

PROF. (DR.) BAL CHANDRA YADAV

Ph.D., M.N.A.Sc.

Head, Department of Physics,

School of Physical & Decision Sciences,
Babasaheb Bhimrao Ambedkar University
(A Central University) Lucknow-226025,
U.P., India

Email:balchandra vadav@rediffmail.com. Mob. No. : +91 9450094590



- **Residence:** 645A/55A, Janaki Vihar, Janakipuram, Lucknow-226021, U.P., INDIA.
- **Date & Place of Birth:** 1st January, 1970, SHRAVASTI, UTTAR PRADESH, INDIA

PRESENT STATUS:

- Working as **Professor & Head** in the Department of Physics, School for Physical & Decision Sciences at Babasaheb Bhimrao Ambedkar University (A Central University) Lucknow, UP, India.
- **Working as Director/Incharge**, University Sophisticated Instrumentation Center (USIC), Innovation & Startup Center at Babasaheb Bhimrao Ambedkar University (A Central University) Lucknow, UP, India.
- Member, Board of Postgraduate Studies, Department of Physics, SPDS, BBAU, Lucknow
- Member of Academic Council, BBAU, Lucknow
- Member, Board of Studies, Department of Physics, Dr RML Awadh University, Faizabad, U.P., India
- Member, Council of Science & Technology, Government of Uttar Pradesh

❖ Past Administrative Assignments:

- **Assistant Provost :** 2008-09, University of Lucknow, Lucknow.
- **Assistant Proctor :** 2008-09, University of Lucknow, Lucknow.
- **Assistant OSD Exam: Conduct and Dispatch:** 2007-2009, University of Lucknow, Lucknow.
- **Assistant Director, Admission:** 1998-2009, 2010-2011, University of Lucknow, Lucknow.
- **Co-coordinator:** B.Sc. Nanotechnology, University of Lucknow, India (2008-2010)
- **Executive Member:** Advisory committee for National/International conferences being held at University of Lucknow, Lucknow-226007, 2006-2008.
- **Head,** Department of Applied Physics, SPS, BBAU, Lucknow, U.P., India (2013-2016)
- **Assistant Proctor:** 2016, B B A University, Lucknow.

- **Co-ordinator:** M. Tech. Nano-Optoelectronics, UIET, BBAU, Lucknow, U.P., India (2013-2017)
- **Co-ordinator:** B. Tech. Electrical, UIET, BBAU, Lucknow, U.P., India (2014-2017)

TEACHING EXPERIENCE:

- More than **Nineteen Years** of teaching and Research experience.

Ph. D. TITLE:

Design and Fabrication of Opto-Electronic Humidity Sensors Based on Titania Films

MAJOR Ph. D. CONTRIBUTIONS:

- Sol-gel processed Titania films on prism substrates as an Optical Moisture Sensors
- Titania Films Deposited by Thermal Evaporation as humidity sensor
- Sol-Gel Processed TiO₂ films on U-shaped glass-rods as optical humidity sensor
- Improved version of optical humidity sensor with incident light in the form of a conical beam

EDUCATIONAL QUALIFICATION:

- **M. Sc. (Physics)** from Dr. R.M.L. Awadh University, Faizabad (1993)
- **B. Sc. (Physics - Hons.)** from Dr. R.M.L. Awadh University, Faizabad (1991)
- **Intermediate** from U.P. Board (1988)
- **High School** from U.P. (1986)

DOCTORAL DEGREE:

- **Ph.D.** from University of Lucknow, Lucknow, U.P., India under the supervision of **Prof. L.M. Bali**, Adjunct Professor, Department of Physics, Miami University, **Oxford, Ohio, USA.**

AREA OF RESEARCH:

Synthesis of Nanomaterials/Nanocomposites, Organometallic nanocomposites, self-healing materials, Characterizations of nanomaterials, Thin Film/ Thick Film Sensors, Humidity Sensors both based on electricity and opt-electronic, Glucose Sensor, LPG Sensors for below LEL operable at room temperature and Opto-electronic Pressure Sensors for building and bridge structures.

PAPERS TAUGHT:

- Mechanics
- Electronics
- Digital Electronics
- Thermal Physics
- Microprocessor
- Electromagnetic Theory
- Condensed Matter Physics
- Materials Science
- Nanoscience & Nanotechnology

COURSES TAUGHT: Ph.D.

- M.Phil.
- M.Tech.(Nano-opto electronics)
- M. Sc. (Physics/Electronics)
- B.Sc. (Computer Science)
- B.Sc. (Electronics)
- B.Sc. (Physics)

❖ **COURSES DESIGNED:**

- Nanotechnology for under graduate classes
- M. Tech. Nano-Optoelectronics

BOOKS PUBLISHED

- **“Tapiya Bhautiki”** ISBN: 978-81-89989-30-9, Author- **Dr. Bal Chandar Yadav**
By Human Resource Ministry & Uttar Pradesh Hindi Sansthan, Lucknow
- **Metaloxides as Nitrogen Oxide Gas Sensor**, LAMBERT Academic Publishing, Germany, ISBN:978-3-330-07805-5
Authors- **Dr. Richa Srivastava & Prof. B. C.Yadav**

BOOK CHAPTER(S)

1. **Biodegradable Nanocomposites for Energy Harvesting, Self-healing, and Shape Memory**, Deepu Thomas, John-John Cabibihan, Sasi Kumar, SK Khadheer Pasha, Dipankar Mandal, Meena Laad, [Bal Chandra Yadav](#), SI Patil, Anil Ghule, Payal Mazumdar, Sunita Rattan, Kishor Kumar Sadasivuni, 2017, **Smart Polymer Nanocomposites**, 377-397, Springer International Publishing.
2. **Determinants of Awareness and willingness to pay for solar and biomass based energy generation in rural households of Shravasti district, Uttar Pradesh**, V.V. Pathak, Richa Kothari, [B. C. Yadav](#), Yogesh Bandhu and Venkatesh Dutta, Bridging the Science-policy Gap for inclusive growth in India, pages 133-145, 2016, Edited by R C Sobti and Venkatesh Dutta, ISBN No. ISBN No.978-93-86110-00-8.
3. **Policy Reforms in Indian Energy Sector to Achieve Energy Security and Sustainability**, Vinayak V. Pathak, Richa Kothari, Vineet V. Tyagi, and [Bal Chandra Yadav](#), Energy Security and Sustainability, ISBN 9781498754439 - CAT# K27407, CRC Press, Taylor & Francis Group, **Chapter 14**, pages 351-360, 2016.
4. **Development in Metal Oxide Nanomaterial-based Solar Cells**, [B. C. Yadav](#), P. Kumar, S. Singh and R. Kothari, Edited book: *Emerging energy alternatives for sustainable environment*, TERI Press. **ISBN: 9788179934111, Chapter 3**, pages 524-536.

- **Chief Editor** : Proceeding of National Workshop on Nanomaterials & Nanotechnology (NWNNT-2007)
- **Chief Editor** : Proceeding of International Conference on Nanoscience & Nanotechnology (ICNN-2013)
- **Chief Editor** : Proceeding of International Conference on Nanoscience & Nanotechnology (ICNN-2017)
- **Chief Editor** : Proceeding of National Conference on Nanomaterials & Associated Conscious Energy (सूक्ष्म पदार्थ-२०१९)
- **Guest Editor**: *Special Issue of Journal of Advance Science Letter, APS, USA, Impact Factor: 1.25*
- **Guest Editor**: *Special Issue of Journal of Advance Science, Engineering & Medicine, APS, USA*

❖ **MEMBER OF EDITORIAL BOARD:**

- *American Journal of Optics and Photonics*, Science Publishing Group, USA.
- SciFed Journal of Petroleum, SciFed Group, USA
- Lucknow Journal of Science, **Print ISSN: 0974-8121, Online ISSN: 0974-813X, Publisher:** Lucknow University Teacher's Academic Publication Society.
- International Journal of Scientific and Innovative Research 2013; 1(2):93-108, P-ISSN 2347-2189, E- ISSN 2347-4971

❖ **RESEARCH PROJECTS**

- **List of Completed Projects:**

Sl. No.	Title	Date of start & Date of completion	Cost (Rs.)	Agency
1.	“To design and fabricate Opto-electronic humidity sensor-----and other materials” (P.I.)	7 th May 2007- May 2010	Rs.5,00,000/-	Council of Science & Technology, Uttar Pradesh
2.	“Multimetallic nanoparticles in polymer matrix as precursors of magnetic sensor materials” (Co P.I./Participant)	Jan. 2009 – Jan. 2012	Rs.30,00,000/- Approx.	Department of Science & Technology, New Delhi INDORUSSIAN PROJECT
3.	“Synthesis and characterization of nanostructured metal oxides and their applications as Liquefied Petroleum Gas (LPG) Sensors” (P.I.)	June 2009 - December 2012	Rs. 8,03,000/-	University Grants Commission (U.G.C.), Delhi
4.	“Synthesis of semiconductor metaloxide based nanocomposites using Sol-Gel and Hydrothermal/solvothermal techniques for the development of humidity and CO ₂ gas sensors” (P.I.)	2010 – 2014	Rs. 22,14,000/-	Department of Science & Technology
5.	“Synthesis and Characterization of	2013 – 2016	Rs. 26,84,500/-	Department of Science &

	Thin and Thick Film Opto-Electronic Humidity Sensor Based on Metal Oxide Nanocomposites”(P.I.)			Technology (Indo-Russian)
6.	“Preparation and properties of Nanosized spinel and Orthoferite Oxides and their Relevance as Gas Sensor” (P.I.)	2014 -2018	Rs.24,74,750/-	Board of Research Nuclear Research (BRNS), DAE

ist of Ongoing Projects:

Sl. No.	Title	Date of start & Date of completion	Cost (Rs.)	Agency
1.	“Preparation and properties of self-healing polymer based nanohybrid materials for energy harvesting application”(P.I.)	2019-2021	Rs. 39,00000/-	Department of Science & Technology (Indo-Russian)

❖ Awards/honours: 11

- Awarded for publishing papers in high Impact Factor Journal by BBA University, Rs. 2.00 lac incentive grant, 10th June 2014.
- Travel Grant Award-2014 from Department of Science & Technology, Government of India, Delhi for visiting Kuala Lumpur, Malaysia.
- Most downloaded Paper Award-2012 for Optics and Laser Technology, 57 (2014) 181-188 by Elsevier, USA.
- International Brainpool Fellowship-2010, The Korean Federation of Science and Technology Societies (KOFST), Government of South Korea.
- Travel Grant Award-2010 from DST, Delhi for visiting University of South-West Australia, Perth, Australia.
- Research Grant Award-2010 for Young Scientists from DST, Delhi under SERC scheme.
- Best Poster Prize: October 2008, International Conference on Biomedical Engineering and Nanotechnology (ICBENT) at D.Y. Patil University, Kolhapur, M.H., India.
- Research Grant Award-2007 from International Center for Theoretical Physics, Italy for visiting ICTP, Trieste, Italy.
- Best Poster Award: 2006, International Conference on Nanomaterials for Electronics (ICNME) at C-MET, Pune.
- Young Scientist Award: 2004-2005 by Uttar Pradesh Council of Science and Technology.

- **ISCA Best Poster Presentation Award: 2002 by Indian Science Congress Association.**

❖ ABROAD VISITS

1. **POLY-CHAR 2019**, Tribhuwan University, Kathmandu, **Nepal**. **May 19-23, 2019**.
2. Institute of Problems on Chemical Physics, Chernogoloka, Moscow Region, **Russia**. 25th Feb. -7th March 2016
3. Institute of Problems on Chemical Physics, Chernogoloka, Moscow Region, **Russia**. 25th July -7th August 2014
4. Institute of Materials, Malaysia, Kuala Lumpur, **Malaysia**. 13-16th May, 2014
5. Korean Research Institute of Chemical Technology, Daejeon, **South Korea**, 25th March, 2011 (Brain Pool Scientist)
6. Institute of Problems on Chemical Physics, Chernogolovka, Moscow Region, **Russia**. 6th-17th November 2010
7. University of Western Australia, Perth, **Australia**. 11th - 14th July 2010
8. National University, **Singapore**. 30th June - 7th July 2007
9. ICTP, Trieste, **Italy**. 30th March 2007-1st May 2007
10. Tribhuwan University, Kathmandu, **Nepal**. 9thFeb.1994.
11. Tribhuwan University, Kathmandu, **Nepal**. 25thJan.1994.

