering-IGCAR), Homi Bhabha National Institute
Indira Gandhi Centre for Atomic Research
Kalpakkam-603102 (T.N.) India

- ❖ **Prof. V. Rajendran**
Director
Research and Development & Centre for Nano Science and Technology
KS Rangasamy college of Technology KSR Kalvi Nagar, Tiruchengode-
637215 Namakkal (Dt.), Tamil Nadu, India

- ❖ **Dr. Sukhvir Singh**
Former Scientist & Head,
Electron & Ion Microscopy Sophisticated Analytical Instruments Div.
National Physical Laboratory,
Dr. K.S. Krishnan Marg, New Delhi – 110012, India

- ❖ **Dr. A.K. Srivastava**
Scientist, Electron Microscopy
Division of Materials Characterization National Physical Laboratory
Dr. K.S. Krishnan Marg, New Delhi – 110012, India

- ❖ **Prof. Christ Glorieux**
Laboratorium voor Akoestiek en
Thermische Fysica (ATF) PO 2416
Deptt. Fysica en Sterrenkunde,

Katholieke Universiteit-Leuven, Belgium

❖ **Prof. Nico F. Declercq**

Laboratory for Ultrasonic Nondestructive Evaluation
Metz- Technopole,
France and Atlanta (USA)

❖ **Prof. Mahi R. Singh**

University of Western Ontario,
London, ON, Canada

❖ **Prof. Dr. Witold Brostow**

Laboratory of Advanced Polymers & Optimized Materials (LAPOM),
Department of Materials Science and Engineering and Department of Physics,
University of North Texas, 1150 Union Circle # 305310,
Denton, TX 76203-5017, USA

LIST OF PUBLICATIONS (IN THE REFERRED JOURNALS)

-Dr. R.R. Yadav

S.No.	Author(s)	Year	Title of the Paper	Reference
1.	S. K. Kor and R. R. Yadav	1982	Electron-Phonon Interaction in Tungsten	J. Acoust. Soc. India 10(1), (1982), 23
2.	S. K. Kor and R. R. Yadav	1982	Ultrasonic Attenuation in Cu-Ni Alloys	Acta Physica Polonica A64 (5), (1982), 529 (Poland)
3.	S.K.Kor and R. R. Yadav	1986	Akhieser Damping in KCN	Indian J. pure and Appl. Phys. 24 (7), (1986), 336
4.	S.K.Kor and R. R. Yadav and Kailash	1986	Ultrasonic Attenuation in Dielectric Crystals	J.PhysSocJapan. 55(1), (1986), 207-212
5.	S.K.Kor and R. R. Yadav	1986	Ultrasonic Attenuation in NaCl-NaBr Mixed Crystal due to Phonon-Viscosity Mechanism	J. Acoust. Soc. India 14(3), (1986), 29
6.	R. R. Yadav	1986	Ultrasonic Attenuation in CeAl ₃	J. Phys. Soc. Japan 55(2), (1986), 544-545
7.	S.K.Kor and R. R. Yadav	1986	Ultrasonic Attenuation due to Electron-Phonon Interaction in Palladium	J. pure and Appl. Ultrasonics 8(4), (1986), 90
8.	Kailash, R. R. Yadav and R.P.Khare	1986	Anharmonic properties of dielectric alloys	J. Acoust. Soc. India 14(3), (1986), 235-237
9.	S.K.Kor, R. R. Yadav and Kailash	1987	Damping of Acoustic Waves in Calcite Crystals	J. Acoust. Soc. India 15(2), (1987), 43-48
10.	R. R. Yadav and S.K.Kor	1989	Ultrasonics in 'Pd'	J. Acoust. Soc. India 17(3-4), (1989), 180
11.	Kailash, R. R. Yadav and K. Shankar	1989	Ultrasonic Attenuation in Dielectric Alloys	J. Acoust. Soc. India 17(3-4), 1989), 187-190
12.	R. R. Yadav and K. Shankar	1993	Orientation dependence of Ultrasonic Attenuation	J. Acoust. Soc. India 21(4), (1993), 250-254
13.	R. R. Yadav and Janmejay Singh	1998	Temperature dependence of Ultrasonic Absorption in Vitreous Silica	J. Acoust. Soc. India 26 (3&4), (1998), 93-96
14.	R. R. Yadav and Janmejay Singh	1998	Characterization of Vitreous Silica	J. Acoust. Soc. India 26 (3&4), (1998), 181-184
15.	R. R. Yadav and Devraj Singh	2000	Temperature dependence of Ultrasonic Absorption in Lanthanum Monochalcogenides	J. Acoust. Soc. India 28(1-4),(2000),191-198

