

# **CURRICULUM VITAE**



1. Name : Dr. CHANDKI RAM GAUTAM

2. Father Name : Dr. Jag Pal Singh3. Date of Birth : 16 January, 1972

**4.** Present Address : Department of Physics, University of Lucknow

Lucknow -226007 (India)

Mob. No. 8840389015, 09125599588

E-mail: gautam\_ceramic@yahoo.com, gautamcceramic@gmail.com

ORCID ID:https://orcid.org/0000-0003-3190-5577

**5.** Nationality : Indian

**6.** Languages : Fluent English and Hindi

**Current Position:** Working as 'Assistant Professor Stage -III' in Department of Physics, University of Lucknow, Lucknow -226007 (India)

Career Objective: To learn more about the role of physical phenomena in Physics/Materials Science / Glass / Glass Ceramics/Nanocomposites for bone implant applications and also new experimental techniques, measurements for the characterization of different type materials.

**Special Interest**: Teaching, Research and Developments

**Area of Research:** Glass and Glass Ceramic Materials, Electronic Ceramic Materials, Composites Materials, Ferroelectric Materials, Bio-ceramic and Nanocomposite Materials.

## **Academic Background:**

2001-2005	Ph.D. in Ceramic Engineering from "Institute of Technology, Banaras Hindu
2001-2003	
	University", Varanasi (India).
	"Study of Crystallization, Microstructure and Electrical Behavior of Lead
	Strontium Titanate Borosilicate Glass Ceramics with La <sub>2</sub> O <sub>3</sub> and Nb <sub>2</sub> O <sub>5</sub> as
	Additives"
1998-2000	M. Tech. in Materials Technology from S.M.S.T. "Institute of Technology,
	Banaras Hindu University", Varanasi (India)
	"Synthesis, Structure and Electrical Behavior of the Sr <sub>1-x</sub> Y <sub>x</sub> Ti <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub>
	system"
1997-1998	M.Phil. In Physics (Instrumentation), I.I.T., Roorkee Formerly UOR, Roorkee,
	Roorkee
	"Back Ground Noise Characteristics of Ground Using Broad Band
	Seismometers"
1996-1997	M.Sc. in Physics (Electronics) from "Choudhary Charan Singh University",
	Meerut (India)
1992-1995	B.Sc. in Physics, Chemistry and Math's from "Choudhary Charan Singh
	University", Meerut (India)

## **RESEARCH AND TEACHING EXPERIENCE: 15.2 Years**

S.	Positions	Name of	Date of	Date of	Salary and
N.		<b>Employment</b>	Joining	Leaving	Grade
1.	Raman Post	Rice	10 <sup>th</sup> October,	9 <sup>th</sup> October,	\$3000/m
	Doctoral	University,	2014	2015	
	Research Fellow	Houston			
		Texas, USA			
2.	Assistant	University of	13 <sup>th</sup>	Continued	Rs. 15,600-
	Professor	Lucknow,	November,		39100/-
		Lucknow	2006		
3.	Lecturer	U.P. Higher	16 <sup>th</sup> July,2005	12 <sup>th</sup> November,	Rs. 8000-275-
		Education		2006	13500/-
		Commission			
4.	Research	CSIR New	1st April, 2005	15 <sup>th</sup> July, 2005	Rs.11,000/m
	Associate	Delhi			
5.	Senior Research	U. G. C.	9 <sup>th</sup> June, 2001	31 <sup>th</sup> March,	Rs.10,000/m
	Fellow during			2005	
	Ph.D.				

## **AWARDS AND ACHIEVEMENTS:18**

- 1. Acclaim Award under Research Promotion Scheme through Lucknow University, 2019-2020.
- 2. Uddeepan Award (Best Research Paper Award) under Research Promotion Scheme through Lucknow University, 2019-2020.
- 3. Uddeepan Award (Best Research Paper Award) under Research Promotion Scheme through Lucknow University, 2018-2019.
- **4.** Certificate of Appreciation Highly Cited Author Award by Royal Society of Chemistry, September 18, 2019.
- Uddeepan Award (Best Research Paper Award) under Research Promotion Scheme through Lucknow University, 2017-2018.
- Uddeepan Award (Best Research Paper Award) under Research Promotion Scheme through Lucknow University, 2016-2017.
- 7. IOP Outstanding Reviewer Award for 'Materials Research Express' in 2018
- 9. Raman Post-Doctoral Research Fellowship Awarded Through UGC New Delhi at Rice University, Houston, Texas, USA, During 2014-2015.
- 10. UGC Research Award, Through UGC New Delhi, 2012
- 11. Foreign Travel Grant from Department of Science and Technology, New Delhi in

2009.

- **12.** "Young Scientist" Award through Council of Science and Technology (CST), Lucknow, Uttar Pradesh, during 26 March, 2008.
- 13. Best Poster Presentation Award at BARC Mumbai during 15-16 September, 2006
- 14. Research Associatship through CSIR, New Delhi, 2005 at IT BHU, Varanasi
- 15. Senior Research Fellowship awarded during Ph.D. (2001-2004) through UGC, New Delhi.
- **16.** Fellowship during M. Tech. course study through MHRD (1998-1999).
- **17. Selected for Lecturer in Physics**, Department of Physics, B.N.D. P.G. College, Kanpur through U.P. Higher Education Commission.
- 18. GATE-1998, 1999, Qualified through IIT Kanpur.

## **EXPERIMENTAL SKILLS:**

Synthesis of ceramic materials by solid-state reaction and glass ceramic route (Melt and Quench Method). Synthesis of nanomaterials using Microwave irradiation technique, Acquisition & analysis of X-ray data, Optical Microscopy, SEM & EDAX, DTA & TGA, FTIR, Seebeck Coefficient Measurements, Dielectric Measurements, Electrical Conductivity Measurements, AC Impedance Measurements and analysis of data (Impedance Spectroscopy), Universal Testing Machine for Mechanical characterizations etc.

## Major Research Project completed: 05

S. No	Title of the project	Sponsoring Agency	Period	Amount (in lakhs)	Status
1.	"Synthesis, Crystallization, Microstructure & Electrical Properties of (Ba,Sr)TiO <sub>3</sub> Borosilicate Glass Ceramics with addition of La <sub>2</sub> O <sub>3</sub> and Nb <sub>2</sub> O <sub>5</sub> "	UGC, New Delhi	3 years	9,80,267/-	completed good crystallization
2.	"Synthesis, Characterization of Lead- and Lead-Free Bismuth Titanate Borosilicate Glass Ceramics Doped with La for the Application of X-rays Radiation Protection"	U.P.C.S.T. Lucknow	3 years	7,35,000/-	completed
3.	"Synthesis, Crystallization, Microstructure & mechanical behaviour of Lanthanum doped machinable glass ceramics system for dental CAD/CAM applications"	UGC, New Delhi	2 years	16,02,523/-	completed

4.	Synthesis, Crystallization, Microstructure and Mechanical Behavior of Machinable Glass Ceramics System K <sub>2</sub> O-CaO-MgO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -NH <sub>4</sub> -MgF <sub>2</sub> doped with Carbon Nanotubes and Zirconia for Dental Restoration Applications	Delhi (did at Rice University Houston,	1 year	22,87,952/-	completed
5.	Synthesis of nano-hydroxyapatite (nHAp) and its novel composites with metal/oxides: A study of structural, mechanical and biological properties for bone implant applications		3 years	34,94000/-	On going

## NO. OF Ph. D. and P.G. STUDENTS PRODUCED/UNDER SUPERVISION

Ph. D. Scholars Supervised : 06 Dr. Avadhesh Kumar Yadav (awarded)

Dr. Anod Kumar Singh (awarded)

Dr. Sunil Kumar (awarded)

Dr. Abhishek Madheshiya (awarded)

Dr.Sangeeta Das (awarded)

Dr. Amarendra Gautam (awarded)

Current Ph. D. Scholars : 03 (under progress)

Ms. Shweta

Mr. Sarvesh Kumar Avinashi

Ms. Zaireen Fatima

M.Sc. students : 06 (Mrs. Shiva Dixit Prabhuta Sharma, Mr. Sawajal Kumar

Srivastava, Soumya Priya Shukla, Ram singh Yadav and

Ved Prakash Tripathi)

M.Tech. students : 02 (Matin Tamuk and Chau Woipeng Manpoong)

## **National/International Research Colloborations**

(a) Rice University, Houston Texas, USA, (b) NIT, Rouerkela India, (c) GNDU, Amritsar Punjab, (d) School of Physics, Madurai Kamaraj University, Madurai, (e) CAT, Indore, (f) IIT, BHU, Varanasi, (g) Texas Southeren University, Texas, USA.

## **MEMBERSHIP OF DIFFERENT SCIENTIFIC BODIES: 19**

- **1.** Life time membership of Materials Research Society (MRSI), India, Membership No. LMB1581.
- 2. Life time membership of Indian Physics Association (IPA) Membership No. GEN/LM/12670

- **3.** Life time membership of Association of Separation Scientists and Technologists (ASSET), BARC, Trombay, Mumbai, Membership No. LM 0209.
- 4. Member of Faculty of Science (FOS) at University of Lucknow, Lucknow
- 5. Member of Board of Studies (BOS), Dept. of Physics, University of Lucknow, Lucknow
- 6. Member of Editorial Board of 'American Journal of Materials Science and Engineering'
- 7. Member of Editorial Board of 'International Journal of Applied and Natural Sciences'
- 8. Member of Editorial Board of 'ALIG Journal of Agricultural Sciences and Sustainable Development Research'
- 9. Member of Editorial Board of 'International Journal of Physics and Applications (IJPA)'
- **10.** Member of Editorial Board of Transstellar Journal Publications and Research Consultancy Private Limited,
- 11. Member of the 'Science Advisory Board' (SAB).
- 12. Life time membership of Indian Ceramic Society, No. N. L.-301 since 2013.
- 13. Member of Editorial Board of Universal Journal of Materials Science
- 14. Member of Editorial Board of 'International Journal of Chemistry and Materials Research'
- 15. Member of Editorial Board of 'International Journal of Applied Sciences'
- 16. Member of Editorial Board of International Journal of Applied Science-Research & Review
- 17. Member of Editorial Board of 'Global Journal of Research and Review'
- 18. Membership of American Chemical Society, USA, Membership No. 30838760
- 19. Member of Editorial Board of International Journal of Ceramics and Ceramic Technology

## **REVIEWER OF SEVERAL PEER REVIEWED JOURNALS:**

ACS Applied Nano, ACS Biomaterials Science and Engineering, RSC Advances, Journal of Non-Crystalline Solids, Ceramic International, Journal of Applied Physics, Journal of Physics and Chemistry of Solids, Journal of the European Ceramic Society, Journal of Alloys and Compounds, Materials Research Express, Applied Surface Science, Materials Research Express, Materials Letters etc.

## **FOREIGN VISITS: 03**

## 1. ITALY

A visit for twenty days from 20 May, 2008 to 10 June 2008 at ICTP, Trieste Italy. The purpose of this visit to attend a workshop and also to carry out the research work as well as research literature.

## 2. TUNISIA (North Africa)

To Attend a "Second International Meeting On Materials for Electronic Applications", (IMMEA-2009) during 8-10 May, 2009 Tunisia" for oral presentation entitled "Synthesis,

Crystallization and Dielectric Behavior of Ferroelectric (PbSr)TiO<sub>3</sub> Borosilicate Glass Ceramics Doped with La<sub>2</sub>O<sub>3</sub>".

**3.** USA (Houston Texas) A visit for the completion of the one year period from (10 October 2014- 9 October 2015 through UGC New Delhi at Rice University, Houston, Texas, USA under Raman Post-Doctoral Research Award Fellowship.

#### **COMPUTER PROFICIENCY & TRANING: 02**

- **1.** Microsoft Office package (MS word, Excel, Power point); Technical software (Scientific software)-Sigma Stat, Sigma Plot, Prism Graph Pad, Endnote plus, Origin-7.0, Adobe Photoshop, Coral Draw, Fortran –77, Cell software for crystal structure determination. Internet: Information searching and retrieval uses various materials research papers etc.
- **2.** LATEX Software short training during 17-22 January, 2005 in School of Bioinformatics BHU, Varanasi.

# UGC Sponsored Orientation Course/Faculty Improvement Programme / Refresher course Attended: 06

- (i) UGC Sponsored Orientation Course at UGC Academic Staff College, Banaras Hindu University, Varanasi-226007 during June 16, 2009 to July 13, 2009
- (ii) Faculty Improvement Programme at SMST, IT, BHU, through UGC academic Staff College, Banaras Hindu University, Varanasi-226007 during February 14-15, 2011.
- (iii) First refresher course in Physics and Geophysics at UGC Academic Staff College, Banaras Hindu University, Varanasi-226007, during January 31, 2012 to February 20, 2012
- (iv) Refresher course in Physics at UGC Academic Staff College, Jawaharlal Nehru University, New Delhi-110067, during September 16, 2013 to October 11, 2013
- (v) Refresher course in Physics, Electronics, Renewable Energy and Information Technology at UGC Academic Staff College, University of Lucknow, Lucknow226007, during February 14 March 07, 2014.
- (vi) Short Term Course on Educational Technology, at UGC Academic Staff College, University of Lucknow, Lucknow226007, during November 22-28, 2019.

## CONFERENCES/WORKSHOP ORGANISED: 02

- National Workshop on Recent Advances in Materials Science" during 15-16 March 2013 (NWRAMS-2013) as 'General Secretary' at Department of Physics, University of Lucknow, Lucknow.
- 2. International Conference on Diverse Emerging Materials and their Applications (ICDEMA-2021) during March 14-15, 2021 as *'General Secretary'* at Department of Physics, University of Lucknow, Lucknow.

## DETAILS OF ADMINISTRATIVE EXPERIENCE

<b>S. N.</b>	Organization	Designation	From	To	Roles and Responsibilities
	University of	Co-coordinator (M. Sc.	2007	Till	To run the course study smoothly
1.	Lucknow	Renewable Energy)		date	

2.	University of	Assistant Provost	2013	2015	Hostel allotments, providing the
	Lucknow				good facilities to hostel inmates,
					sports activities etc
3.	University of	Superintendent	2017	2017	To conduct the PG. Semester Exams
	Lucknow				smoothly
4.	University of	Assistant Dean of student	2020	-	To provide and solve the student's
	Lucknow	Welfare (DSW)			problems

#### REFERENCES

## (i) Prof. Robert Vajtai

Department of Materials Science and Nanoengineering,

Rice University Houston, Texas-7005

**United State** 

E-mail: Robert.vajtai@rice.edu

## (ii) Prof. Poonam Tandon

Head

Department of Physics, University of Lucknow

Lucknow-226007 (India)

E-mail: tandon\_poonam@lkouniv.ac.in

## (iii) Prof. Devendra Kumar (Ph. D. Supervisor)

Head

Department of Ceramic Engineering

I. I. T., B.H.U., Varanasi -221005 (India)

Ph. No.09335411705 (M)

E-mail: dev\_ceramic@yahoo.co.in

## (iv) Prof. Om Parkash (Ph. D. Co-Supervisor)

Department of Ceramic Engineering

I. I. T., B.H.U., Varanasi -221005 (India)

Ph. No.09335411705 (M)

E-mail: oprakash.cer@iitbhu.ac.in

## **DECLARATION**

I solemnly declare that the statements made by me in this C.V. are correct to the best of my knowledge and belief.

Place: Lucknow (Dr. Chandki Ram Gautam)

Date: 10 September, 2021

# (A) Published research paper in National/International Peer Reviewed Journals: 99

1.	
2.	Synthesis of a novel nanocomposite SiO2–H3BO3–V2O5–Al2O3 via melt quenching technique:
	Structural and surface morphological characteristics for carbon dioxide gas sensing applications
	Zaireen Fatima1,2, Chandkiram Gautam*1, Ajeet Singh3, Sarvesh Kumar Avinashi1,Shweta1,
	Bal Chandra Yadav3, Afroj Ahmed Khan2
3.	Methods of Hexagonal Boron Nitride Exfoliation and its Functionalization: Covalent and Non-
	covalent Approaches
	Chandkiram Gautam a,*, Selvam Chelliah

- RSC Advances, Vol., pp. (2021) [I. F.- 3.119]. ISSN: 20462069
- 4. Synthesis, structural, mechanical, and biological properties of HAp-ZrO<sub>2</sub>-hBN biocomposites for bone regeneration applications

  Amarendra Gautam <sup>a</sup>, **Chandkiram Gautam** <sup>a,\*</sup>, Monalisa Mishra <sup>b</sup>, Swetapadma Sahu <sup>b</sup>,

  Reetuparna Nanda <sup>b</sup>, Bikash Kisan <sup>b</sup>, Rakesh Kumar Gautam <sup>c</sup>, Ravi Prakash <sup>d</sup>, Kriti Sharma <sup>d</sup>,

  Divya Singh <sup>d</sup>, Satyam Shivam Gautam <sup>e</sup>

Ceramic International, Vol.00, pp. 1-18 (2020) [I.F.- 4.527]. ISSN: 02728842 (In Press)

- 5. Influence of Carbon Nanotubes Reinforcement on the structural Feature and Bioactivity of SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>-MgO-K<sub>2</sub>CO<sub>3</sub>-CaO-MgF<sub>2</sub> Bioglass

  \*Shweta, a,\*Chandkiram Gautam, bKrishna Kishor Dey, cManasi Ghosh, dRavi Prakash, dKriti Sharma, dDivya Singh
  Applied Physics A, 127:545 (2021). [I.F.- 2.584]. ISSN: 02728842 (In Press
- 6. Synthesis and structural characterizations of HAp-NaOH-Al<sub>2</sub>O<sub>3</sub> composites for liquid petroleum gas sensing applications
  Sarvesh Kumar Avinashi<sup>1</sup>, Ajaz Hussain<sup>1</sup>, Kuldeep Kumar<sup>2</sup>, Bal Chandra Yadav<sup>2</sup> and Chandkiram Gautam<sup>1\*</sup>
  Oxford Open Materials Science, Vol. 1, pp. 1-12 (2021) ISSN: 2633-6979
- 7. Synthesis, Physical and mechanical properties of lead strontium titanate glass ceramics <sup>a</sup>Shweta, <sup>a,\*</sup>Chandkiram Gautam, <sup>a</sup>Ved Prakash Tripathi, <sup>b</sup>Subodh Kumar, <sup>c</sup>Sudhakar Beera, <sup>c</sup>Rakesh Kumar Gautam
  Physica B Condensed Matter, Vol. 615 (15), pp. 413069 (2021) [I.F.- 1.902]. ISSN: 0921-4526
- 8. Dielectric and Impedance Spectroscopic Characteristics of Lead Calcium Titanate Borosilicate Glass Ceramics
  Sangeeta Das <sup>a</sup>, Abhishek Madheshiya <sup>b</sup>, Satyam Shivam Gautam<sup>c</sup>, Diptimayee Tripathy<sup>d</sup>

  1 Chandkiram Gautam<sup>e\*</sup>,
  Glass Physics and Chemistry, Vol. 46 (6), pp. 514-525 (2020) [I.F.- 0.668]. ISSN: 1087-6596
- 9. Synthesis and characterization of [BaO-(10-x)ZrO<sub>2</sub>TiO<sub>2</sub>-SiO<sub>2</sub>-xCrO<sub>3</sub>] type glass and glass ceramics Zaireen Fatima, Hussain Ajaz, **Chandkiram Gautam**\*, Shweta, Prakash Singh, Afroz Ahmed, Gulab Singh & Manoj Kumar Singh Journal of Asian Ceramic Societies, Vol. 8 (4), pp. 1108-1126 (2020) [I.F.- 2.653] ISSN: 21870764
- 10. Fabrication methods of lead titanate glass ceramics and dielectric characteristics: a review Chandkiram Gautam<sup>1,\*</sup>, Abhishek Madheshiy<sup>al</sup>, Journal of Materials Science: Materials in Electronics, Vol. 31, pp. 12004–12025 (2020) [I.F.- 2.324]. ISSN: 09574522
- 11. Formation of Multifunctional ZrO<sub>2</sub>-MgO-hBN Nanocomposite for Enhanced Bone Regeneration and E coli Bacteria Filtration Applications, Ajaz Hussain<sup>a</sup>, Chandkiram Gautam<sup>a\*</sup>, Asif Jafri<sup>b</sup>, Vijay Kumar Mishra<sup>c</sup>, Abhishek Madheshiya<sup>a</sup>, Amarendra Gautam<sup>a</sup>, Manvandra Kumar Singh<sup>d</sup>, Rakesh Kumar Gautam<sup>d</sup>, Manisha Gupta<sup>a</sup>, Md Arshad<sup>b</sup>, Robert Vajtai<sup>e</sup>, Pulickel M. Ajayan<sup>e</sup> Ceramic International, Vol. 46 (14), pp. 23006-23020 (2020) [I.F.- 3.830]. ISSN: 02728842
- Synthesis, structural and morphological analysis of hexagonal boron nitride doped BaCO<sub>3</sub>-TiO<sub>2</sub> composites, Abhishek Madheshiya<sup>a</sup>, Sarvesh Kumar Avinashi<sup>a</sup>, Swajal Kumar Srivastava<sup>a</sup>, Subodh Kumar<sup>b</sup>, Chandkiram Gautam<sup>a,\*</sup>
  Materials Today: Proceedings, Vol. 31 (2), pp. 457-463 (2020) [I.F.- 0.875] ISSN:22147853
- 13. Electrical Study of Lead Calcium Titanate Borosilicate Glass Ceramics, Sangeeta Das, S.S. Gautam, C. R. Gautam, Advances in Lightweight Materials and structures, Springer Proceeding, pp. 361-370 (2020) ISBN:978-981-15-7827-4
- 14. Mechanical, surface morphological and multi-objective optimization of tribological properties of V<sub>2</sub>O<sub>5</sub> doped lead calcium titanate borosilicate glass ceramics, Ceramic International, Sangeeta Das <sup>a</sup>, Abhishek Madheshiya <sup>b</sup>, Shubhajit Das <sup>c</sup>, Satyam Shivam Gautam <sup>d</sup>, <sup>1</sup>Chandkiram Gautam\*, Vol. 46 (11), pp. 19170-19180 (2020) [I.F.- 3.830]. ISSN: 02728842
- 15. Enhanced mechanical properties and hydrophilic behavior of magnesium oxide added

- hydroxyapatite nanocomposite: a bone substitute material for load bearing applications <sup>1</sup>Sunil Kumar, \*1Chandkiram Gautam, <sup>2</sup>Brijesh Singh Chauhan, <sup>2</sup>Saripella Srikrishna, <sup>3</sup>Ram Sagar Yadav, <sup>4</sup>Shyam Bahadur Rai, Ceramic International, Vol. 46 (10), pp. 16235-16248 (2020) [I.F.- 3.830]. ISSN: 02728842
- Optimization of Wear Coefficient and Coefficient of Friction of Borosilicate Glass Ceramics using Taguchi Coupled Grey Fuzzy Logic Technique Sangeeta Dasa, Shubhajit Das, S. S. Gautam, C. R. Gautam Materials Today: Proceedings, Vol., pp. (2020) [I.F.- 0.875] ISSN:22147853
- 17. Fabrication of Lead-Bismuth Titanate Borosilicate Glass Ceramics and Dielectric Characteristics Doped with GNPs
  Abhishek Madheshiya1, Chandkiram Gautam<sup>2\*</sup> Kamal K Srivastav<sup>3</sup>
  Materials Research Express, Vol.7, pp. 1-17 (2020) ISSN: 2053-1591) [I.F.- 1.929].
- Fabrication, Optical and Solid NMR Studies of Strontium Titanate Borosilicate Glasses Doped with TeO<sub>2</sub>
   Chandkiram Gautam<sup>a</sup>, \*, Abhishek Madheshiya<sup>a</sup>, Anod Kumar Singh<sup>a</sup>, Krishna Kishor Dey<sup>b</sup>, Manasi Ghosh<sup>b</sup>
   Results in Physics, Vol. 16, pp. 102914-102924 (2020) [I.F.- 4.019]. ISSN: 2211-3797
- 19. Enhanced mechanical properties of hBN-ZrO<sub>2</sub> composites and their biological activities on *Drosophila melanogaster:* Synthesis and characterizations

  Amarendra Gautam, **Chandkiram Gautam**\*, Monalisa Mishra, Vijay Kumar Mishra, Ajaz Hussain, Swetapadma Sahu, Reetuparna Nanda, Bikash Kisan, Santoshkumar Biradar, Rakesh Kumar Gautam

  RSC Advances, Vol. 9, pp. 40977–40996 (2019) [I. F.- 3.119]. ISSN: 20462069
- 20. Synthesis and structural investigations of microporous graphene-reinforced h-BN solids for LPG sensing applications
  Amarendra Gautam<sup>a</sup>, Chandkiram Gautam<sup>a\*</sup>, Utkarsh Kumar<sup>b</sup>, Bal Chandra Yadav<sup>b</sup>
  Materials Research Express, Vol. 6 (12), pp. 125090 (2019) ISSN: 2053-1591) [I.F.- 1.929].
- Fabrication of Graphene Nanoplatelets Incorporated Porous Hydroxyapatite Composites: Improved Mechanical and In-vivo Imaging Performances for Emerging Biomedical Applications 
  <sup>1</sup>Sunil Kumar, \*<sup>1</sup>Chamdkiram Gautam, <sup>2</sup>Vijay Kumar Mishra, <sup>3</sup>B. S. Chauhan, <sup>3</sup>Saripella Srikrishna, <sup>4</sup>R. S. Yadav, <sup>2</sup>Ritu Trivedi, <sup>4</sup>S. B. Rai ACS Omega, Vol. 4 (4), pp. 7448-7458, **2019**, ISSN: 24701343) [I.F.- 2.87].
- 22. Electrical characteristics of PbO-CaO-TiO<sub>2</sub>-SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub> glass ceramics doped with germanium Sangeeta Das, Abhishek Madheshiya, Satyam Shivam Gautam, **Chandkiram Gautam\***, Diptimayee Tripathy Journal of Materials Science: Materials in Electronics, Vol., No.30, pp. 2431–2441 (2019) [I.F.-2.220]. ISSN: 09574522
- 23. Synthesis, Structural, Optical and Solid-State NMR Study of Lead Bismuth Titanate Borosilicate Glasses
  Abhishek Madheshiya<sup>a</sup>, Krishna Kishor Dey<sup>b</sup>, Manasi Ghosh<sup>b</sup>, Jai Singh<sup>b</sup>, Chandkiram Gautam<sup>a</sup>, \*
  Journal of Non-Crystalline Solids, Vol. 503-504, pp. 288-296 (2019) [I.F.- 2.929]. ISSN: 00223093
- 3D interconnected architecture of h-BN reinforced ZrO<sub>2</sub> composites: structural evolution and enhanced mechanical properties for bone implant applications

  Chandkiram Gautam<sup>a\*</sup>, Amarendra Gautam<sup>a</sup>, Vijay Kumar Mishra<sup>b</sup>, Naseer Ahmad<sup>b</sup>, Ritu Trivedi<sup>b</sup>, Santoshkumar Biradar<sup>c</sup>

  Ceramic International, Vol. 45, pp.1037-1048 (2019) [I.F.- 3.830]. ISSN: 02728842
- 25. Structural, optical and NMR study of V<sub>2</sub>O<sub>5</sub> doped lead calcium titanate borosilicate glasses Sangeeta Das<sup>a</sup>, Abhishek Madheshiya<sup>b</sup>, Manasi Ghosh<sup>c</sup>, Krishna Kishor Dey<sup>c</sup>, Satyam Shivam Gautam<sup>a</sup> Jai Singh<sup>c</sup>, Ramanuj Mishra<sup>d</sup>, **Chandkiram Gautam**<sup>b,\*</sup>

  Journal of Physics and Chemistry of Solids, Vol. 126, pp. 17-26 (2019) [I.F.-3.442]. ISSN: 00223697

- 26. Preparation, optical and electrical properties of bismuth substituted lead tinate borosilicate glass and glass ceramics
   Abhishek Madheshiya<sup>a</sup>, Chandkiram Gautam<sup>a,\*</sup>, Shail Upadhayay<sup>b</sup>
   Journal of Non-Crystalline Solids, Vol. 502, pp. 118-127 (2018) [I.F.- 2.929]. ISSN: 00223093

   27. Synthesis and 3-D Interconnected Nanostructured h-BN Based Biocomposites by Low Temperature Plasma Sintering: Bone Regeneration Applications
- 27. Synthesis and 3-D Interconnected Nanostructured h-BN Based Biocomposites by Low Temperature Plasma Sintering: Bone Regeneration Applications

  \*a,bChandkiram Gautam, <sup>c</sup>Dibyendu Chakravarty, <sup>b</sup>Amarendra Gautam, <sup>a</sup>Chandra Sekhar Tiwary, <sup>ac</sup>Cristiano F. Woellner, <sup>d</sup>Vijay Kumar Mishra, <sup>d</sup>Naseer Ahamad, <sup>a</sup>Sehmus Ozden, <sup>f</sup>Sujin Jose, <sup>a</sup>SantoshKumar Biradar, <sup>a</sup>Robert Vajtai, <sup>d</sup>Ritu Trivedi, <sup>e</sup>Douglas S. Galvao, <sup>a</sup>P.M. Ajayan ACS Omega, Vol. 3, pp. 6013-6021(2018) [I.F.- 2.87]. ISSN: 24701343
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- 97. Synthesis and Crystallization Study of (Pb,Bi)TiO<sub>3</sub> Borosilicate Glass Doped with La<sub>2</sub>O<sub>3</sub> C.R. Gautam and Abhishek Madheshiya
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  For Industry (AMETI-2014), 6- 8 December, 2014, NERIST, Itanagar, India, (pp. 134-140)
- 98. Synthesis, UV and Raman Spectroscopic Analysis of (SrTiO<sub>3</sub>) Borosilicate Glasses Anod Kumar Singh, C.R. Gautam, S.S. Gautam
  In Proceedings of International Symposium on Accept of Mechanical Engineering and Technology For Industry (AMETI-2014), 6- 8 December, 2014, NERIST, Itanagar, India, (pp.141-147)
- Preparation and Microstructural Behaviour of (Sr,Bi)TiO<sub>3</sub> Borosilicate Glass Ceramics Doped with CeO<sub>2</sub>
  Chau Woipeng Manpoong, Matin Tamuk, S.S. Gautam, C.R. Gautam, Anod Kumar Singh and Abhishek Madheshiya
  In Proceedings of International Symposium on Accept of Mechanical Engineering and Technology for Industry (AMETI-2014), 6-8 December, 2014, NERIST, Itanagar, India, (pp. 344-349)

## (D) Scientific Papers Presented in Various Conferences/Symposia/Seminars: 57

Preparation and Characterization of Glass Ceramics in the System [(Pb<sub>1-x</sub>Sr<sub>x</sub>)O.TiO<sub>2</sub>]-[2SiO<sub>2</sub>.B<sub>2</sub>O<sub>3</sub>]

 K<sub>2</sub>O - BaO with CoO addition.

 Atul Kumar, Ashok K. Sahu, C. R.Gautam, Om Parkash and Devendra Kumar

 Presented at 13<sup>th</sup> AGM - MRSI, held at IICT, Hyderabad on February 7-9, 2002.

- 2. Effect of post sintering annealing on the dielectric Behavior of Sr<sub>0.65</sub>La<sub>0.35</sub>Ti<sub>0.65</sub>O<sub>3</sub>

  Presented at National seminar on new Prospective in Ceramic Research and Industrial development during September 13-14, 2002
  - C. R. Gautam, A.K. Sahu, Prakash Singh, O. Parkash and D. Kumar
- 3. Dielectric Behavior of Lead Strontium Titanate Glass Ceramics Doped with La<sub>2</sub>O<sub>3</sub> Presented at International Symposium on Recent advances in Inorganic Materials RAIM, I.I.T. Bombay on December 11-13, 2002
  - C. R. Gautam, O. Parkash and D. Kumar, O.P. Thakur and Chandra Prakash
- **94.** Effect of annealing and quenching on the dielectric behavior of the valence Compensated solid Solution  $(Sr_{1-x}Y_x Ti_{1-x}Co_xO_3, 0.01 \le x \le 0.10)$ 
  - C. R. Gautam, A.K. Sahu, Prakash Singh, O. Parkash and D. Kumar Presented at Proc. AMF-4, held at I.I.Sc., Bangalore on December 12-15, 2003.
- 5. DTA and crystallization study in the glass ceramic system  $[(Pb_{1-x}Sr_x)O.TiO_2]-[2SiO_2.B_2O_3]-[yBaO. (1-y)K_2O]-[La_2O_3](00. \le x \le 0.10, y=0.5,0.7)$ C. R. Gautam, O. Parkash and D. Kumar
- 15<sup>th</sup> AGM MRSI, held at I.T.B.H.U. Varanasi on February 9-11, 2004.
   Synthesis and Characterization of High Dielectric Constant Materials CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> Doped with Tin C. R. Gautam, Bhoomika Yadava, Prakash Singh, O. Parkash and D. Kumar,
- Presented at 15<sup>th</sup> AGM MRSI, held at I.T.B.H.U. Varanasi on February 9-11, 2004.
- 7. Crystallization of Lead Strontium Titanate Solid Solution in Presence of La<sub>2</sub>O<sub>3</sub> In Borosilicate Glassy Matrix.
  - C. R. Gautam, O. Parkash and D. Kumar
  - Presented at Disorder, Complexity and Biology-04 held at Department of Physics B.H.U. Varanasi-22005 on July 12-15, 2004.
- Dielectric Characteristics of the Glass Ceramic system [(Sr<sub>1-x</sub>Pb<sub>x</sub>)O.TiO<sub>2</sub>]- [2SiO<sub>2</sub>.B<sub>2</sub>O<sub>3</sub>]- [7BaO]- [3K<sub>2</sub>O] With Addition Of La<sub>2</sub>O<sub>3</sub>
   C. R. Gautam, D. Kumar, O. Parkash, O. P. Thakur and C. Prakash
  - Presented in Proceeding of National Seminar on Ferroelectric and Dielectrics 13<sup>th</sup> (NSFDXIII) at Department of Physics & Astrophysics, Delhi University, Delhi on November 23- 25, 2004.
- 9. Dielectric and Impedance Spectroscopic Studies of Lead Strontium Titanate Borosilicate Glass Ceramics with Addition of Nb<sub>2</sub>O<sub>5</sub>
  - C. R. Gautam, Devendra Kumar, Om Parkash and L.Pandey
  - Presented in "International Symposium on Advanced Materials and Processing" at IIT Kharagpur during 6-8, December 2004
- 10. Effect of La<sub>2</sub>O<sub>3</sub> Addition on Dielectric Properties of Lead Strontium Titanate Borosilicate Glass Ceramics System
  - **Chandkiram Gautam,** Devendra Kumar and Om Parkash
  - Presented in International Conference on "Design and Characterization of Advanced Materials" during 10-11, December 2004.
- 11. Dielectric Behavior In The Glass Ceramic System [ $(Pb_{1-x}Sr_x)O.TiO_2$ ]-[ $2SiO_2.B_2O_3$ ]-[7BaO]-[ $3K_2O$ ] With Addition Of La<sub>2</sub>O<sub>3</sub>( $0.0 \le x \le 0.5$ )
  - C. R. Gautam, D. Kumar, O. Parkash, O. P. Thakur and C. Prakash
  - Presented in Proceeding of International Symposium of Research Student at IIT Madras during 20-22 December, 2004.
- 12. Effect of Niobium Doping on Electrical Properties of ZnO Based Varistors.
  - C.R. Gautam, Archana Pandey, O. Parkash and D. Kumar
  - Presented in Proceeding of International Symposium of Research Student at IIT Madras during 20-22 December, 2004.

- Synthesis and Dielectric Behavior of Some Ti Doped Strontium Stannate
   C. R. Gautam, Sindhu Singh, P. Singh, O. Parkash and D. Kumar
   Presented in Proceeding of International Symposium of Research Student at IIT Madras during 20-22 December, 2004.
- Synthesis, Structure & Electrical Behavior of the System Sr<sub>1-x</sub>Nd<sub>x</sub>Ti<sub>1-x</sub>Mn<sub>x</sub> (x ≤ 0.50)
   C. R. Gautam, Sindhu Singh, P. Singh, O. Parkash and D. Kumar
   Presented in Proceeding of International Symposium of Research Student at IIT Madras during 20-22 December, 2004.
- **15.** Effect of heat treatment and crystallization behavior of lead strontium titanate borosilicate glass ceramics
  - C. R. Gautam, D. Kumar and O. Parkash

Presented in 17<sup>th</sup> AGM – MRSI, held at Lucknow University, Lucknow on February 9- 11, 2006.

- 16. Dielectric behavior of ferroelectric lead strontium titanate borosilicate glass ceramics doped with La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam, Devendra Kumar and Om Parkash

Presented in National Symposium on Science & Technology of Glass & Glass – Ceramics at BARC, Mumbai, during 15-16 September, 2006.

- 17. Dielectric relaxation and impedance spectroscopic analysis in the glass ceramic system [( $Pb_xSr_{1-x}$ ) OtiO<sub>2</sub>]-[( $2SiO_2.B_2O_3$ )]-[BaO]-[ $K_2O$ ]-[1La<sub>2</sub>O<sub>3</sub>]
  - **C. R. Gautam**, Prabhakar Singh, D. Kumar, O. Parkash, O.P. Thakur and C. Prakash Presented in 18<sup>th</sup> AGM MRSI, at NPL,Delhi, February 12- 14, 2007.
- **18.** Synthesis, Crystallization and Dielectric Behavior of Ferroelectric (PbSr)TiO<sub>3</sub> Borosilicate Glass Ceramics Doped with La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam, Devendra Kumar and Om Parkash

Oral presentation in "Second International Meeting On Materials for Electronic Applications", (IMMEA-2009) at Hammamet, TUNISIA during 8-10 May, 2009.

- 19. Glass and Glass Ceramics
  - C. R. Gautam

Oral presentation in 51<sup>st</sup> Orientation course during 16 June, to 13 July 2009 at Academic Staff College, Banaras Hindu University, Varanasi -226007.

- **20.** Study of Electrical Properties of Ferroelectric (PbSr)TiO<sub>3</sub> Glass Ceramic System with Addition of La<sub>2</sub>O<sub>3</sub> by Impedance Spectroscopy.
  - C. R. Gautam, Devendra Kumar, