


Brief Biodata

Name: Dr. Chitra Gautam

Designation:	Senior Scientist	
DP No. and Name:	1.07, Acoustics and Vibration Metrology	
DU No. and Name:	1, Physico-Mechanical Metrology Division	
Email:	c.gautam@nplindia.org	
Date of Joining CSIR-NPL:	29-01-2021	
Phone (office)	011-45609386	
Mobile (optional)	-	

Research Area/ Interest

Acoustics and Vibration Metrology, Building Acoustics, Deep Learning

Educational Qualifications

(Please write latest qualification first)

Degree	Subject	University/ Institute	Year
Ph.D.	Instrumentation	Gauhati University, Guwahati	2019
M.Tech.	Instrumentation	N.I.T., Kurukshetra	2007
M.Sc.	Physics	Devi Ahilya Vishva Vidhyalaya, Indore	2005
B.Sc.	Physics, Mathematics, Computer Application	Maharani College, University of Rajasthan, Jaipur	2003

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Senior Scientist	CSIR-National Physical Laboratory (NPL), New Delhi	29-01-2021	Till Date	Acoustics and Vibration Metrology, Building Acoustics

Senior Scientist	CSIR- Central Electronics Engineering Research Institute (CEERI), Pilani	03-02-2017	28-01-2021	IoT, Agri-Electronics, Deep Learning, Air Quality monitoring, Food processing Technologies
Scientist	CSIR- Central Electronics Engineering Research Institute (CEERI), Pilani	28-12-2012	02-02-2017	Agri-Electronics, Food processing Technologies, Water quality monitoring
Scientist	CSIR- Central Scientific Instruments Organisation (CSIO), Chandigarh	03-02-2012	27-12-2012	Precision Agriculture Electronics
Senior Project Assistant	CSIR- Central Electronics Engineering Research Institute (CEERI), Pilani	11-08-2008	11-08-2010	Fresh Fish Water Aquaculture Monitoring
Lecturer	Ajmer Institute of Technology, Ajmer	March, 2008	July, 2008	Physics, Instrumentation
Lecturer	N.I.T., Kurukshetra	July, 2007	March, 2008	Instrumentation, Physics, Nanotechnology

No. of Publications

No. of Publications in SCI Journals	No. of Publications in Non-SCI Journals	No. of Publications in Conference Proceedings	Books	Total
04	02	07	-	13

Selected Publications

1.	Kumar, Prashant, Gaurav Purohit, Pramod Tanwar, Chitra Gautam, Kota Solomon Raju, "Real time, an IoT-based affordable air pollution monitoring for smart home." In First International Conference on Sustainable Technologies for Computational Intelligence, pp. 837-844. Springer, Singapore, 2020.
2.	Pearl Pullan, Chitra Gautam, Vandana Niranjana, "Air Quality Management System," 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 436-

- 439, doi: 10.1109/GUCON48875.2020.9231233 (IEEE Xplore)
3. Aseem Sindwani, Akhilesh Kumar, Chitra Gautam, Gaurav Purohit, Pramod Tanwar, "Prediction and Monitoring of stored food grains health using IoT Enable Nodes," 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 516-522, doi: 10.1109/GUCON48875.2020.9231104 (IEEE Xplore)
 4. Chitra Gautam, Sk Masiul Islam, Shashikant Sadistap, Utpal Sarma, "Effect of Microwave Heat on the Nutritional Properties of Infected Red Kidney Beans" in IEEE Access, Vol. 6, Oct. 2018, Pg. 57137-57143
 5. Chitra Gautam, Sk Masiul Islam, Shashikant Sadistap, S C Bose, Utpal Sarma, "Physical and Engineering Characteristics of Microwave Treated Red Kidney Beans (*Phaseolus vulgaris*)", International Conference on Recent Advances in Food Processing Technology, Theme: Doubling Farmers' Income Through Food Processing, Thanjavur (India), August 17-19, 2018
 6. Chitra Gautam, Utpal Sarma, Shashikant Sadistap, "Controlled Microwave Technology for Disinfestations of Selected Pulses" in All India Seminar on Technological Interventions for Enhancing Agricultural Productivity to be held at Ahmednagar, Aug 29-27, 2016
 7. Chitra Gautam, Shashikant Sadistap, Utpal Sarma, "Moisture Analysis Of Whole Mung Bean And Red Lentil By Domestic Microwave Oven" in International Journal Of Food And Nutritional Sciences, Vol 4(5), Oct-Dec 2015, pp. 38-41
 8. Vijay Jakhar, Arpit Coudhary, Shashikant Sadistap, Chitra Gautam, "Embedded water parameter measurement system" in National Conference on Advances in Electronics and its Interdisciplinary Applications, held on 19-29 Sep, 2014 at Fergusson College, Pune (Published in SPEED journal in March, 2015)
 9. Kalpana Lamba, Sunil Joshi, Chitra Gautam & Shashikant Sadistap, Embedded sensor system with wireless communication for Greenhouse (Paper in Global Journal of Computer Science and Technology: E, Network, Web & Security International Journal of Scientific & Engineering Research, Volume 14, Issue 3, April-2014, ISSN 0975-4172, Pg. 21-26)
 10. Chitra Gautam, Shashikant Sadistap, Pankaj Kumar, K.S.N. Rao, LabVIEW Based Automatic Measuring System for Fresh Water Aquaculture Parameters (Paper in International Journal of Scientific & Engineering Research, Volume 5, Issue 2, February-2014, ISSN 2229-5518, Pg. 1390-1394)
 11. D. Shivling, Chitra Gautam, Ankit Sehga, C Ghanshyam, Pawan Kapur, Embedded system for plant diseases early warning system for grapes (Conference poster presentation in ISOI journal), NSI-37, held on 30Oct-1 Nov, 2012 at CSIR-CSIO, Chandigarh
 12. Chitra Gautam, Gajender Singh, Santosh Kumar, KSN Rao, Smart System Integration by Neural Network Analysis using Virtual Instrumentation, Presenting paper on National Conference on analysis and its applications (AA-BHU-2009), March 19-21, 2009 at Banaras Hindu University, Varanasi, India.
 13. K.S.N.Rao, Shashikant, Chitra Gautam, Santosh Kumar, A.D.Shaligram, "Virtual Instrumentation for Smart Pond Management System in freshwater aquaculture", presenting paper on International Conference of ICI-2009 and Nsi-34, January 21-23, 2010 at Cummins College of Engineering for Women, Karvenagar, Pune - 411052, Maharashtra, INDIA