16.	R. R. Yadav and Devraj Singh	2001	Behaviour of Ultrasonic Attenuation in Intermetallics	INTERMETALLICS (Cambridge) Vol.9 (3), (2001), 189-192
17.	R. R. Yadav and Devraj Singh	2001	Ultrasonic Attenuation in Lanthanum Monochalcogenides	J.Phys.Soc Japan. Vol.70(6), (2001), 1825-1832
18.	R. R. Yadav and Devraj Singh	2001	Ultrasonic Absorption at Low Temperatures	J. Acoust Soc. India 9(1), (2001), 220-224
19.	Devraj Singh and R. R. Yadav	2001	Ultrasonic Attenuation in Gadolinium Monopnictides	J. Acoust. Soc. India 29(1), (2001), 176-184
20.	R. R. Yadav , Devraj Singh, Arvind Kumar Tiwari	2002	Ultrasonic Attenuation in Semiconductors	I.J. Pure & Appl. Physics Vol.40, (2002), pp.845-849
21.	R. R. Yadav , Devraj Singh and Priyanka Awasthi	2002	Effect of Composition on Ultrasonic Attenuation in Metallic alloys at room temperature	J. Acoust. Soc. India 30 (1-2), (2002), 64 – 67
22.	R. R. Yadav , Devraj Singh and Arvind Kumar Tiwari	2002	Ultrasonic Evaluation in Rare-Earth Metals	J. Acoust. Soc. India 30 (1-2), (2002), 59 – 63
23.	R. R. Yadav and Devraj Singh	2002	Acoustical Investigations on Plutonium Monochalcogenides	J. Acoust. Soc. India 30 (1-2), (2002), 55 – 58
24.	S. K. Kor, R. R. Yadav and Devraj Singh	2003	Ultrasonic studies in Surfactant Cetyl Trimethyl Ammonium Bromide (CTAB) in Non-aqueous solution of Ethylene Glycol	“Molecular Crystals and Liquid Crystals” (USA) Vol. 390, (2003), pp 75-81
25.	R. R. Yadav & Dev Raj Singh	2003	Effect of thermal conductivity on “Ultrasonic Attenuation in Praseodymium monochalcogenides”	‘Acoustical Physics’ (Moscow) Vol. 49(5) Sept 2003 pp 595-604
26.	Devraj Singh and R. R. Yadav	2003	The thermal conductivity and Ultrasonic Absorption in Dielectric Crystals	J. Pure & Appl. Ultrasonics Vol. 25 (3), (2003), 82-87
27.	R. R. Yadav , A.K. Gupta and D. Singh	2003	Acoustical Properties of Rare-earth Monochalcogenides	J. Acoust. Soc. India Vol. 31, (2003), 300-303
28.	R. R. Yadav , A.K. Tiwari and D. Singh	2003	How the Ultrasonic Parameters are so sensitive to pressure	J. Acoust. Soc. India Vol. 31, (2003), 317-319
29.	R. R. Yadav and D. K. Pandey	2003	Phonon-Phonon Interaction in Low Carrier Heavy Fermion Systems	J. Acoust. Soc. India Vol. 31, (2003), 325-327
30.	R. R. Yadav and A. K. Tiwari	2003	Temperature Dependence of Ultrasonic Absorption in Ir, Rh & Mo metal	J. Acoust. Soc. India Vol. 31, (2003), 348-351