❖ No. of Ph. D. Thesis supervised : 17

1. **Dr. Richa Srivastava** “*Design and Fabrication of undoped and doped ZnO as humidity sensors*”(BEST THESIS AWARD, MRSI) August 2008
2. **Dr. Amit Kumar Srivastava**, “*Design and Fabrication of Solid – state Resistive type humidity sensors using Titanium Dioxide*” Jan. 2009
3. **Dr. Anil Kumar Yadav**, “*Design and fabrication of Humidity and temperature sensors using sucro se and cuprous oxide*” September 2009
4. **Dr. Preeti Sharma**, “*Design and fabrication of Solid-state Resistive type Humidity and Gas sensors based on SnO₂ and other additives*”, January 2010
5. **Dr. Monika Singh**, “*Experimental Investigations on Solid-state Humidity sensing properties of Lanthanum, Praseodymium ad Neodymium oxides*”, August 2010
6. **Dr. Ritesh Kumar**, “*Synthesis and characterizations of nanostructured titanium, niobium and tantalum oxides and their applications as Humidity Sensors*”, December 2010
7. **Dr. Anuradha Yadav**, “*Experimental Investigations on Design and Fabrication of Liquefied Petroleum Gas Sensor using Nanostructured Zinc Oxide and its Composites*”, December 2012
8. **Dr. Rajeev Singh**, “*A New Approach to Oxygen Related Donor in Czochralski (Cz) Silicon*” 27 February 2013

9. **Dr. Satyendra Singh**, “Synthesis and characterizations of nanostructured ferrite composites and their applications as L.P.G. Sensors”, 30 December, 2013
10. **Dr. Nidhi Verma**, “Synthesis and characterizations of metal oxide nanocomposites and their applications as Humidity and L.P.G. Sensors” 9, September 2014
11. **Dr. Rama Singh**, “Synthesis and characterization of tin oxide based nanocomposites and their application as Humidity Sensors” 26th May 2015
12. **Dr. Rakesh K. Sonker**, "Synthesis and characterization of metal oxide based nanocomposites and their application as NO₂ Sensors", 21th Sept. 2016
13. **Dr. Ravindra Kumar**, "Synthesis and characterization of Polymer nanocomposites and their application as Humidity Sensors" 21th Nov. 2016
14. **Dr. Satyendra Kumar**, “Synthesis and characterization of nanocomposite Polymer films” April 18, 2017 (As Co-supervisor)
15. **Dr. Saroj Radheshyam Sabhajeet**, “Synthesis and characterization of nanostructured Titania for gas sensor applications” Jan. 2018
16. **Dr. Monika Singh**, “Synthesis and characterization of nanosized Spinel and Orthoferrites and its application as Liquefied Petroleum Gas Sensor” May 14, 2018
17. **Dr. Samiksha Sikarwar**, “Synthesis and Characterization of Metal Oxide Nanocomposite Films and their Applications as Opto-Electronic Humidity Sensors” June 7, 2019

❖ Ph.D. Guided Indirectly: 06

S.No.	Name of student	Year of Award	No. of joint papers	Name of Guide
1.	Dr. Vimallesh Kumar Singh Department of Chemistry, Lucknow University, Lucknow, U.P., India	2012	3	Prof. Kaman Singh
2.	Dr. Archana Singh Department of Physics, Lucknow University, Lucknow, U.P., India	2013	9	Prof. Poonam Tandon
3.	Dr. S M Kang KRICT, Daejeon, South Korea	2012	1	Prof. H J Rue
4.	Mr. Ajendra Singh Department of Physics, Lucknow University, Lucknow, U.P., India	Under process	4	Prof. Poonam Tandon
5.	Ms. Mridula Singh Department of Physics, Lucknow University, Lucknow, U.P., India	Under process	3	Prof. Poonam Tandon

6.	Ms. Tripti Shukla Department of Physics, Sant Gadge Baba Amravati University, Amravati, India	2018	7	Prof. S. K. Omanwar
----	---	------	---	---------------------

❖ **No. of M. Phil. Thesis supervised : 03**

- **Mr. Dhiraj K Maurya**, "Synthesis and characterization of CZTS (Copper, zinc, tin and sulfur) thin film and its opto-electronic humidity sensing capability" 10th June, 2016
- **Ms. Priyanka Chaudhary**, "Investigation and characterization of Copper (II) Nitrate Acryl Amide complex film and its application as humidity sensor" 10th June, 2016
- **Mr. Shakti Singh**, "Design and development of self-healing concretes by vacuum impregnation and encapsulation technique" 27th July, 2017

❖ **No. of M. Tech. Thesis supervised : 13**

1. **Ms. Swati Singh**, "Synthesis of cuprous oxide nanoparticles through hydrothermal route to develop a sensor for the detections of glucose level and humidity", 19th August, 2018
2. **Ms. Chandra Mohini**, "Green Synthesis and Characterization of Zinc Oxide Nanoparticles and their Application as an Opto-electronic Humidity Sensor" 19th August, 2018
3. **Ms. Sunanda Singh**, "Synthesis & characterizations of nanostructure tin ferrite by different capping agents, their application in waste water treatment & as humidity sensor" 19th August, 2018
4. **Mr. Navin Chaurasia**, "Synthesis of TiO₂ Nanoparticles and its Application as Dye-sensitized Solar cell (DSSC)" 19th August, 2018
5. **Ms. Mamta Ray**, "Synthesis of Co-doped TiO₂ nanoparticles by means of chemical precipitation method and its application as Opto-electronic Humidity Sensor" 19th August, 2018
6. **Ms. Ekta Singh**, "Catalytic growth of carbon nanotubes via CVD techniques and its application as opto-electronic humidity sensor", 9th June, 2016
7. **Ms. Anamika Katheria**, "Synthesis of Copper Acrylamide complex and its application as opto-electronic humidity sensor", 9th June, 2016
8. **Mr. Satyendra Singh**, "Investigation on loaded microbend and linear fiber optic sensor for crack detection", 9th June, 2016
9. **Ms. Ruchita**, "Nanostructured Lanthanum doped zinc ferrite as LPG and humidity sensor" 9th June, 2016
10. **Mr. Ravi Kumar Rawat**, "Preparation of nanostructured Nickel Oxide and its application as LPG sensor", 9th June, 2016
11. **Ms. Roshni Yadav**, "Synthesis and characterization of nanostructured copper ferrite and its application as LPG sensor" 29th June, 2015

12. **Ms. Priyanka Raj**, "A case study on the effect of varying doping density for the optimization of quantum efficiency of silicon based nanowire solar cell" 29th June, 2015
13. **Ms. Shivani Rastogi**, "TCAD based simulation of quantum well infrared Photo detector" 29th June, 2015

P.D. students presently registered: 09

Post-Doctoral Fellows:

Dr. Ravi Kant Tripathi (DSK-PDF)

Former Ph.D. Scholar, CSIR-NPL, New Delhi

❖ **WORKSHOPS/CONFERENCES ORGANIZED**

- **Convener:** National Conference on Nanomaterials & Associated Conscious Energy, सूक्ष्म पदार्थ-2019, 1-3, Feb. 2019, BBAU, Lucknow, U.P., India.
- **Chairperson:** Winter Training School on Instrumentation and Characterization (TraSIC), January 30-31, 2019, USIC, BBAU, Lucknow-226025, U.P., India
- **Chairperson:** Summer Training School on Instrumentation and Characterization (TraSIC), May 24-25, 2018, USIC, BBAU, Lucknow-226025, U.P., India
- **Chairperson:** Grassroots Innovation Summit & Exhibition (GrISE 2017), December 14-16, 2017, BBAU, Lucknow-226025, U.P., India
- **Convener (Poster Session):** Association of Microbiologists of India & International Symposium on Microbes for Sustainable Development, Nov. 16-19, 2017, BBAU, Lucknow, U.P., India.
- **Convener:** 2nd International Conference on Nanoscience & Nanotechnology, ICNN-2017, 22-24, Sept. 2017, BBAU, Lucknow, U.P., India.
- **Convener:** International Symposium on Advances in Materials Characterization (ISAMC) July 14, 2014, BBAU, Lucknow, U.P., India.
- **Coordinator:** PROF. VISHWA NATH SYMPOSIUM-XXIII: Advances in Physical Sciences on 6th February 2014, "The 101st Session of Indian Science Congress" held at the University of Jammu, Jammu, during 3-7 Feb. 2014.
- **Coordinator (session):** Jan. 12-13, 2014, North Zone VC meet at BBA University, Lucknow, U.P., India
- **Convener:** 1st International Conference on Nanoscience & Nanotechnology, ICNN-2013, 18-20, Nov. 2013, BBAU, Lucknow, U.P., India.
- **Convener:** National Workshop on Nanomaterials & Nanotechnology 24-25th March 2007.

❖ **Session Chaired in various national/international conferences:**

- Two days International Conference on “Recent Advances on Interdisciplinary Sciences”, 12-15 January, 2019, Department of Electronics, University of Jammu, **Jammu**, India
- 1st North India Science Congress (NISC) & International Conference on Science & Technology for sustainable future, 10-11, January, 2018, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025**, U.P., India.
- International Conference On Renewable Energy for Sustainable Environment: Challenges and Remedies, 20-21 March, 2017, Department of Energy Shri Mata Vaishno Devi University Kakrayal, Katra, Jammu & Kashmir -182320 (INDIA)
- National Conference on "Recent Advances and Innovations in Chemical and Materials Science" Scheduled on 23-24 Feb. 2017 organised at Sri Jai Narain (PG) College, Lucknow, U.P., India
- International Conference on Science and Engineering of Materials for future needs SR& BGNR Arts & Science College, Khammam-507002, Telangana, India, 21-22nd December, 2015.
- INTERNATIONAL WORKSHOP: Bridging Development Divide for Inclusive Growth through Science, Technology and Innovation, January 16-17, 2015, Babasaheb Bhimrao Ambedkar University (A Central University) Vidya Vihar, Raebareli Road, Lucknow-226025, U.P., India.
- National Conference on “Emerging Trends in Nanoscience and Nanotechnology” On 23 - 24, December 2014, Department of Physics, Arts, Sci. and Comm. College, Ozar (Mig), Nasik, MH, India.
- International Symposium on Role of Dendrimers in Nano drug delivery, June 14-15, 2014, CDRI New Campus, Lucknow-26021, U.P., India.
- 2nd Lucknow Science Congress, 27-28 March 2014, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.
- International Conference on Advancements of Science & Technology: Health and Social Issues, Feb. 18-19, 2014, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.

❖ **Jury Member:**

- National Children Science Congress, Uttar Pradesh
Sagar Institute of Technology and Management, Faizabad Road, Barabanki, Nov. 22-24, 2012.

❖ **Member of Local Organizing Committees:**

- 6th International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2016) November 5-8, 2016, University of Lucknow, Lucknow, U.P., India.
- International Conference on Chemistry and Materials: Prospects and perspectives (IC-MPP-2012), Dec. 14-16, 2012, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.
- International Conference on Radiation Environment- Assessment, Measurement and its Impact, 12-14 April, 2012, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.
- 16th National Seminar on Physics and Technology of Sensors, Lucknow University, U.P., India, 2011.
- 3rd National Conference on Nanomaterials and Nanotechnology, 21st-23rd December 2010, Vol.-1, Issue-1, Nov.-Dec 2010.
- 2nd National Conference on Nanomaterials & Nanotechnology, **Lucknow University**, Lucknow, U.P., India December 21-23, 2009.
- Seminar on Frontiers of Spectroscopy (SFS) November 11-12, 2008, **University of Lucknow**, Lucknow, India.
- 16th Polychar: World forum on Advanced Materials, World Unity Convention Centre, Lucknow, India, February 17-21, 2008.
- National Conference on Nanomaterials and Nanotechnology, Dec.8-11, 2007, **University of Lucknow**, Lucknow, India.
- National Symposium on Advances in Chemical and Materials Sciences, May11-12, 2007, **University of Lucknow**, Lucknow, India.
- 17th AGM of Material Research Society of India, **University of Lucknow, Lucknow**, U.P., India, Feb.13-15 (2006).

❖ CURRICULUM DESIGNED:

- Nanotechnology for under graduate classes
- M. Tech. Nano-Optoelectronics
- M.Sc. (Nanoscience & Nanotechnology)

❖ Invited Lectures delivered:

1. International Polymer Characterization Forum - POLY-CHAR 2019, May 19-23, 2019, Kathmandu, **Nepal**.
2. Two days International Conference on “Recent Advances on Interdisciplinary Sciences”, 12-15 January, 2019, Department of Electronics, University of Jammu, **Jammu, India**
3. National Symposium on Advanced Materials Science(NSAMS 2018)" 7-8 December 2018, Department of Physics, DDU Gorakhpur University, Gorakhpur, U.P., India
4. National Seminar on “Recent Innovations in Advanced Materials (RIAM-2018)”, 18-19 September, 2018, CSIR-Advanced Materials and Processes Research Institute (AMPRI), Hoshangabad Road, Near Habibganj Naka, Bhopal 462026, (M. P.) India
5. Special Invited Lecture, 24th July, 2018, Department of Electronics, University of Jammu, Jammu, INDIA
6. Special Invited Lecture, 16th January, 2018, Department of Physics, CT Bora PG College, Pune University, Pune, MH, INDIA.
7. 1st North India Science Congress (NISC) & International Conference on Science & Technology for sustainable future, 10-11, January, 2018, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025, U.P., India.**
8. Special Invited Lecture, 22 March, 2017, Department of Electronics, Jammu University, Jammu & Kashmir -182320, INDIA.
9. International Conference On Renewable Energy for Sustainable Environment: Challenges and Remedies, 20-21 March, 2017, Department of Energy SHRI MATA VAISHNO DEVI UNIVERSITY Kakrayal, Katra, Jammu & Kashmir -182320 (INDIA)
10. 4th Lucknow Science Congress (LUSCON)” on Science Technology and Innovations for Sustainable Development, 3-4 March 2017, BBAU, Lucknow, U.P., India.
11. National Seminar on “Nano Science and Biotechnology” on 25-26 February 2017, DAV PG College, Kanpur, U.P., India.
12. National Conference on “Recent Advances and Innovations in Chemical and Materials Science (RAICMS)” on 23-24 February 2017, Shri Jai Narain PG College & DSMNRU, Lucknow, U.P., India.
13. 6th International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2016) November 5-8, 2016, University of Lucknow, Lucknow, U.P., India.
14. Application of Physical Sciences in Engineering & Technology (STCAPSET-16), 02-08 July, 2016, Department of Applied Science, M.M.M. University of Technology, Gorakhpur, U.P., India.
15. International Conference on "Environmental systems and sustainable development", Tarachand Bora College, Shirur, Pune, MS, India, 15-16th January, 2016.
16. International Conference on Science and Engineering of Materials for future needs SR & BGNR Arts & Science College, Khammam-507002, Telangana, India, 21-22nd December, 2015.

17. National Conference on Physics and Industry Interfaces, Kurukshetra University, 30th July to 1st August, 2015, Kurukshetra, Hariyana, India.
18. National Conference On “Emerging Trends in Nanoscience and Nanotechnology” On 23-24 December 2014, Department of Physics, Arts, Sci. and Comm. College, Ozar (Mig), Nasik, MS, India.
19. DST-RFBR Project meeting at Metallopolymer Lab, Institute of Problems on Chemical Physics, Chernogoloka, Moscow Region, Russia. 25th July -7th August 2014.
20. “International Conference on Materials Technologies and Exhibitions (ICMTE-2014), Institute of Materials, Malaysia, Kuala Lumpur, Malaysia.13-16th May, 2014.
21. “The 101st Session of Indian Science Congress” held at the University of Jammu, Jammu during 3-7 Feb. 2014.
22. “National Conference on synthesis characterization and application of advanced nanomaterials (NCSCAAN 2014)” to be held from 17th Jan to 19th Jan, 2014 at Hindustan College of Science and Technology, Farah (**Mathura**) U.P., India.
23. “National Conference on Materials Science: Trends &Future-2014 (NCMS-2014)” during 10, 11 January 2014, Bharatiya Mahavidyalaya, **Amravati**, M.H., India
24. "Workshop on Electroactive Materials" on 22-23rd April 2012, School of Materials Science and Technology, Institute of Technology, **Banaras Hindu University, Varanasi-221005**, U.P., India.
25. “Inspire Science Camp”, DST, 16th April to 20th April, 2012, BBS College of Engineering & Technology, Gaddo Pur, Phaphamau, **Allahabad-211013**, U.P., India.
26. International Conference on Radiation Environment-Assessment, Measurement and its Impact, RADENVIRON-2012 (April 12-14, 2012), Babasaheb Bhimrao Ambedkar University, **Lucknow-26025**, U.P., India.
27. Recent Trends in Nanotechnology and Materials Characterization "RTNMC-2012" January 12-13, 2012, Prasad Institute of Management and Technology (PIMT), Kanpur Road Banthara, **Lucknow-227101**, U.P., India.
28. Workshop on “Nano Sensors” 19-20 September 2011, Amaltas Hall, India Habitat Center, **New Delhi**, India.
29. National Conference on Advances on Nanomaterials and their Applications, 25-27 February, 2011, DAV College, **Kanpur**, U.P., India.
30. National Conference on Recent Advances in Materials Science 22-24 January, 2011, **Bhusawal**, M.S., India.
31. Indo-Russian Project, 6th-17th November 2010, Institute of Problems on Chemical Physics Chernogoloka, Moscow Region, **Russia**.
32. National Seminar on Preparation of Nanomaterials and their Applications (NSPNA-2010), Feb. 20-22, 2010, ACS College, **Nandgaon, Nasik, M.H.**, India.
33. Symposium on Current trends in Nanoscience and Nanotechnology (CTNT-09), Jan. 15-16, 2009, AVB Indian Institute of Information Technology and Management (**IITM**), **Gwalior, M.P.**, India.
34. “Environment: Assessment and Safety” Jan. 1-5, 2009, NCC Camp of Gramyanchal P.G. College, Haidergarh, **Barabanki**, U.P., India.

❖ **Referee of Journals:**

<ul style="list-style-type: none"> • Sensors and Actuators-A • Philosophical magazine • Sensors and Actuators-B • Materials Letters • Sol-gel Science and Technology • Sensor Letters • Current Applied Physics • Measurement • Journal of Materials Science: Materials in Electronics • Journal of Alloy & Compounds • Indian Journal of Pure & Applied Physics • Materials Chemistry and Physics • Chemistry: A European Journal 	<ul style="list-style-type: none"> • Journal of Materials Science & Engineering B • Materials & Nano-composite • Solid State Science • IEEE Sensors Journal • Sensors Review • Waste Management & Research • Journal of Science Research & Reviews • Materials & Design • Materials and Manufacturing Processes • Photonic Sensors • Materials Research • Journal of the Taiwan Institute of Chemical Engineers • Super Lattices
---	---

❖ **Member of Editorial Board:**

- ❖ American Journal of Optics and Photonics, Science Publishing Group, USA.
- ❖ Lucknow Journal of Science, **Print ISSN:** 0974-8121, **Online ISSN:** 0974-813X, **Publisher:** Lucknow University Teacher's Academic Publication Society.
- ❖ International Journal of Scientific and Innovative Research 2013; 1(2):93-108, P-ISSN 2347-2189, E-ISSN 2347-4971.
- ❖ International Journal of Sensors and Sensor Networks, Science PG

GOOGLE SCHOLAR CITATION

Citations	2806	2226
h-index	28	26
i10-index	79	69

Status of Student's Placement

S. No.	Name of student	Designation	Organization
1.	Dr. Richa Srivastava	Assistant Professor (Guest Faculty)	B B Ambedkar University, Lucknow, U.P., India
2.	Dr. Ritesh Kumar	Assistant Professor	Urdu Farsi Technical University, Hyderabad, A.P., India
3.	Dr. Amit Kumar Srivastava	Assistant Professor	Dr. APJ Kalam Technical University, Lucknow, U.P., India
4.	Dr. Anil Kumar Yadav	Administrative Officer	Class I officer, Ministry of Railway
5.	Dr. Preeti Sharma	Assistant Professor	Gautam Buddha Technical University, Noida, U.P., India
6.	Dr. Rajeev Singh	Assistant Professor	Anna Arts & Science Govt. PG College, Karaikal, University of Pudducheri, India
7.	Dr. Satyendra Singh	Assistant Professor	KNPG College, Gyanpur, Siddhartha University, Kapilvastu
8.	Dr. Nidhi Verma	Assistant Professor	Dr. APJ Kalam Technical University, Lucknow, U.P., India
9.	Dr. Monika Singh	Assistant Teacher	Department of Basic Education, Government of Uttar Pradesh
10.	Dr. Anuradha Yadav	Assistant Teacher	Department of Basic Education, Government of Uttar Pradesh
11.	Dr. Rakesh K. Sonker	DST SERB-NPDF	Department of Physics, Delhi University, Delhi
12.	Dr. Ravindra Kumar	Assistant Professor	Department of Physics, Lovely Professional Universi- ty, Punjab
13.	Dr. Satyendra Kumar	Assistant Professor	Department of Physics, Gautam Buddha Technical University, Ghaziabad, U.P., India
14.	Er. Priyanka Raj	Assistant Professor	BBD University, U.P., India
15.	Er. Shivani Rastogi	Assistant Professor	BBD University, U.P., India
17.	Er. Ekta Singh	Assistant Professor	Dr. APJ Kalam Technical University, Lucknow, U.P., India
18.	Dr. Archana Singh	Patent Examiner	Ministry of Commerce and Industry, Government of India, Nagpur
19.	Mr. Ajendra Singh	Patent Examiner	Ministry of Commerce and Industry, Government of India, Delhi
20.	Ms. Mridula Singh	Scientist 'C'	DRDO, Delhi
21.	Mr. Naveen Chaurasia	Assistant Professor	VBS Purvanchal University, Jaunpur, U.P., India

PUBLICATIONS IN REFEREED NATIONAL/ INTERNATIONAL JOURNALS

156. V. Manikandan, Monika Singh, B.C. Yadav, R.S. Mane, S. Vigneselvan, Ali Mirzaei, J. Chandrasekaran, Room temperature LPG sensing properties of tin substituted copper ferrite $\text{Sn-CuFe}_2\text{O}_4$ thin film, *Materials Chemistry and Physics*, *Materials Chemistry and Physics* 240 (2020) 122265.
155. Synthesis of CdS nanoparticle by sol-gel method as low temperature NO_2 sensor, RK Sonker, [B. C. Yadav](#), V Gupta, M Tomar, *Materials Chemistry and Physics* 239, 121975
154. Catalytic growth of MWCNT using CVD and its application as opto-electronic humidity sensor, Ekta Singh, Utkarsh Kumar, Richa Srivastava, [B. C. Yadav](#), *Carbon Letters*, 1-12, 2019
153. Improved sensing behaviour of self-healable solar light photodetector based on core-shell type $\text{Ni}_0.2\text{Zn}_0.8\text{Fe}_2\text{O}_4$ @ poly (Urea-Formaldehyde), Shakti Singh, Abhisikta Bhaduri, Ravi Kant Tripathi, Khem Bahadur Thapa, Rajeev Kumar, [Bal Chandra Yadav](#), *Solar Energy* 188 (2019) 278–290.
152. Development of WO_3 -PEDOT: PSS hybrid nanocomposites based devices for gas (LPG) sensing application, Jagjeevan Ram, Ramgopal Singh, F. Singh, Vikas Kumar; Vishnu Chauhan, Rashi Gupta, Utkarsh Kumar, [B. C. Yadav](#), Rajesh Kumar, *Journal of Materials Science: Materials in Electronics*, 30 (14), 13593-13603, 2019, **IF= 2.324**
151. Synthesis and characterizations of exohedral functionalized Graphene Oxide with iron nanoparticles for humidity detection, Kuldeep Kumar, Utkarsh Kumar, Monika Singh, [B. C. Yadav](#) *Journal of Materials Science: Materials in Electronics*, <https://doi.org/10.1007/s10854-019-01663-9>, 2019 **IF= 2.324**
150. Facile synthesis of molybdenum disulfide (MoS_2) quantum dots and its application in humidity sensing, Sarita Yadav, Priyanka Chaudhary, K N Uttam, Ashish Varma, Manu Vashista and [B. C. Yadav](#), *Nanotechnology* 30 (2019) 295501 (10pp) <https://doi.org/10.1088/1361-6528/ab1569>
149. Fabrication of nanopolygon's structured morphology of magnesium ferrite and its applications as heat transfer agent and gas/humidity sensors, Aashit Kumar Jaiswal, Samiksha Sikarwar, Satyendra Singh, [B. C. Yadav](#) and R.R. Yadav, *Journal of Materials Science: Materials in Electronics*, 2019. **IF= 2.324**
148. Rapid humidity sensing activities of lithium-substituted copper-ferrite ($\text{Li-CuFe}_2\text{O}_4$) thin films, V. Manikandan, S. Sikarwar, [B. C. Yadav](#), S. Vigneselvan, R.S. Mane, Ali Mirzaei, *Materials Chemistry and Physics*, Volume 229, 1 May 2019, Pages 448-452.
147. Development of humidity sensor using modified curved MWCNT based thin film with DFT calculations, Utkarsh Kumar, [B. C. Yadav](#), *Sensors & Actuators: B. Chemical*, Volume 288, 1 June 2019, Pages 399-407. **IF= 5.667**
146. Priyanka Chaudhary, Dheeraj Kumar Maurya, Samiksha Sikarwar, [B. C. Yadav](#), GI Dzhardimalieva, Rajiv Prakash, Development of nanostructured nickel reinforced polyacrylamide via frontal polymerization for a reliable room temperature humidity sensor, *Journal European Polymer Journal*, Volume 112 (2019) Pages 161-169, **IF = 3.531**