Patents

NIL

Current Activities

(Not more than 100 words)

Testing and Calibration, Maintenance and upgradation, calibration of electro-acoustic instruments, Building Acoustics, R&D in Noise and Vibration control, R&D in Building Acoustics, Birds voice classification

Honour(s)/Award(s)/ Fellowship(s)

1. Received award as group team member for AF's Excellence in Development of Technology for Water & Aqua (Institutional) from aqua foundation in November 2014
2. CSIR-UGC NET for Lectureship in 2012
3. GATE Scholarship in 2005
4. President award in Scout-Guide in 1999
5. Rajya Puraskar in Scout-Guide in 1997

Contributions to AcSIR

Ph.D. Student: 01 (Ongoing)

Membership of Professional Societies/ Institutions

1. Member, SSI (Semiconductor Society of India) (2015 - Present)
2. Member, IETE (Institution of Electronics and Telecommunication Engineers) (2014 - Present)
3. Life Member, ISOI (Instrument Society Of India), India (2012 - Present)
4. Life Member, IPA (Indian Physics Association), India (2014 - Present)
5. Life member, OWSD (Organization for Women in Science for the Developing World) (2016 - Present)
6. Member, IEEE (Institute of Electrical and Electronics Engineers), USA (2017- 2019)
7. Member, AFST (I) (Association of Food Scientists & Technologists), India (2014- Present)
8. Member, MSI (Metrology Society of India), India (2021- Present)

Any other Information

(Not more than 100 words)

1. Students Guidance
 - a. M. Tech. Students: 04 (Completed)
 - b. B. Tech. Students: 22 (Completed)
2. Research and Consultancy Projects as Principal Investigator / Project Leader / Co-Principal Investigator / Team Member: 10 (Co-PI: 03 & member: 07)

3. Worked as acting Scientist-In-Charge at CSIR-CEERI, Naraina, Delhi centre (Dated August, 2020 to January, 2021)
4. Institute mentor of Techies-SLIET team for Hardware edition grand finale “Smart India Hackathon, 2018” held on dated 18th to 22nd June, 2018
5. Member of Selection committee for Technician and Technical Assistant posts in 2019
6. Assisted as Team member of Scientists to prepare a Full DPR for ICPS which focused the CPS from systems perspective
7. Assisted as Team Member in preparation of the Cyber Physical Systems (CPS) area component in Annual Report 2017-2018
8. Interacted with GLF business school, 3D printing technology, MSME and NSIC for business model
9. Member of Screening committee for scientist recruitment in 2017
10. Convener of “Augmented reality workshop” held from 3rd June to 7th June 2019
11. Member of AR challenge webinar and workshop (CSIR-CEERI, GOI, Elixar and Nvidia) held on 9th to 14th May, 2020
12. Organized workshop on “Build yourself” under IETE for women empowerment on 15/12/17