31.	R. R. Yadav , A. K. Tiwari	2004	Ultrasonic attenuation due to phonon-phonon interaction	J. of Pure and Applied Ultrasonics , vol-26, (2004)
32.	R. R. Yadav and D. K. Pandey	2004	Acoustical investigation in HCP Metals	J. Acoust. Soc. India Vol. 32 (2004) 243-248
33.	R. R. Yadav , A.K. Gupta and D. K. Pandey	2004	Electron-Phonon interaction in nano crystalline Fe	J. Acoust. Soc. India Vol. 32 (2004) 249-251
34.	D. Singh, R. R. Yadav and A. K. Gupta	2004	Acoustic Attenuation in Scandium Antimonide	J. Acoust. Soc. India Vol. 32 (2004) 252-254
35.	R. R. Yadav and A. K. Tiwari	2004	Concentration and temperature variation of ultrasonic properties in NaCl-NaCN mixed crystal system	J. Acoust. Soc. India Vol. 32 (2004) 274-278
36.	D. Singh and R. R. Yadav	2004	Ultrasonic properties of SmS	J. Acoust. Soc. India Vol. 32 (2004) 279-281
37.	R. R. Yadav , P. Awasthi and D. Singh	2004	Ultrasonic attenuation in Fe ₃ O ₄	J. Acoust. Soc. India Vol. 32 (2004) 282-286
38.	R. R. Yadav , P. Awasthi and D. K. Pandey	2004	Ultrasonic properties in some metals at nanoscale	J. Acoust. Soc. India Vol. 32 (2004) 287-292
39.	R. R. Yadav and D. K. Pandey	2005	Ultrasonic Properties at nanoscale in some metals	Materials Letters , vol-59(5), (2005) 564-569 (Netherlands)
40.	R. R. Yadav and D. K. Pandey	2005	Size dependent acoustical properties of bcc metal	Acta Physica Polonica A (Poland) 107(6) (2005) 933-945
41.	R. R. Yadav , A. K. Tiwari and D. Singh	2005	Effect of pressure on Ultrasonic Attenuation in Ce Monopnictides at low temperatures	J. Materials Science 40(19) (2005) 5319-5321 (U.S.A)
42.	R. R. Yadav , A. K. Gupta and D. Singh	2005	Ultrasonic attenuation in Ni-Pd alloys at high temperature phase	J. Physical Studies Vol. 9 (3) (2005) 227-232
43.	A. K. Tiwari and R. R. Yadav	2005	Effect of pressure on ultrasonic attenuation in Ce-monopnictides along <100> and <110> at room temperature	J. Acoust. Soc. India Vol. 33 (2005) 162-167
44.	Devraj Singh, A. K. Gupta and R. R. Yadav	2005	Acoustic wave propagation in chalcogenides of Tm	J. Acoust. Soc. India Vol. 33 (2005) 309-315

45.	R. R. Yadav, Priyanka Awasthi and Devraj Singh	2005	Akheiser damping in refractory compounds	J. Acoust. Soc. India Vol. 33 (2005) 177-181
46.	R. R. Yadav, Devraj Singh and Priyanka Awasthi	2005	Low temperature ultrasonic study of metallic alloys	J. Acoust. Soc. India Vol. 33 (2005) 180-185
47.	P. K. Yadawa, D. K. Pandey and R. R. Yadav	2005	Characterization of CdS and CdSe by ultrasonic technique	J. Acoust. Soc. India Vol. 33 (2005) 186-192
48.	A. K. Yadav, P. K. Yadawa, R. R. Yadav and D. K. Pandey	2005	High temperature anharmonic properties of InN	J. Acoust. Soc. India Vol. 33 (2005) 193-199
49.	R. R. Yadav, P. K. Yadawa, A. K. Gupta and D. K. Pandey	2005	Ultrasonic investigation in particle reinforced nanofluids	J. Acoust. Soc. India Vol. 33 (2005) 219-222
50.	R. R. Yadav and D. K. Pandey	2006	Ultrasonic Properties of Beta-phase NiAl	J. Pure and Appl. Ultrasonics Vol. 28 (1) (2006) 4-11
51.	R. R. Yadav and D. K. Pandey	2006	Ultrasonic characterization of Gallium Nitride	Materials Research Innovations 10 (4) (2006) 113-115 (USA)
52.	Raja Ram Yadav , Alok Kumar Gupta, Sushil Kumar Kor, Shanker ram	2006	Ultrasonic properties in Au nanoparticles reinforced PVA solution	Materials Research Innovations Vol.10(4)(2006) 112-113 (USA)
53.	D. K. Pandey, Devraj Singh and R. R. Yadav	2007	Ultrasonic wave propagation in IIIrd group nitrides	Applied Acoustics Vol. 68 (2007)766-777 (UK)
54.	D.K.Pandey, P.K.Yadawa and R.R.Yadav	2007	Acoustic Wave Propagation in Laves Phase Compounds	Materials Letters 61(2007) 4747-4751 (Netherlands)
55.	D.K. Pandey, P.K.Yadawa and R.R.Yadav	2007	Ultrasonic properties of ZnS at Nanoscale	Materials Letters 61(2007)5194-5198 (Netherlands)
56.	D. K Pandey, Devraj Singh, Pramod Kumar Yadawa, Raja Ram Yadav	2007	Ultrasonic velocity and absorption measurements in lyotropic liquid crystal systems	Macromolecules 3(3)(2007)75-78
57.	Dharmendra Kumar Pandey, Devraj Singh, Pramod Kumar Yadawa, Raja Ram Yadav	2007	Ultrasonic Studies Of CTAB/Decanol/Water Systems	Macromolecules 3(3)(2007)79-83

58.	A.K.Yadav, R.R. Yadav and D.K.Pandey	2008	Ultrasonic Study of Fission Products Precipitated in the Nuclear Fuels	Materials Letters 62(2008)3258-3261 (Netherlands)
59.	R.R.Yadav , Giridhar Mishra, P.K.Yadav,S.K Kor, A.K.Gupta, Baldev Raj & T.Jayakumar	2008	Ultrasonic Properties of Nanoparticles-Liquid Suspensions	Ultrasonics (USA) Vol. 48(2008)591-593
60.	P.K.Yadav and R.R.Yadav	2008	Anharmonic Properties of MgB ₂	Materials Science (India) Vol.4 (3)(2008)193-195
61.	P. K. Yadawa and R. R. Yadav	2009	Ultrasonic study of Intermediate-valent Intermetallic YbAl ₂ at different physical conditions	Multidiscipline Modeling in Materials and Structures 5(2009) 59-76(CHINA)
62.	D.K.Pandey and R.R.Yadav	2009	Temperature dependent Ultrasonic Properties of Aluminium Nitride	Applied Acoustics (UK) 70(2009) 412-415
63.	D.K.Singh, R.R.Yadav and D.K.Pandey	2009	Synthesis and Nondestructive Characterization of Cr ₂ O ₃ Nanoparticles-PVA Suspensions	Advanced Materials Research (USA) Vol.67(2009)259-264
64.	D.K.Singh, R.R.Yadav and D.K.Pandey	2009	An Ultrasonic characterization of ferrofluid	Ultrasonics (USA) 49 (2009) 634-637
65.	Giridhar Mishra, R.R. Yadav	2009	Ultrasonic Wave Propagation in Nickel Aluminide Based Ternary Alloy	Materials Science Vol 5,issue 2,(2009)
66.	A.K.Yadav, GiridharMishra, R.R.Yadav	2009	Synthesis and ultrasonic Characterization of nanofluid containing Silver Nanoparticles	Materials Science Vol.5(3)(2009)237-242
67.	Giridhar Mishra, R.R.Yadav and S.K.Kor	2009	Nondestructive Characterization of Lyotropic Liquid Crystalline System	J. Pure and applied Ultrasonics 31(2009)31-35
68.	P.K.Yadawa, Devraj singh, D.K.Pandey and R.R.Yadav	2009	Elastic and acoustical Properties of Rare Earth Metals	The open acoustics Journal (TOACOJ) 2(2009)80-86
69.	Giridhar Mishra, R.R.Yadav and S.K.Kor	2010	Synthesis and Ultrasonic Characterization of Lyotropic Liquid Crystal	The Journal Of Crystallization Physics and Chemistry(China) 1(2010)78-81
70.	S.K. Verma, R.R. Yadav , A.K. Yadav, Bipin Joshi	2010	Nondestructive Evaluations of Gallium Nitride nanowires	Materials Letters , 64(2010)1677-1680

71.	P.K. Yadawa, D.K. Pandey, D. Singh, R.R. Yadav and Giridhar Mishra	2010	Computations of Ultrasonic Parameters of Lanthanide Metals Ti, Zr and Hf	Turkish J. Phys. 34 (2010) 23-31
72.	Giridhar Mishra, S.K. Verma and R.R. Yadav	2010	Nonlinear acoustical properties of ternary alloys	J.Acoustical Society of India,37(2010)130-138
73.	Giridhar Mishra R.R. Yadav , Baldev Raj and T. Jayakumar	2011	Higher order elastic constants and ultrasonic attenuation in Ni-Al-Cr	J. Pure and applied Ultrasonics 33(3) (2011) 54-58
74.	Devraj Singh, D. K Pandey, D. K Singh and R. R. Yadav	2011	Propagation of ultrasonic waves in neptunium monochalcogenides	Applied Acoustics (UK) 72 (2011) 737
75.	Giridhar Mishra, S.K. Verma, R.R. Yadav , P.K. Yadawa and D. Singh	2011	Synthesis and Ultrasonic Characterization of Cu/PVP nanoparticles- Polymer Suspensions	Open Journal of Acoustics 1(2011)9-14
76.	P.K. Yadawa, D. Singh, D.K. Pandey, Giridhar Mishra, R.R. Yadav	2011	Acoustic Wave Propagation in Nanocrystalline RuCo alloys	Advances in Materials Physics and Chemistry (AMPC) 1 (2011) 14-19
77.	Meher Wan, R.R. yadav	2011	Ultrasonic Study of Polyaniline nanofibers-water suspensions	Journal of Acoustical Society of India 38 2 (2011) 82-86
78.	M.Hari, S.A.Joseph, N.Balan, Mathews S, Ravi Kumar, G.Mishra, R.R.Yadav , P.Radhakrishnan, V.P.N.Nampoori	2011	Linear And Nonlinear Optical Properties of Gold Nanoparticles Stabilized with Polyvinyl Alcohol	J.Nonlinear Optic. Phys. Mat. 20, 467 (2011)
79.	K.K. Dey, A.Kumar, R. Shanker, A. Dhawan, Meher Wan, R.R. Yadav and A.K. Srivastava	2012	Growth morphologies, phase formation, optical and biological response of nanostructured CuO and their application as cooling fluid in high energy density devices	RSC Advances 2 (2012) 1387-1403 (UK)
80.	D.K.Singh, D. K. Pandey, R.R.Yadav and Devraj Singh	2012	A study of nanosized Zinc oxide and its nanofluid	Pramana – Vol. 78, No. 5 (2012) 759–766
81.	S.K. Verma, Giridhar Mishra, D.K. Pandey and R.R. Yadav	2012	Non-linear Elastic Properties of Single-Walled Carbon Nanotubes	Advanced Materials Letters(Japan) 3(2012) 34-37

82.	D.K. Singh, D.K. Pandey, R.R. Yadav and D. Singh	2012	A study of ZnO nanoparticles and ZnO-EG nanofluid	J. Experimental Nanoscience 1 (2012) 1-11
83.	Meher Wan, R.R.Yadav , K.L.Yadav, S.B.Yadav	2012	Synthesis and experimental investigation on thermal conductivity of nanofluids containing functionalized Polyaniline nanofibers	Experimental Thermal and Fluid Science (Elsevier) 41 (2012) 158–164
84.	D.K. Singh, D.K. Pandey, D. Singh and R.R. Yadav	2012	Characterization of CrO ₂ -Poly-vinyl Pyrrolidone Magnetic Nanofluid	Journal of Magnetism and Magnetic Materials (JMMM) 324 (2012) 3662–3667
85.	S.K. Verma, D.K. Pandey, R.R. Yadav	2012	Size dependent Ultrasonic properties of InN nanowires	Physica B: Condensed Matter 407 (2012) 3731-3735
86.	S.K. Verma, R.R. Yadav	2012	Attenuation of Ultrasonic Waves in Nano-crystalline Ytria Stabilized Zirconia	Journal of Acoustical Society of India 39(3) (2012) 152-160
87.	Vimal Pandey, Giridhar Mishra, S. K. Verma, Meher Wan, R. R. Yadav	2012	Synthesis and Ultrasonic Investigations of CuO-PVA Nanofluid	Materials Sciences and Applications (USA) , 2012, 3, 664-668
88.	Vimal Pandey, S.K.Verma and R.R.Yadav	2012	Ultrasonic Properties of CuO nanoparticles based nanofluids	Journal of Pure and Applied Ultrasonics 34 (2012) 72-75
89.	S.K.Verma, D.K.Singh, D.K.Pandey, R.R.Yadav	2013	Study of Nanostructured Silver Sulphide and its nanofluid	National Academy Science Letters (Springer) 36(5):535–540
90.	Giridhar Mishra, Devraj Singh and Pramod Kumar Yadawa, S.K. Verma and R. R. Yadav	2013	Study of Copper/Palladium Nanoclusters using Acoustic Particle Sizer	Platinum Metals Review (UK) 57(3) (2013) 186-191
91.	A. K. Yadav, Devraj Singh, Sudhanshu Tripathi, Vyoma Bhalla, R. R. Yadav	2013	Temperature Dependent Elastic and Ultrasonic Properties of Iron Aluminide	Universal Journal of Materials Science 1(2): (2013)56-62,
92.	Jitendra Gangwar, Kajal Kumar Dey, Surya Kant Tripathi, Meher Wan, Raja Ram Yadav , Rajiv Kumar Singh, Samta and A.K. Srivastava	2013	NiO-based nanostructures with efficient optical and electrochemical properties for high-performance nanofluids	Nanotechnology, IOP Science 24 (2013) 415705 (15pp)

93.	K.K. Dey, P. Kumar, R.R. Yadav , A. Dhar, A.K. Srivastava	2014	CuO nanoellipsoids for superior physicochemical response of biodegradable PVA	RSC Adv. 4, (2014), 10123-10132
94.	Punit Kumar Dhawan, Sanjay Upadhyay, S.K. Verma, Meher Wan, R.R. Yadav , B.Joshi	2014	Size and temperature dependent ultrasonic properties of thermoelectric nanowires	Materials Letters; 114, 15-18 (2014) (UK)
95.	P. K. Yadawa, S. K. Verma, G. Mishra and R. R. Yadav	2014	Effect of Elastic Constants on the Ultrasonic Properties of Group VIB Transition Metal Diborides	J. Nano. Adv. Mat. 2, No. 1, 1-9 (2014)
96.	D.K. Pandey, Devraj Singh, Vyoma Bhalla, Sudhanshu Tripathi and R.R. Yadav	2014	Temperature Dependent Elastic and Ultrasonic Properties of Ytterbium Monopnictides	Indian J. Pure & Applied Physics. Vol. 52, 330-336 (2014)
97.	Satyendra Singh, Archana Singh, P. Tandon, R.R. Yadav	2014	Growth of zinc ferrite aligned nanorods for liquefied petroleum gas sensing	Materials Letters, 131, 31-34 (2014)
98.	Mohit Gupta, S.K. Verma, Meher Wan, R.R. Yadav	2014	Elastic and Ultrasonic Properties of Single Crystalline Nickel Nanowire	Ultrasonics (Elsevier) 54(8), 2115-2118 (2014)
99.	Rashmi Parashar, Meher Wan, R. R. Yadav , Avinash C. Pandey, Vyom Parashar	2014	Surfactant free synthesis of metal oxide (Co and Ni) nanoparticles and applications to heat propagation in nanofluids	Materials Letters (Elsevier) 132, 440-443 (2014)
100.	J. Gangwar, A. K. Srivastava, S. K. Tripathi, M. Wan, R. Yadav	2014	Strong enhancement in thermal conductivity of ethylene glycol-based nanofluids by amorphous and crystalline Al ₂ O ₃ nanoparticles	Applied Physics Letters (AIP Publishing) 105, 063108 (2014)
101.	Satyendra Singh, Archana Singh, Meher Wan, R.R. Yadav , Poonam Tandon, S.S.A. Rasool, B.C. Yadav	2014	Fabrication of self-assembled hierarchical flowerlike zinc stannate thin film and its application as liquefied petroleum gas sensor	Sensors & Actuators: B. Chemical (Elsevier) 205, 102–110 (2014)
102.	A.K. Yadav and R.R. Yadav	2014	An Investigation on the Effect of Nanostructuring on Mechanical and Ultrasonic Properties of Si/Si _x Ge _{1-x} Superlattice Nanowires	Adv. Sci. Letter (USA) 20, 1107-1111 (2014)

103.	Archana Singh, A. Singh, Satyendra Singh, P. Tandon, R.R. Yadav , B.C. Yadav	2015	Synthesis, characterization and performance of zinc ferrite nanorods for room temperature sensing applications	Journal of Alloys and Compounds (Elsevier) (2015) 618, 475-483
104.	S. Singh, A. Singh, B.C. Yadav P. Tandon, S. Kumar, R.R. Yadav , S. I. Pomogailo, G. I. Dzhardimalieva and A.D. Pomogailo	2015	Frontal polymerization of acrylamide complex with nanostructured ZnS and PbS: their characterizations and sensing applications	Sensors and Actuators B (Elsevier) 207 (2015) 460-469
105.	Meher Wan, Giridhar Mishra, R.R. Yadav and D. Singh	2015	Temperature dependent heat transfer performance of multi-walled carbon nanotubes-based aqueous nanofluids at very low particle loadings	Johnson Matthey Technology Review (2015) 199-205
106.	Aashit Kumar Jaiswal, Satyendra Singh, Archana Singh, R.R. Yadav , Poonam Tandon, B.C. Yadav	2015	Fabrication of Cu/Pd bimetallic nanostructures with high gas sorption ability towards development of LPG sensor	Materials Chemistry and Physics (Elsevier) (2015) 154, 16-21
107.	Punit Kumar Dhawan, Meher Wan, Satyendra Verma, D.K.Pandey, R.R. Yadav	2015	Effect of diameter and surface roughness on ultrasonic properties of GaAs nanowires	Journal of Applied Physics (AIP Publishing) 117, 074307 (2015)
108.	Kajal Kumar Dey, Divyanshu Bhatnagar, Avanish Kumar Srivastava, Meher Wan, Satyendra Singh, Raja Ram Yadav , Bal Chandra Yadav and Melepurath Deepa	2015	VO ₂ nanorods for efficient performance in thermal fluids and sensors	Nanoscale (2015) 7, 6159-6172
109.	Meher Wan, Anoop K Srivastav, P.K. Dhawan, R.R. Yadav , S.B. Sant, Ram Kripal and J.H. Lee	2015	High dielectric Response of 2D- Polyaniline Nanoflakes Based Epoxy Nanocomposites	RSC Advances (2015) 1-5
110.	Meher Wan, R. Parashar, N. Kumar, R.R. Yadav, Rajiv Prakash, J. C. Ngila, Vyom Parashar	2015	Heat transfer biofluids: A novel approach towards weed management	Ecological Engineering (Elsevier) 84 (2015) 492-495

111.	Vimal Pandey, Giridhar Mishra, Meher Wan, Devraj Singh, A.K. Tiwari, R.R. Yadav and Bharat Mishra	2015	Characterization of Cu-PVA nanofluids: ultrasonic and thermal properties	J. Pure Appl. Ultrason. 37 (2015) 33-38
112.	Meher Wan, Raja Ram Yadav, Devraj Singh, V. Rajendran	2015	Temperature dependent ultrasonic and thermo-physical properties of oylaniline nanofibers reinforced epoxy composites	Composites Part B (Elsevier) (Accepted)
113	Rajkamal Shastri, D. Kumar, S.P. Goutam, R.R. Yadav and Anil Kumar Yadav	2015	Size dependent structural, electronic and vibrational properties of Cd _m Sn _(m+n=2-6) nanoclusters: a DFT study	International Journal of Advanced Research (2015) 3 (12) 787 – 798
114.	Aashit K. Jaiswal, M. Wan, S. Singh, D.K. Singh, R.R. Yadav , D. Singh, G. Mishra	2016	Experimental investigation of thermal conduction in copper- palladium nanofluids	Journal of Nanofluids 5 (4) (2016) 496-501
115.	Aashit Kumar Jaiswal, Mayank Gangwar, Gopal Nath and R.R. Yadav	2016	Antimicrobial Activity of Bimetallic Cu/Pd Nanofluids	Journal of Advanced Chemical Engineering 6:151 (2016)
116.	Archana Singh, Ajendra Singh, Satyendra Singh, Poonam Tandon, R. R. Yadav	2016	Synthesis, Characterization and Gas Sensign Capability of Ni _x Cu _{1-x} Fe ₂ O ₄ (0.0<x<0.8) Nanostructures Prepared via Sol-Gel Method	Journal of Inorganic and Organometallic Polymers and Materials (Springer) (Accepted) (2016)
117.	Rajesh Kumar, Rajesh Kumar Singh, Dinesh P. Singh, Alfredo R. Vaz, Raja R. Yadav , C.S. Rout, S. A. Moshkalev	2017	Synthesis of self assembled and hierarchical palladium- CNTs-reduced graphene oxide composites for enhanced field emission properties	Materials and Design (Elsevier) 122 (2017) 110-117