145. Synthesis and characterization of highly porous hexagonal shaped CeO₂-Gd₂O₃-CoO nanocomposite and its opto-electronic humidity sensing, Samiksha Sikarwar, [B. C. Yadav](#), Rakesh K Sonker, GI Dzhardimalieva, Jeevitesh K Rajput, *Applied Surface Science*, Volume 479, 15 June 2019, Pages 326-333, **IF = 4.439**
144. Synthesis of carbon nanotubes by direct liquid injection chemical vapor deposition method and its relevance for developing an ultra-sensitive room temperature based CO₂ sensor, Utkarsh Kumar, [B. C. Yadav](#), *Journal of the Taiwan Institute of Chemical Engineers*, Volume 96, March 2019, Pages 652-663. **IF = 3.849**
143. Synthesis and characterization of nanostructured Copper Zinc Tin Sulphide (CZTS), for humidity sensing applications, Dheeraj Kumar Maurya, Samiksha Sikarwar, Priyanka Chaudhary, Subramania Angaiah, and [Bal Chandra Yadav](#), *IEEE Sensors*-24602-2018, (2019). **IF 2.617**
142. Development of nanostructured nickel reinforced polyacrylamide via frontal polymerization for a reliable room temperature humidity sensor, P Chaudhary, DK Maurya, S Sikarwar, [B.C. Yadav](#), GI Dzhardimalieva, Rajiv Prakash, *European Polymer Journal*, 112 (2019) 161-169, **IF 3.54**
141. Fabrication and characterization of ZnO-TiO₂-PANI (ZTP) micro/nanoballs for the detection of flammable and toxic gases, Rakesh K Sonker, [B.C. Yadav](#), Vinay Gupta, Monika Tomar, *Journal of Hazardous Materials*, <https://doi.org/10.1016/j.jhazmat.2018.10.016>, 2018 **IF 6.434**
140. Green synthesis of iron nanoparticle from extract of waste tea: An application for phenol red removal from aqueous solution, A Gautam, S Rawat, J Singh, S Sikarwar, [B.C. Yadav](#), AS Kalamdhad, *Environmental Nanotechnology, Monitoring & Management*, 10 (2018) 377–387 **IF 1.46**
139. Room-Temperature Gas Sensing Properties of Nanocrystalline-Structured Indium-Substituted Copper Ferrite Thin Film, V. Manikandan, Monika Singh, [B.C. Yadav](#), and S. Vigneselvan, *Journal of Electronic Materials*, <https://doi.org/10.1007/s11664-018-6543-8>, 2018.
138. Spherical growth of nanostructures ZnO based optical sensing and photovoltaic application
Rakesh K. Sonker, S. Sikarwar, S.R. Sabhajeet, Rahul, [B.C. Yadav](#), *Optical Materials* 83 (2018) 342–347, **IF = 2.320**
137. Synthesis and investigation of cubical shaped barium titanate and its application as opto-electronic humidity sensor, Samiksha Sikarwar, Rakesh K. Sonker, Anuj Shukla, [B. C. Yadav](#), *Journal of Materials Science: Materials in Electronics*, *in press* 2018, **IF 1.56**
136. Synthesis and Characterization of Nanostructured MnO₂-CoO and its relevance as opto-electronic humidity sensing device, Samiksha Sikarwar, [B. C. Yadav](#), G.I. Dzhardimalieva, N.D. Golubeva and Pankaj Srivastava, *RSC Advances*, 2018, **8**, 20534 - 20542, **IF= 3.108**
135. Nanostructured spherical-shaped Sc(III) Polyacrylate for monitoring the moisture level
Samiksha Sikarwar, Arun Kumar, [B. C. Yadav](#), G.I. Dzhardimalieva, *IEEE Sensors Journal* 18 (11), 4384 – 4391, 2018. **IF= 2.617**
134. Effect of ambient gas on the nanomechanical properties of amorphous carbon embedded with nanocrystallites deposited using filtered anodic jet carbon arc technique, Ravi Kant Tripathi, O. S. Panwar, Ishpal Rawal, A. K. Srivastava and [B. C. Yadav](#), *Journal of the Taiwan Institute of Chemical Engineers*, 86, 185–191, 2018, **IF= 4.217**

133. State of Art: An Approach to the Synthesis of Pure and Doped Graphene, U Kumar, [B. C. Yadav](#), *Advance Science, Engineering & Medicine*, ASP, USA 10 (07), 638-643, 2018.
132. Carbon Nanotubes Based Thin Films as Opto-Electronic Moisture Sensor Ekta Singh, U. Kumar, R.Srivastava, [B. C. Yadav](#), *Advance Science Engineering & Medicine*, ASP, USA, 10 (7/8), 790-792, 2018.
131. An Overview on the Importance of Chemical Vapour Deposition Technique for Graphene Synthesis, K Kumar and [B. C. Yadav](#), *Advance Science, Engineering & Medicine*, ASP, USA, 10 (7/8), 765-768, 2018.
130. Kinetics of new thermal donors (NTDs) in CZ-silicon based on FTIR analysis, R Singh, S Singh, [B. C. Yadav](#), *AIP Conference Proceedings* 1953 (1), 050072, 2018.
129. Sol-gel formed spherical nanostructured titania based liquefied petroleum gas sensor SR Sabhajeet, [B. C. Yadav](#), RK Sonker, *AIP Conference Proceedings* 1953 (1), 030078, 2018.
128. Preparation of Zinc (II) Nitrate Poly Acryl Amide (PAAm) and its optoelectronic application for humidity sensing, [B. C. Yadav](#), Samiksha Sikarwar, R. Yadav, P. Chaudhary, G.I. Dzhardimalieva, Nina D. Golubeva, *Journal of Materials Science: Materials in Electronics*, Feb. 2018, 29 (9), 7770-7777, **IF 1.56**
127. Fabrication of Tin substituted Nickel Ferrite (Sn-NiFe₂O₄) Thin film and its application as humidity sensor, V. Manikandan, Samiksha Sikarwar, [B. C. Yadav](#), R.S. Mane, *Sensor Actuator A: Physical*, 272, 267-273, January, 2018, **I.F.= 2.79**
125. An in-situ thin film based Carbon Nanotubes as Moisture sensors to enhance the detection power of Humidity level in Trades, Ekta Singh, Utkarsh Kumar, Richa Srivastava, [B. C. Yadav](#), in press, *Journal of Advanced Science, Medicine & Engineering*, ASP, USA, 2018.
126. Investigation on Polyvinyl Alcohol (PVA)-Polypyrrole (PPY) Nanocomposite for Opto-Electronic Humidity Sensing Application, Anamika D. Katheria, Richa Srivastava, Ravindra Kumar and [B. C. Yadav](#), *Journal of Advanced Science, Medicine & Engineering*, 10 (7/8), 689-694, 2018, ASP, USA.
124. Zn-doped TiO₂ nanoparticles employed as room temperature Liquefied Petroleum Gas Sensor, S. R. Sabhajeet, Rakesh K. Sonker, [B. C. Yadav](#), *Journal of Advanced Science, Medicine & Engineering*, 10 (7/8), 741-745, 2018, ASP, USA.
123. Synthesis of Titanium Dioxide (TiO₂) via Sol-gel method & Fabrication of Dye-sensitized Solar Cell, Shikha Srivastava, S.P. Goutam, Richa Srivastava, A.K. Yadav, [B. C. Yadav](#), *Journal of Advanced Science, Medicine & Engineering*, 10 (7/8), 695-699, 2018, ASP, USA.
122. Design and development of lab model of piezo-optic sensor for Structural Health Monitoring, Samiksha Sikarwar, Shakti Singh, Satyendra, Richa Srivastava, [B.C. Yadav](#), V.V. Tyagi, *Smart Materials and Structures*, 26 (2017) 105047, Springer, **IF= 2.99**.
121. Synthesis and characterization of copper (II) nitrate polyacrylamide & its application as opto-electronic humidity sensor, Priyanka Chaudhary, Samiksha Sikarwar, B.C. Yadav, G.I. Dzhardimalieva, Nina D. Golubeva, Igor E. Uflyan, *Sensors and Actuators A* 263 (2017) 415–

422. IF= 2.79

120. Preparation of PANI doped TiO₂ nanocomposite thin film and its relevance as room temperature liquefied petroleum gas sensor, Rakesh K. Sonker, [B. C. Yadav](#), S.R. Sabhajeet, *Mater Sci: Mater Electron*, (2017) 1-5, DOI 10.1007/s10854-017-7309-4.
119. Effect of nitrogen and carbon in the formation of shallow thermal donors in cz-silicon, Rajeev Singh, Shyam Singh, [B. C. Yadav](#), *International Journal of Materials Science*, Volume 12, Number 1 (2017) **81-84**. ISSN 0973-4589
118. Development of Fe₂O₃-PANI nanocomposite thin film based sensor for NO₂ detection, Rakesh K. Sonker, [B. C. Yadav](#), *Journal of the Taiwan Institute of Chemical Engineers*, 77 (2017) 276–281. **IF= 4.217**.
117. Electrical Behaviour of Chitosan-Silver Nanocomposite in Presence of Water Vapour, [B. C. Yadav](#), R. Kumar, Subhasis Chaudhuri and P. Pramanik, *J. Water Environ. Nanotechnol.*, 2(2): 71-79, Spring 2017.
116. Detection of liquefied petroleum gas below lowest explosion limit (LEL) using nanostructured hexagonal strontium ferrite thin film, Monika Singh, [B.C. Yadav](#), Ashok Ranjan, Rakesh K. Sonker, Manmeet Kaur, *Sensors and Actuators B:Chem.* 249 (2017) 96–104. **IF= 5.401**.
115. Growth and characterization of sol-gel processed rectangular shaped nanostructured ferric oxide thin film followed by humidity and gas sensing, [B. C. Yadav](#), K. S. Chauhan, S. Singh, R.K. Sonker, S. Sikarwar and R. Kumar, *Journal of Materials Science: Materials in Electronics*, April 2017, Volume 28, Issue 7, pp 5270–5280, **IF 1.56**
114. Synthesis and characterization of perovskite barium titanate thin film and its application as LPG sensor, Monika Singh, [B. C. Yadav](#), Ashok Ranjan, Manmeet Kaur, S.K. Gupta, *Sensors & Actuators: B. Chemical*, Volume 233, (2017) 1170-1178, **IF= 5.401**.
113. Preparation and Properties of Nanostructured PANI Thin Film and Its Application as Low Temperature NO₂ Sensor, Rakesh K. Sonker, [B. C. Yadav](#), G. I. Dzhardimalieva, *J Inorg Organomet Polym* (2016) 26:1428-1433, DOI 10.1007/s10904-016-0439-y. **IF = 1.308**
112. A comparative LPG sensing study of bulk titanium oxide and nanostructured titanium oxide, Anuradha Yadav and [B. C. Yadav](#), *Science and Engineering Applications* 1(5) (2016) 58-63 **ISSN-2456-2793(Online)**.
111. MWCNT Doped ZnO Nanocomposite Thin Film as LPG Sensing, Rakesh K. Sonker, Monika Singh, Utkarsh Kumar, [B. C. Yadav](#), *J Inorg Organomet Polym* (2016) 26:1434-1440 DOI 10.1007/s10904-016-0442-3. **IF = 1.308**
110. Synthesis and porous h-BN 3D architectures for effective humidity and gas sensors, Chandkiram Gautam, Chandra Sekhar Tiwary, Leonardo D. Machado, Sujin Jose, Sehmus Ozden, Santoshkumar Biradar, Douglas S. Galvao, Rakesh K. Sonker, [B. C. Yadav](#), Robert Vajtai and P. M. Ajayan, *RSC Advances*, Royal Society of Chemistry, **Elsevier**, 2016, **6**, 87888-87896, **DOI: 10.1039/C6RA18833H IF = 3.289**
109. Synthesis, characterization of Nickel Ferrite and its uses as Humidity & LPG sensors, Richa Srivastava, [B. C. Yadav](#), Monika Singh and T. P. Yadav, *Journal of Inorganic and Organometallic Polymers and Materials*, 26,6; 1428-1433, 2016, DOI 10.1007/s10904-016-0425-4, **IF = 1.308**
108. Synthesis of ZnO/CNTs nanocomposite thin film and its sensing, Rakesh K. Sonker, [B. C.](#)

[Yadav](#), *International Journal on Applied Bioengineering*, Vol 10, Issue 1, January 2016.

107. Fabrication of Polyaniline (PANI) - Tungsten oxide (WO₃) composite for humidity sensing application, R. Kumar, [B. C. Yadav](#), *Inorg Organomet Polym* (2016) 26:1421–1427, DOI 10.1007/s10904-016-0412-9. **IF = 1.308**
106. TiO₂-PANI nanocomposite thin film prepared by spin coating technique working as room temperature CO₂ gas sensing, Rakesh K. Sonker, S. R. Sabhajeet, [B. C. Yadav](#), *Journal of Materials Science Materials in Electronics*, (2016) 27:11726-11732, DOI:10.1007/s10854-016-5310-y, **IF 1.56**
105. Experimental investigations on NO₂ sensing of PANI-ZnO composite thin films, R K Sonker, [B. C. Yadav](#), A. Sharma, M. Tomar, V Gupta, *RSC Advances*, Royal Society of Chemistry, Elsevier, 2016. Issue 61, **6**, 56149-56158, DOI: 10.1039/C6RA07103A. **IF=3.289**
104. Low temperature study of nanostructured Fe₂O₃ thin films as NO₂ sensor, Rakesh K. Sonker and [B. C. Yadav](#), *Materials Today: Proceedings*, Recent Advances In Nano Science And Technology 2015, Volume 3, Issue 6, 2016, Pages 2315-2320.
103. Experimental Investigations on Solid State LPG Sensor Using ZnFe₂O₄ Nanocomposite Prepared by Co-Precipitation Method, Anuradha Yadav and [B. C. Yadav](#), *Journal of Materials Science and Engineering B* 5 (11-12) (2015) 435-445, doi: 10.17265/2161-6221/2015.11-12.004,
102. Preparation and characterization of nanocrystalline nickel ferrite thin films for development of a gas sensor at room temperature, Archana Singh, Ajendra Singh, Satyendra Singh, Poonam Tandon, [B. C. Yadav](#), *J Mater Sci: Mater Electron*, August 2016, Volume 27, [Issue 8](#), pp 8047–8054, DOI:10.1007/s10854-016-4802-0. **IF 1.56**
101. Fabrication and characterization of nanostructured (Sn–Ti)O₂ pellets and films for liquefied petroleum gas sensing, [B. C. Yadav](#), Nidhi Verma, Tripti Shukla, Satyendra Singh, S. R. Sabhajeet, *J Mater Sci: Mater Electron*, *J Mater Sci: Mater Electron* (2016) 27:7852–7863. **IF 1.56**
100. Fabrication of nanostructured yttria stabilized zirconia multilayered films and their optical humidity sensing capabilities based on transmission, Samiksha Sikarwar, [B. C. Yadav](#), Satyendra Singh, G. I. Dzhardimalieva, S.I. Pomogailo, Nina D. Golubeva and Anatolii D. Pomogailo, *Sensors & Actuators B: Chemical*, Volume 232, 2016, Pages 283–291, **IF= 5.401**
99. Fabrication and characterization of nanostructured indium tin oxide film and its application as humidity and gas sensors, [B. C. Yadav](#), Kaushlendra Agrahari, Satyendra Singh and T.P. Yadav, *Journal of Materials Science: Materials in Electronics*, May 2016, Volume 27, [Issue 5](#), pp 4172–4179, DOI 10.1007/s10854-016-4279-x, 2016, Elsevier Publication. **IF 1.569**
98. Humidity Sensing Investigation on Nanostructured Polyaniline Synthesized via Chemical Polymerization Method, Ravindra Kumar and [B. C. Yadav](#), *Materials Letter*, 167 (2016) 300-302, Elsevier Publication. **IF 2.489**
97. Synthesis, Characterization and Development of Opto-Electronic Humidity Sensor using Copper Oxide Thin Film, [B. C. Yadav](#), Samiksha Sikarwar, Abhisikta Bhadiri and P. Kumar, *International Advanced Research Journal in Science, Engineering and Technology*, Volume 2, Issue 11, November 2015, pp.105-109. **IF=3.943**
96. Growth mechanism of hexagonal ZnO nanocrystals and their sensing application, Rakesh K. Sonker and [B. C. Yadav](#), *Materials Letter*, 160,581-584, 2015, Elsevier Publication. **IF 2.489**
95. Synthesis of ZnO nanoflower and its application as NO₂ gas sensor, R. K. Sonker, S. R. Sabhajeet,

- Satyendra Singh and [B.C. Yadav](#), *Materials Letter*, 152, 189-191, 2015, Elsevier Publication. **IF 2.489**
94. Physics and Technology of Humidity Sensing through a Solid State Pellet of Cerium Oxide, Monika Singh and [B.C. Yadav](#), *Sensors & Transducers*, Vol. 186, Issue 3, March 2015, pp. 140-147, IFSA, **IF=0.75**
93. VO₂ nanorods for efficient performance in thermal fluids and sensors, Kajal Kumar Dey, Divyanshu Bhatnagar, Avanish Kumar Srivastava, Meher Wan, Satyendra Singh, Raja Ram Yadav, [Bal Chandra Yadav](#) and Melepurath Deepa, *Nanoscale*, Royal Society of America, 2015,7, 6159-6172. DOI: 10.1039/C4NR06032F. **IF 7.760**
92. Fabrication of novel Cu/Pd bimetallic nanostructures with high gas sorption ability towards development of LPG sensor, Aashit Kumar Jaiswal, Satyendra Singh, Archana Singh, R.R. Yadav, Poonam Tandon and [B. C. Yadav](#), *Materials Chemistry Physics*, published online from 17th January for Vol.154, 2015. **IF 2.129**
91. Titania Prepared by Ball Milling: Its Characterization and Application as Liquefied Petroleum Gas Sensor, [B.C. Yadav](#), Satyendra Singh and T.P. Yadav, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, 45, 487-494 (2015). **IF= 0.493**
90. Frontal polymerization of acrylamide complex with nanostructured ZnS and PbS: their characterizations and sensing applications, Satyendra Singh, Archana Singh, [B.C. Yadav](#), Poonam Tandon, Subodh Kumar, R.R. Yadav, Svetlana I. Pomogailo, Gulzhian I. Dzhardimalieva and Anatolii D. Pomogailo, *Sensors & Actuators B: Chemical*, 207 (2015) 460-469. **IF= 5.401**
89. Synthesis, characterization and performance of zinc ferrite nanorods for room temperature sensing applications, Archana Singh, Ajendra Singh, Satyendra Singh, Poonam Tandon, [B.C. Yadav](#), R.R. Yadav, *Journal of Alloys and Compounds*, 618 (2015) 475–483. **IF 2.999**
88. Synthesis, characterization, magnetic measurements and liquefied petroleum gas sensing properties of nanostructured cobalt ferrite and ferric oxide, Satyendra Singh, Archana Singh, [B.C. Yadav](#), Poonam Tandon, *Materials Science in Semiconductor Processing*, Volume 23, (2014) 122–135. **IF=2.41**
87. Synthesis, characterization, magnetic properties and gas sensing applications of Zn_xCu_{1-x}Fe₂O₄ (0.0≤x≤0.8) nanocomposites, Archana Singh, Satyendra Singh, B.D. Joshi, Anuj Shukla, [B. C. Yadav](#) and Poonam Tandon, *Materials Science in Semiconductor Processing*, DOI:10.1016/j.mssp.2014.08.029, ISSN-Electronic: 13698001, Published: 11/01/2014, Vol: 27, 934-950. **IF=2.41**
86. Structural analysis of nanostructured iron antimonate by experimental and quantum chemical simulation and its LPG sensing, Satyendra Singh, Vineet Gupta, [B.C. Yadav](#), Poonam Tandon, Akhilesh Kumar Singh, *Sensors and Actuators B: Chemical*, 195 (2014) 373–381. **IF= 5.401**
85. Humidity Sensor Based on NiFe₂O₄-Fe₂O₃ Nanocomposite, Richa Srivastava, [B.C. Yadav](#), *Journal of Science and Technology Research*, Vol. 3, No. 2, Dec 2013, 43-45.
84. Fabrication of self-assembled hierarchical flowerlike zinc stannate thin film and its application as liquefied petroleum gas sensor, Satyendra Singh, Archana Singh, Meher Wan, R.R. Yadav, Poonam Tandon, S.S.A. Rasool, [B.C. Yadav](#), *Sensors and Actuators B:Chem.* 205 (2014) 102–110. **IF= 5.401**
83. Nanocatalyst (Pt, Ag and CuO) Doped SnO₂ Thin Film Based Sensors for Low Temperature Detection of NO₂ Gas, Rakesh Kumar Sonker, Anjali Sharma, Monika Tomar, [B. C. Yadav](#) and

- Vinay Gupta, *Adv. Sci. Lett.* 20, 1374-1377 (2014). **IF=1.25**
82. Chemical Route Deposited SnO₂, SnO₂-Pt and SnO₂-Pd Thin Films for LPG Detection, Rakesh Kumar Sonker and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 1023-1027(2014). **IF=1.25**
81. Synthesis and Characterization of Nanostructured Cobalt Zincate and Its Application as LPG Sensor, Anuradha Yadav and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 939-945 (2014). **IF=1.25**
80. Synthesis of Copper Titanate Nanocomposite via Sol-Gel Method and Its Application as Liquefied Petroleum Gas Sensor, Nidhi Verma and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 933-938 (2014). **IF=1.25**
79. Nanostructured Zinc Ferrite as Electrical and Optoelectronic Humidity Sensors, Richa Srivastava, Nidhi Verma, and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 917-922 (2014) **IF=1.25**
78. Low Temperature Operated NO₂ Gas Sensor Based on SnO₂-ZnO Nanocomposite Thin Film, Rakesh Kumar Sonker, Anjali Sharma, Monika Tomar, Vinay Gupta, and [B.C. Yadav](#), *Adv. Sci. Lett.* 20, 911-916 (2014). **IF=1.25**
77. Synthesis and Characterization of Copper Doped Tin Oxide for Humidity Sensing Applications, Rama Singh and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 895-902 (2014). **IF=1.25**
76. Humidity Sensing Investigations on Nanostructured Antimony-Substituted Tin Oxide Nanoparticles, Rama Singh, Satyendra Singh, Richa Srivastava, Akhilesh Mishra, and [B. C. Yadav](#), *Adv. Sci. Lett.* 20, 887-894 (2014). **IF=1.25**
75. Polymer Matrix Nanocomposite Gas Sensing Materials, D. A. Pomogailo, S. Singh, M. Singh, [B. C. Yadav](#), P. Tandon, S. I. Pomogailo, G. I. Dzhardimalieva, and K.A. Kydralieva, ISSN 0020_1685, *Inorganic Materials*, 2014, Vol. 50, No. 3, pp. 296–305. **IF=0.567**
74. Nanostructured Zinc Ferrite thick film as room temperature liquefied petroleum gas sensor, Richa Srivastava and [B.C. Yadav](#), *Journal of Experimental Nanoscience* 02/2014; Vol. 10, No.9, 1-15, <http://dx.doi.org/10.1080/17458080.2013.880001>, **IF= 0.832**
73. Synthesis and characterization of CuO-SnO₂ nanocomposite and its application as liquefied petroleum gas sensor, Satyendra Singh, Nidhi Verma, Archana Singh, [B. C. Yadav](#), *Materials Science in Semiconductor Processing*, 18C (2014), pp.88-96, DOI information: 10.1016/j.mssp.2013.11.002, **IF=2.41**
72. Synthesis, characterization and liquefied petroleum gas sensing of cobalt acetylenedi carboxylate and its polymer, Satyendra Singh, Archana Singh, [B.C. Yadav](#), Poonam Tandon, Anuj Shukla, Vitaly A. Shershnev, Gulzhian I. Dzhardimalieva, Nina D. Golubeva, Anatolii D. Pomogailo, *Sensors and Actuators B: Chemical*, Volume 192, 1 March 2014, Pages 503–511. **IF= 5.401**
71. Fabrication of iron titanium oxide thin film and its application as opto-electronic humidity and liquefied petroleum gas sensors, Nidhi Verma, Satyendra Singh, [B.C. Yadav](#), *Optics and Laser Technology*, 57 (2014) 181–188. **IF=2.10**
70. Microstructural, optical and electrical investigations of Sb-SnO₂ thin films deposited by spray pyrolysis, Sushant Gupta, [B.C. Yadav](#), P.K. Dwivedi and B. Das, *Materials Research Bulletin*, 48 (2013), pp. 3315-3322 (ISSN: 0025-5408, Elsevier, U.S.A.). **IF= 2.493**
69. Nanostructured cobalt oxide and cobalt titanate thin films as optical humidity sensor: a new

- approach, [B. C. Yadav](#), R.C. Yadav, Satyendra Singh, P.K. Dwivedi, Hojin Ryu and Sukmin Kang, *Optics and Laser Technology*, 49 (2013) 68-74. **IF=2.10**
68. Fabrication of nanobeads structured perovskite type neodymium iron oxide film: its structural, optical, electrical and LPG sensing investigations, Satyendra Singh, Archana Singh, [B.C. Yadav](#) and Prabhat K. Dwivedi, *Sensors & Actuators B: Chemical*, 177 (2013) 730–739, DOI:10.1016/j.snb.2012.11.096. **IF= 5.401**
67. Nanocrystalline zinc titanate synthesized via physicochemical route and its application as liquefied petroleum gas sensor, [B.C. Yadav](#), Anuradha Yadav, Satyendra Singh and Kaman Singh, *Sensors & Actuators B: Chemical*, Volume 177, February 2013, Pages 605–611, DOI: 10.1016/j.snb.2012.11.045. **IF= 5.401**
66. Electrical conductivity of cuprous bromide in the temperature range of 30-490 °C, Kaman Singh, [B.C. Yadav](#) & Vimallesh Kumar Singh, *Indian Journal of Chemistry*, Vol. 51A, August 2012, pp. 1090-1094. **IF=0.729**
65. Effect of nanostructured zinc oxide additives on the humidity and temperature sensing properties of cuprous oxide, [B.C. Yadav](#), A.K. Yadav and Anurodh Kumar, *International Journal of Green Nanotechnology*, Volume 4, Issue 3, 2012, pp. 345-353, DOI:10.1080/19430892.2012.706191.
64. Humidity sensor based on nanostructured ferric oxide thick film, Richa Srivastava, Satyendra Singh, [B. C. Yadav](#), *International Journal of Green Nanotechnology*, Volume 4, Issue 3, 2012, pages 215-218, DOI:10.1080/19430892.2012.706021.
63. Investigations on effects of surface morphologies on response of LPG sensor based on nanostructured copper ferrites synthesized in various molar ratios, Satyendra Singh, [B. C. Yadav](#), V.D. Gupta and Prabhat K. Dwivedi, *Materials Research Bulletin*, 47 (2012)3538–3547, ISSN: 0025-5408, Elsevier (U.S.A.). **IF=1.72**
62. Nanostructured ZnO, ZnO-TiO₂ and ZnO-Nb₂O₅ as solid state humidity sensor, Richa Srivastava and [B. C. Yadav](#), *Advanced Materials Letters*, 2012 3(3) DOI: 10.5185/amlett.2012.4330 (ISSN : 0976-3961, VBRI Press, Sweden). **IF=1.52**
61. A comparative study on surface morphological investigations of ferric oxide for LPG and opto-electronic humidity sensors, Satyendra Singh, Nidhi Verma, [B. C. Yadav](#) and Rajiv Prakash, *Applied Surface Science*, Vol. 258 (2012) pp. 8780-8789, DOI:10.1016/j.apsusc.2012.05.091 (ISSN: 0169-4332, Elsevier, U.S.A.). **IF=4.5**
60. Experimental investigations on barium titanate nanocomposite thin films as an opto-electronic humidity sensor, Nidhi Verma, Satyendra Singh and [B. C. Yadav](#), *Journal of Experimental Nanoscience*, Manuscript ID: 68943, 2012, 1-9. (ISSN: 1943-0876, Taylor & Francis, Britain)
59. Synthesis of nanostructured iron-antimonate and its application in liquefied petroleum gas sensor, Satyendra Singh, [B. C. Yadav](#), Archana Singh, Prabhat K. Dwivedi, *Advanced Materials Letters*, (2012) 3(2), 154-160 (ISSN : 0976-3961, VBRI Press, Sweden). **IF=1.52**
58. Synthesis and Characterization of 20% Pt-Fe/C Alloy as a Cathode Catalyst for Oxygen Reduction Reaction PEMFCs, Sukmin Kang, Sungyeol Yoo, Jina Lee, Bonghyun Boo, [Bal Chandra Yadav](#) and Hojin Ryu, *Journal of New Materials for Electrochemical Systems*, 15, 241-247 (2012) (ISSN: 14802422, Ecole Polytechnique de Montreal, Italy). **IF=1.1**

57. Polymer-assisted synthesis of metallopolymer nanocomposites and their applications in liquefied petroleum gas sensing at room temperature, Satyendra Singh, [B. C. Yadav](#), Poonam Tandon, Mridula Singh, Anuj Shukla, Gulzhian I Dzhardimalieva, Svetlana I Pomogailo, Nina D Pomogailo, Anatolii D Pomogailo, *Sensor and Actuators B:Chemical*, 166–167 (2012) 281–291; (ISSN: 0925-4005, Elsevier, U.S.A.). **IF= 5.401**
56. Nanocrystalline SnO₂-TiO₂ thin film deposited on base of equilateral prism as an opto-electronic humidity sensor, [B. C. Yadav](#), Nidhi Verma and Satyendra Singh, *Optics & Laser Technology*, 44 (2012) 1681–1688 (ISSN: 0030-3992, Elsevier, U.S.A.). **IF=2.10**
55. Humidity Sensing Investigations on Nanostructured Zinc Stannate Synthesized via Chemical Precipitation Method, [B. C. Yadav](#), Rama Singh, Satyendra Singh, Prabhat K. Dwivedi, *International Journal of Green Nanotechnology: Materials Science and Engineering*, 4:1–9, 2012 (ISSN: 1943-0876, Taylor & Francis, Britain).
54. A mechanochemical synthesis of nanostructured zinc oxide via acetate route for LPG sensing, Anuradha Yadav and [B. C. Yadav](#), *Journal of Experimental Nanoscience*, Vol. 9, Issue 5 (2014), 501-511 (Taylor & Francis, Britain). DOI:10.1080/17458080.2012.671541 **IF=0.856**
53. Optical Humidity Sensing Properties of Nanocrystalline SnO₂-TiO₂ Thin Film, [B. C. Yadav](#), Nidhi Verma, Rama Singh, Satyendra Singh and Vachaspati Srivastava, *Lucknow Journal of Science*, Vol. 8, No. 1, 230-234, 2011.
52. Measurement of the Hall Effect in a CuBr Pellet, Kaman Singh, Vimallesh Kumar Singh and [B. C. Yadav](#), *International Journal of Chemical and Analytical Science*, 2011, 2(8), 136-141, ISSN: 0976-1206. **IF=1.52**
51. Electrical Conductivity of CuBr in the Temperature Range 30-490oC, 51. Kaman Singh, [B. C. Yadav](#) and Vimallesh Kumar Singh, *Int. J. Chem. Sci.:* 9(4), 2011, 1577-1586, ISSN 0972-768X. **IF=1.52**
50. Morphological, Humidity and Liquefied Petroleum Gas (LPG) Sensing Investigations on Tantalum Oxide, Ritesh Kumar, [B. C. Yadav](#), Tripti Shukla, Rajeev Singh and Shyam Singh, *Sensors & Transducers Journal*, Vol. 135, Issue 12, December 2011, pp. 98-109(ISSN: 1726-5479, IFSA, Belgium). **IF=0.756**
49. Investigations on humidity sensing of nanostructured tin oxide synthesized via mechanochemical method, [B. C. Yadav](#), Rama Singh and Satyendra Singh, *Journal of Experimental Nanoscience*, 2011, TJEN-2011-0045, 1-14.(Taylor & Francis, Britain). **IF=0.856**
48. An Insight in the formation of Thermal Donor in CZ Silicon, Shyam Singh, Rajeev Singh and [B. C. Yadav](#), *J. Optoelectronic Adv. Mater-Rapid Comm.* 5 Vol. 5, No. 11, (2011), 1252-1255 (ISSN: 1454-4164, National Institute of Research and Development for Optoelectronics). **IF=0.52**
47. Solid State Titania based Gas Sensor for Liquefied Petroleum Gas Detection at Room Temperature, [B. C. Yadav](#), Anuradha Yadav, Tripti Shukla and Satyendra Singh, *Bulletin of Materials Science*, Vol. 34, No. 7, December 2011, pp. 1–6. © **Indian Academy of Sciences.** **IF=1.2**
46. Synthesis of TiO₂-Nb₂O₅ and TiO₂-CuO Nano co-oxides and Their Application as Solid State Humidity Sensors, [B. C. Yadav](#), Amit K. Srivastava and P.K. Khanna, *International Journal of*

- Green Nanotechnology: Physics and Chemistry*, 3(03), pp. 160 - 169. DOI: 10.1080/19430892.2011.628578 (ISSN: 1943-0876, Taylor & Francis, Britain).
45. Flame Synthesis of Carbon Nanotubes using Camphor and its Characterization, [B.C. Yadav](#), Ritesh Kumar, Richa Srivastava and Tripti Shukla, *International Journal of Green Nanotechnology: Materials Science and Engineering*, 3 (03) 170-179, DOI: 10.1080/19430892.2011.628579 (ISSN: 1943-0876, Taylor & Francis, Britain).
 44. Experimental investigations on liquefied petroleum gas sensing of Cd(NO₃)₂·(AAM)₄·2H₂O and CdS/polyacrylamide synthesized via frontal polymerization, Satyendra Singh, Mridula Singh, [B.C. Yadav](#), Poonam Tandon, Svetlana I. Pomogailo, Gulzhian I. Dzhardimalieva, Anatolii D. Pomogailo, *Sensor and Actuators B: Chemical* 160 (2011) 826– 834; (ISSN: 0925-4005, Elsevier, U.S.A.). **IF= 5.401**
 43. Experimental investigation on moisture sensing behavior of La₂O₃ with La(OH)₃ at nano scale, [B.C. Yadav](#), Monika Singh, Richa Srivastava and C.D. Dwivedi, *International Journal of Green Nanotechnology: Physics and Chemistry*, 3(02) 98 - 108. DOI: 10.1080/19430892.2011.574566, (ISSN: 1943-0876, Taylor & Francis, Britain).
 42. Synthesis and Characterization of ZnO/ZnNb₂O₆ Nanocomposite and its Application as Humidity and LPG Sensor, [B.C. Yadav](#), Richa Srivastava, Anuradha Yadav and Tripti Shukla, *International Journal of Green Nanotechnology: Physics and Chemistry*, Vol. 3, 56 -71, 2011, (ISSN: 1943-0876 Taylor & Francis, Britain).
 41. Synthesis of nanorods and mixed shaped copper ferrite and their applications as liquefied petroleum gas sensor, Satyendra Singh, [B.C. Yadav](#), Rajiv Prakash, Bharat Bajaj and Jae Rock lee, *Applied Surface Science*, Vol. 257 (2011) 10763–10770 (ISSN: 0169-4332, Elsevier, U.S.A.). **IF=3.15**
 40. Synthesis of Nanostructured Cobalt Titanate and its application as Liquefied Petroleum Gas Sensor at Room Temperature, Tripti Shukla, [B.C. Yadav](#), and Poonam Tandon, *Sensor Letters*, Vol. 9, Issue 2 (2011) 533-540 (ISSN:1546-198X, American Scientific Publishers, U.S.A.).
 39. Optical Characterization and Humidity Sensing Properties of Praseodymium Oxide [B.C. Yadav](#), Monika Singh and C.D. Dwivedi, *Sensors & Transducers Journal* (ISSN: 1726-5479, IFSA, Belgium), Vol.125, 2011, 68-75. **IF=0.756**
 38. Nanonails structured ferric oxide thick film as room temperature liquefied petroleum gas (LPG) sensor, [B.C. Yadav](#), Satyendra Singh and Anuradha Yadav, *Applied Surface Science*, 257 (2011) 1960–1966 (ISSN: 0169-4332, Elsevier, U.S.A.). **IF=3.15**
 37. Morphological and Humidity Sensing Characteristics of SnO₂-CuO, SnO₂-Fe₂O₃ and SnO₂-SbO₂ nanoco-oxides, [B.C. Yadav](#), Preeti Sharma and P.K. Khanna, *Bulletin of Materials Science*, Vol.34, Suppl.1(2011) 1-10, (Springer& MRSI, India). **IF=1.15**
 36. Experimental investigations on nano-sized ferric oxide and its LPG sensing, [B.C. Yadav](#), Satyendra Singh, Anuradha Yadav and Tripti Shukla, *International Journal of Nanoscience*, Vol. 10, No. 1 (2011) 1-5 (World Scientific Publishing Company). **IF=0.502**
 35. Sol-gel processed (Mg-Zn-Ti) oxide nano-composite film deposited on Prism base as an Opto-Electronic Humidity Sensor, [B.C. Yadav](#), Ramesh C. Yadav, and Prabhat K. Dwivedi, *Sensors & Actuators B: Chemical*, Vol.148, 413-419, 2010(ISSN: 0925-4005, Elsevier, U.S.A.). **IF= 5.401**

34. Morphological and humidity sensing investigations on niobium, neodymium and lanthanum oxides, [B. C. Yadav](#) and Monika Singh, *IEEE Sensor Journal*, 1530-437X (2010) (IEEE,U.S.A.). **IF= 2.617**
33. Experimental Investigations on Solid State Conductivity of Cobaltzincate nanocomposite for Liquefied Petroleum Gas Sensing, [B. C. Yadav](#), Anuradha Yadav, Tripti Shukla and Satyendra Singh, *Sensor Letters*, 1-5, Vol.7, No.5, 2009; (ISSN:1546-198X,American Scientific Publishers, U.S.A.). **IF=0.85**
31. Humidity sensing properties of TiO₂-Sb₂O₅ nanocomposite, A.K. Srivastava and [B. C. Yadav](#), *Materials Science-Poland*, Vol. 28, No. 2, 2010, 493-504. **IF= 1.0**
32. Synthesis and Optical properties of anatase TiO₂ nano-particles in commercial PMMA: A green approach for wider acceptability?, Priyesh More, Ritesh Kumar, [B. C. Yadav](#), P.K. Khanna, *International Journal of Green Nanotechnology: Materials Science & Engineering*, 1:M3–M10, 2009(ISSN: 1943-0841, Taylor & Francis, Britain).
30. Effect of Organic Chromophore on Nano-sized TiO₂: Optical properties and humidity sensing, Jagdish Jawalkar, Priyesh More, Shubhangi R. Damkale, Ritesh Kumar, [B. C. Yadav](#), A.K. Vishwanath, S.H. Sonawane and P.K. Khanna, *International Journal of Green Nanotechnology: Physics and Chemistry*, 1:P40–P50, 2009, (ISSN: 1943-0876,Taylor & Francis, Britain).
29. Synthesis of nanostructured cuprous oxide and its performance as Humidity and Temperature Sensor, [B. C. Yadav](#) and A.K. Yadav, *International Journal of Green Nanotechnology: Materials Science & Engineering*, 1(01), pp. 16 - 31. DOI: 10.1080/19430840902931541, 2009, (ISSN: 1943-0841, Taylor & Francis, Britain).
28. Synthesis of nanosized ZnO using drop wise method and its performance as moisture sensor, [B. C. Yadav](#), Richa Srivastava, C.D. Dwivedi and P. Pramanik, *Sensors and Actuators A: Physiscal*,137-141, **2009** (ISSN: 0924-4247153, Elsevier, U.S.A.). **IF=2.12**
27. Optical humidity sensing behaviour of sol-gel processed nanostructured ZnO films, [B. C. Yadav](#), R.C. Yadav, G.C. Dubey, *Optica-Applicata*, Issue 3, Vol. XXXIX, **2009**; (ISSN: 0078-5466, Institute of Physics Publishing, Wroclaw University of Technology, Poland). **IF= 0.493**
26. Experimental Investigations on Moisture Sensing of Neodymium Oxide, [B. C. Yadav](#), Richa Srivastava, Monika Singh and Alok Kumar, *Sensors & Materials, Japan*, Vol. 21, No. 2, 117-1252009, 2009; (ISSN: 0914-4935, MYU, Japan). **IF=1.15**
25. Nanostructured Zinc Oxide Synthesized via Hydroxide Route as Liquid Petroleum Gas Sensor, [B. C. Yadav](#), R. Srivastava and A. Yadav, *Sensors & Materials, Japan*, 87-94, Vol. 21, No. 2. 2009; (ISSN: 0914-4935, MYU, Japan). **IF=1.15**
24. Role of dimers and trimers in the formation of thermal donors in CZ-silicon, Shyam Singh, Rajeev Singh, [B. C. Yadav](#), *Physica B*, 1070-1073, 404, **2009**; (ISSN:0921-4526 Elsevier, U.S.A.). **IF=1.25**
23. LPG sensing of nanostructured zinc oxide and zincniobate, [B. C. Yadav](#), Richa Srivastava, Anuradha Yadav and Vachaspati Srivastava, *Sensor Letters*,714–718, Vol.6.No.5, **2008** (ISSN: 1546-198X, American Scientific Publishers, U.S.A.). **IF=0.85**
22. Role of nitrogen on formation of oxygen related donors in step annealed CZ-Silicon, S. Singh, [B. C. Yadav](#), R. Singh, *Journal of Optoelectronics and Advanced Materials*, 1522-1525, Vol.10,

No.6, June **2008**; (ISSN: 1454-4164, National Institute of Research and Development for Optoelectronics). **IF=1.25**

20. Moisture sensor based ZnO nanomaterial synthesized through oxalate route, [B. C. Yadav](#), Richa Srivastava, C.D. Dwivedi and P. Pramanik, Vol. 130, 2, *Sensors and Actuators B: Chemical*, 216-222, Vol.131, **2008**; (ISSN: 0925-4005, Elsevier, U.S.A.). **IF= 5.401**
21. Synthesis and characterization of ZnO-TiO₂ nano-composite and its application as humidity sensor, [B. C. Yadav](#), Richa Srivastava and C.D. Dwivedi, *Philosophical Magazine*, Vol. 88, No.7, Vol. 88, No. 7, 1 March **2008**; (ISSN: 1478-6443, Taylor & Francis, Britain). **IF=2.86**
19. Solid-state Conductivity of Sucrose and its Applications as Humidity and Temperature Sensors, A.K. Yadav, [B. C. Yadav](#) and Kaman Singh, *Sensors & Transducers Journal*, 66-73, Vol. 88, Issue 2, February **2008**, (ISSN: 1726-5479, IFSA, Belgium). **IF=0.756**
18. Synthesis of Antimony Doped Tin Oxide and its Use as Electrical Humidity Sensor, [B. C. Yadav](#), Preeti Sharma, Amit K. Srivastava and A.K. Yadav, *Sensors & Transducers Journal*, 99-107, Vol.92, Issue 5, May **2008**; (ISSN: 1726-5479,IFSA, Belgium). **IF=0.756**
17. Humidity Sensing Behavior of Niobium Oxide: Primitive Study, [B. C. Yadav](#), Richa Srivastava, M. Singh, R. Kumar and C.D. Dwivedi, *Sensors & Transducers Journal*,1765-1770, Vol.85, Issue 11, **2007**; (ISSN: 1726-5479, IFSA, Belgium). **IF=0.756**
16. Characterization of ZnO nanomaterial synthesized by different methods, [B. C. Yadav](#), Richa Srivastava and Alok Kumar, *International Journal of Nanotechnology and Applications*, 1–11, Volume 1 Number 2, **2007**(ISSN 0973631X, Research India Publications).
15. Resistance based humidity sensing properties of TiO₂, [B. C. Yadav](#), Amit K. Srivastava and Preeti Sharma, *Sensors & Transducers Journal*, 1348-1353, Vol.81, Issue 7, **2007**; (ISSN: 1726-5479,IFSA, Belgium). **IF=0.756**
14. Comparative Study of Moisture Sensing Properties of ZnO nanomaterials through hydroxide route by mixing Dropwise and Sudden, Richa Srivastava, [B. C. Yadav](#), C.D. Dwivedi and Ritesh Kumar, *Sensors & Transducers Journal*, 1295-1301, Vol.80, Issue 6, **2007**; (ISSN: 1726-5479, IFSA, Belgium). **IF=0.756**
13. Synthesis of ZnO nanorods and their application as Humidity Sensors, [B. C. Yadav](#), Richa Srivastava and C.D. Dwivedi, *Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry*,417-423, Vol.37, **2007**; Print ISSN: 1553-3174 (ISSN: 1553-3182,Taylor& Francis, Britain). **IF= 0.493**
12. Fibre Optic Pressure Sensor and monitoring of structural defects, N.K. Pandey, [B. C. Yadav](#), *Optica-Applicata*, 57-63, Vol. XXXVII, **2007**; ISSN: 0078-5466,(Institute of Physics, Wroclaw University of Technology, Poland). **IF= 1.1**
11. Sol-gel processed Titania films on prism substrates as an Optical Moisture Sensors, [B. C. Yadav](#), *Sensors & Transducers Journal*, 1217-1224, Vol.79, Issue 5, **2007**; (ISSN: 1726-5479, IFSA, Belgium). **IF= 0.756**
10. Study of Optical Humidity Sensing properties of TiO₂ and MgO films, [B. C. Yadav](#), N.K. Pandey, *Sensors & Transducers Journal*, 1127-1133, Vol.78, Issue 4, **2007**; ISSN: 1726-5479, (ISSN: 1726-5479, IFSA, Belgium). **IF= 0.756**

9. Study of Optical humidity sensor based on Titania Films fabricated by Sol-Gel and Thermal Evaporation Methods, [B. C. Yadav](#), N.K. Pandey, Amit K. Srivastava and Preeti Sharma, *Measurement in Science & Technology*, 1-5,18, **2007**. **IF= 1.492**
8. Monitoring of high pressure with Fiber Optic Sensor, N.K. Pandey, [B. C. Yadav](#), Anupam Tripathi, *Sensors & Transducers Journal*, 834-838, Vol.74, Issue12, **2006**; (ISSN: 1726-5479, IFSA, Belgium). **IF= 0.756**
7. Embedded Fibre Optic Microbend Sensor for measurement of high pressure and crack detection, N.K. Pandey, [B. C. Yadav](#), *Sensors and Actuators A: Physical*, 33-36, Vol.128, Issue 1, **2006**; (ISSN:0924-4247153, Elsevier, U.S.A.). **IF = 2.201**
8. Nano like Magnesium Oxide Films and its significance in optical fiber humidity sensor, S.K. Shukla, G.K. Parashar, Puneet Misra, [B. C. Yadav](#), R.K. Shukla, L.M. Bali and G.C. Dubey, *Sensors and Actuators B: Chemical*, 5-11, Vol.98 No.1, Issue 1, **2004**; ISSN:0925-4005(ISSN: 0925-4005, Elsevier, U.S.A.). **IF= 5.401**
5. Improved version of optical humidity sensor with incident light in the form of a conical beam, [B. C. Yadav](#), Anchal Srivastava, R.K. Shukla and G.C. Dubey, *Indian Journal of Pure and Applied Physics*, 694-699, Vol.44, **2006**; ISSN: 0019-5596(The Council of Scientific & Industrial Research, New Delhi, India). **IF=0.739**
4. Sol-Gel Processed TiO₂ films on U-shaped glass-rods as optical humidity sensor, [B. C. Yadav](#), R.K. Shukla and L.M. Bali, *Indian Journal of Pure and Applied Physics*, 51-55, Vol.43, **2005**; ISSN: 0019-5596(The Council of Scientific & Industrial Research, New Delhi, India). **IF=0.739**
3. Fiber Optical humidity sensor, [B.C. Yadav](#), R.K. Shukla and L.M. Bali, *Lucknow Journal of Science*, India, 21-23, Vol.1, No.2 January-March, **2004**; Print ISSN: 0974-8121 Online, ISSN: 0974-813X (Lucknow University Teacher's Academic Publication Society, India).
2. An Opto-Electronic Sensor to monitor Glucose concentration in water, [B. C. Yadav](#) and R.K. Shukla, *Journal of Optics*, 13-17, Vol.32 No.1, **2003**;ISSN: 0972-8821, (Optical Society of India). **IF= 0.40**
1. Titania Films Deposited by Thermal Evaporation as humidity sensor, [B. C. Yadav](#) and R.K. Shukla, *Indian Journal of Pure and Applied Physics*, 13-15, Vol.32, No.1, **2003**; ISSN: 0019-5596 (The Council of Scientific & Industrial Research, New Delhi, India). **IF = 0.739**

(A) List of Review Papers/Articles

18. State of art: an approach to the synthesis of pure and doped grapheme, Utkarsh Kumar and [B. C. Yadav](#), in press, *Journal of Advanced Science, Medicine & Engineering*, ASP, USA.
17. An overview on the Importance of Chemical Vapour Deposition technique for Graphene synthesis, Kuldeep Kumar, [B. C. Yadav](#), in press, *Journal of Advanced Science, Medicine & Engineering*, ASP, USA.
16. A Review on Pressure Sensor for Structural Health Monitoring, Samiksha Sikarwar, Satyendra, Shakti Singh, R. Srivastava, [B. C. Yadav](#), *Photonic Sensors*, December 2017, Volume 7, Issue 4, pp 294–304 **IF=1.317**

15. Preparation and Properties of Transparent Conducting Oxide (TCOs) Thin Films: A Review, Raksha Dixit, Sushant Gupta, Praveen Kumar, Samiksha Sikarwar, [B.C. Yadav](#), *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 6, Issue 2, February 2017, 1944-1959.
14. Carbon Nanotube: Synthesis and Application in Solar Cell, Utkarsh Kumar, Samiksha Sikarwar, Rakesh K. Sonker, [B. C. Yadav](#), *J Inorg. Organomet. Polym.* (2016) 26:1231–1242, DOI:10.1007/s10904-016-0401-z **IF=1.709**
13. Recent Developments in Drug Delivery System via Nanotechnology, Ekta Singh, Anamika Devi Katheria, Richa Srivastava, Utkarsh Kumar, [B. C. Yadav](#), *Imperial Journal of Interdisciplinary Research (IJIR)*, Vol-2, Issue-6, 2016, 366-372.
12. Nanolithography: Processing Methods for Nanofabrication Development, Ruchita, Richa Srivastava and [B. C. Yadav](#), *Imperial Journal of Interdisciplinary Research (IJIR)*, ISSN: 2454-1362, 2, 6, 2016, 275-284.
11. Polymer Nanocomposite: An Overview, Anamika D. Katheria, Ekta Singh, Ravindra Kumar, Richa Srivastava, [B. C. Yadav](#), *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 2, 2016, 1960-1968.
10. Developments in Bioenergy and Sustainable Agriculture Sectors for Climate Change Mitigation in Indian Context: A State of Art, R Kothari, VV Pathak, AK Chopra, S Ahmad, T Allen, [B. C. Yadav](#), *Climate Change and Environmental Sustainability* 3 (2), 93-103, 2016.
9. Conducting Polymers: Synthesis, Properties and Applications, Ravindra Kumar, Satyendra Singh and [B. C. Yadav](#), *International Advanced Research Journal in Science, Engineering and Technology*, Volume 2, Issue 11, November 2015, pp.110-124.
8. Opto-electronic humidity sensor: A review, S. Sikarwar, [B. C. Yadav](#), *Sensors and Actuators A: Physical*, 233, 54-70, 2015. **IF=2.311**
7. A Review Report on Nanostructured Ferrites as Liquefied Petroleum Gas Sensor, Singh, S., [Yadav, B. C.](#), Singh, M. and Kothari, R., *International Journal of Science, Technology & Society*, Vol.1, No.1, Jan-June, 2015.
6. A review on synthesis, fabrication and properties of nanostructured pure and doped tin oxide films, [B. C. Yadav](#), Raksha Dixit and Satyendra Singh, *International Journal of Scientific and Innovative Research* 2014; 2(1): 41-57, P-ISSN 2347-2189, E- ISSN 2347-4971.
5. Nanocomposite material for packaging of electronic goods, S Sikarwar, SB Yadav, AK Yadav, [B C Yadav](#), *International Journal of Scientific and Innovative Research* 2013; 1(2):93-108, P-ISSN 2347-2189, E- ISSN 2347-4971.
4. Ferrite Materials: Introduction, Synthesis Techniques, and Applications as Sensors, Richa Srivastava and [B. C. Yadav](#), *International Journal of Green Nanotechnology: Physics & Chemistry*, Special Issue: New Advances in Phytochemicals-Mediated Green Nanotechnology - technology: Part I, Volume 4, Issue 2, 2012, 1–14.
3. Introduction to nanomaterials and their applications, [B. C. Yadav](#), *Lucknow Journal of Science*, Vol.4, No.3, 2008, Print ISSN: 0974-8121 Online, ISSN: 0974-813X.
2. Structure, properties and applications of fullerenes, [B. C. Yadav](#) and Ritesh Kumar, *International Journal of Nanotechnology and Applications*, 15-24, Volume 2, Number 1,

2008, ISSN: 0973-631X.

1. Water: An unique matter, [B. C. Yadav](#), Amit K. Srivastava and N.K. Pandey, *Lucknow Journal of Science* 15-23, Vol.2, No.2, 2005; Print ISSN: 0974-8121 Online, ISSN: 0974-813X.

Current research interests:

We have designed and fabricated opto-electronic and electrical humidity sensors based on Titania, MgO and ZnO nanomaterials in our laboratory. Also we have developed an opto-electronic sensor for monitoring glucose at low levels and this technology can be used for direct measurement of glucose levels in sugar cane crop. Another sensor, Embedded Fibre Optic Microbend Sensor for measurement of high pressure and crack detection has also been developed. Our basic interest is to synthesize nanomaterials using solvothermal /hydrothermal methods, soft chemical route, traditional precipitation method, aerosol method, low temperature combustion synthesis method etc. in our laboratory in powder form as well as in the form of gel. Powder can be used to form pellet and gel can be used to deposit film on different substrates eg. glass or alumina substrate, U-shaped bend fiber, spiral shaped fiber etc through sol-gel spin method by using Photo resist spinner and dipping and drain method.

Currently we are involved to develop metalnanoparticles reinforced Nanocomposites and Carbon nanofibres reinforced Polymer Nanocomposites as new structural, electronic and functional materials and new series of Optical and sensor materials of metal nanoparticles embedded in insulator ceramics polymers and Nanofluids. We are making investigations on characterizations of synthesized nanomaterials using Scanning Electron Microscopy, Transmission Electron Microscopy, Atomic Force Microscopy, X-Ray Diffraction, Fourier Transform Infrared Spectroscopy, UV-visible Spectroscopy, Raman Spectroscopy, Differential Thermal Analysis-Thermal Gravimetric Analysis for the determination of particle size, morphology, particle distribution, elastic properties, thermal properties, microstructure, microstructure phenomena etc. along with the modeling of modified phase stability and metastable phase transformation in the nanocomposites developing the final sensing mechanism to moisture, CO₂, LPG and other

gases. For this purpose we are fabricating thin films of synthesized materials on various substrates using various up-to-date techniques. This is the pioneer work in India to couple the science/techniques of sensing with the Nanoscience/ Technology in the thrust area of nanosensors.

Life Member:

- Indian Science Congress Association(**ISCA**) ---10370
- Optical Society of India (**OSI**) --- L432
- Materials Research Society of India (**MRSI**) ---- LMB 704
- Lucknow University Teachers Academic Publication Society (**LUTAPS**)--852
- Lucknow University Physics Alumni Association (**LUPAA**) --- Not issued
- National Academy of Sciences, India (NASI)

International Conference/Workshop/Meeting/Symposia Attended

1. Two days International Conference on “Recent Advances on Interdisciplinary Sciences”, 12-15 January, 2019, Department of Electronics, University of Jammu, **Jammu**, India
2. 1st North India Science Congress (NISC) & International Conference on Science & Technology for sustainable future, 10-11, January, 2018, Babasaheb Bhimrao Ambedkar University, **Lucknow**-26025, U.P., India.
3. DST-RFBR Project meeting at Metallopolymer Lab, Institute of Problems on Chemical Physics Chernogoloka, Moscow Region, Russia. 25th July -7th August 2014.
4. “International Conference on Materials Technologies and Exhibitions (ICMTE-2014), Institute of Materials, Malasia, Kuala Lumpur, Malaysia.13-16th May, 2014.
5. International Conference on Advancements of Science & Technology: Health and Social Issues, Feb. 18-19, 2014, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.
6. International Conference on Chemistry and Materials: Prospects and perspectives (IC-MPP-2012), Dec. 14-16, 2012, Babasaheb Bhimrao Ambedkar University, Lucknow-26025, U.P., India.
7. International Workshop on Physics of Semiconductor Devices, IIT, **Kanpur**, 19-22, December 2011.

8. 5th Australia-Korea Joint Symposium: Resource Recycling-Green and Clean Environment, Korean University of Science and Technology, **Seoul, Korea**, 12-13 May 2011.
9. International Meeting on Chemical Sensors (IMCS-13), 11-14 July 2010, University of Western Australia, **Perth, Australia**.
10. International Conference on advanced nanomaterials and nanotechnology, IIT, **Guwahati, Aasam**, India, December 9-11 2009, page 132.
11. International Conference on Biomedical Engineering and Nanotechnology (ICBENT), October 21-23, 2008, **Dr. D.Y. Patil University**, Kolhapur, M.H., India.
12. International Conference on Materials and Advance Technologies (ICMAT) 1st-6th, 2007, Suntec Exhibition Centre, **Singapore**.
13. Workshop on Scientific Instruments and Sensors on the Grid, **ICTP, Trieste, Italy**, 23rd to 28th April 2007.
14. Spring College on Water in Physics, Chemistry and Biology, **ICTP, Trieste, Italy**, 10th to 20th April 2007.
15. International Conference on Recent Trends on Nanotechnology (ICRTNT), **Jadavpur University, West Bengal**, India, Dec.7th to 9th 2006.
16. International Conference on Lasers and Nanomaterials (ICLAN), **University of Calcutta, West Bengal**, India Nov.30th to Dec.2nd 2006.
17. International Conference on MEMS and Semiconductor Nanotechnology, **I.I.T., Kharagpur**, West Bengal, India Dec.20-22 (2005).
18. XIth International Workshop on the Physics of Semiconductor devices, **I.I.T. Delhi**. India. Dec. 11-15 (2001).

National Conference/Workshop/Meeting/Symposia Attended

- [1] National Symposium on Advanced Materials Science (NSAMS 2018)" 7-8 December 2018, Department of Physics, DDU Gorakhpur University, Gorakhpur, U.P., India
- [2] National Seminar on "Recent Innovations in Advanced Materials (RIAM-2018)", 18-19 September, 2018, CSIR-Advanced Materials and Processes Research Institute (AMPRI), Hoshangabad Road, Near Habibganj Naka, Bhopal 462026, (M. P.) India

- [3] 1st North India Science Congress (NISC) & International Conference on Science & Technology for sustainable future, 10-11, January, 2018, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025**, U.P., India.
- [4] 4th Lucknow Science Congress (LUSCON)” on Science Technology and Innovations for Sustainable Development, 3-4 March 2017, BBAU, Lucknow, U.P., India.
- [5] National Seminar on “Nano Science and Biotechnology” on 25-26 February 2017, DAV PG College, Kanpur, U.P., India.
- [6] National Conference on “Recent Advances and Innovations in Chemical and Materials Science (RAICMS)” on 23-24 February 2017, Shri Jai Narain PG College & DSMNRU, Lucknow, U.P., India.
- [7] Application of Physical Sciences in Engineering & Technology (STCAPSET-16), 02-08 July, 2016, Department of Applied Science, M.M.M. University of Technology, Gorakhpur, U.P., India.
- [8] National Conference on Physics and Industry Interfaces, Kurukshetra University, 30th July to 1st August, 2015, Kurukshetra, Haryana, India.
- [9] National Conference On “Emerging Trends in Nanoscience and Nanotechnology” On 23-24 December 2014, Department of Physics, Arts, Sci. and Comm. College, Ozar (Mig), Nasik, MS, India.
- [10] DST-RFBR Project meeting at Metallopolymer Lab, Institute of Problems on Chemical Physics, Chernogoloka, Moscow Region, Russia. 25th July -7th August 2014.
- [11] The 101st Session of Indian Science Congress, University of Jammu, Jammu during 3-7 Feb. 2014.
- [12] National Conference on synthesis characterization and application of advanced nanomaterials (NCSCAAN 2014) to be held from 17th Jan to 19th Jan, 2014 at Hindustan College of Science and Technology, Farah (Mathura) U P, India.
- [13] National Conference on Materials Science: Trends & Future-2014 (NCMS-2014)” during 10, 11 January 2014, Bharatiya Mahavidyalaya, Amravati, M.H., India
- [14] Advance Technologies Committee –Technical Program Discussion Meeting (ATC-TPDM), July 8-10, 2013, BARC, **Mumbai**, India.
- [15] Seminar on “Environment, Education & Society” 05th June, 2013, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025**, U.P., India.

- [16] One day Workshop on “Enhancing Communication Skills of Students in Higher Education: Role of Libraries” 22nd May 2013, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025, U.P., India.**
- [17] Placement and Employment Prospects in Indian Patent Offices and Hands-on Training for Patenting the research work, 18th March, 2013, Babasaheb Bhimrao Ambedkar University, **Lucknow-26025, U.P., India.**
- [18] National Workshop on Recent Advances in Materials, 14-15 March, 2013, Department of Physics, University of Lucknow, **Lucknow-226007, I.P., India.**
- [19] Group Monitoring Workshop (GMW) Jan.11-12, 2013 at Devgiri College, **Calicut, Kerala, India.**
- [20] National Conference on Science of climate change and Earth’s Sustainability; Issues and challenges, 12-14 Sept. 2011, **Lucknow, U.P., India.**
- [21] 16th National Seminar on Physics and Technology of Sensors, Lucknow University, **Lucknow, U.P., India, 2011.**
- [22] 3rd National Conference on Nanomaterials and Nanotechnology, Amity University, **Lucknow, 21st -23rd December 2010.**
- [23] 2nd National Conference on Nanomaterials & Nanotechnology, Lucknow University, Lucknow, U.P., India, December 21-23, 2009.
- [24] Seminar on Frontiers of Spectroscopy (SFS) November 11-12, 2008, **University of Lucknow, Lucknow, India.**
- [25] DST-PAC Meeting, 7th May to 9th May, 2008, **Sikkim Manipal Institute of Technology, Majitar, Sikkim, India.**
- [26] National Workshop on Physics and Technology of Sensors, 1-2 March, 2008, **University of Pune, India.**
- [27] 13th National Seminar on Physics and Technology of Sensors, 3-5 March, 2008, **University of Pune, India.**
- [28] Workshop for Senior Academicians, February 28-29, 2008, UGC-Academic Staff College, University of Lucknow, **Lucknow-26007, India.**
- [29] National Conference on Nanomaterials and Nanotechnology, Dec.8-11, 2007, **University of Lucknow, Lucknow, India.**

- [30] National Symposium on Advances in Chemical and Materials Sciences, May11-12, 2007, **University of Lucknow**, Lucknow, India.
- [31] National Workshop in Nanomaterials and Nanotechnology, University of Lucknow, **Lucknow**, India, March 24-25, 2007.
- [32] 94th Session of Indian Science Congress, Annamalai University, **Chidamberam, Tamilnadu**, India, Jan.37 (2007).
- [33] “Lecture Course on Quantum Mechanics” Department of Physics, University of Lucknow, Lucknow-226007, U.P., India, Nov.18th to 19th, 2006.
- [34] 17th AGM of Material Research Society of India, **University of Lucknow, Lucknow**, U.P., India, Feb.13-15(2006).
- [35] Current Trends on Materials Characterization, **I.I.T, Kanpur**, U.P., India, Dec. 5-7(2005).
- [36] 90th Session of Indian Science Congress, **Bangalore University**, Bangalore, India Jan.37 (2003). (I.S.C.A. Young scientist award programme).
- [37] National Seminar on scientific and technological words in Hindi, Department of Physics, **University of Lucknow**, Lucknow, U.P., India. Octo. 4-6 (2002).
- [38] 89th Indian Science Congress, University of Lucknow, Lucknow, India. Jan. 37 (2002).
- [39] 7th National Laser Symposium, **I.I.T. Kanpur**, India. Dec. 14-16 (1998).
- [40] 5th National Seminar on Physics and Technology of Sensors, **University of Pune, Pune**, India. Feb.2-4 (1998).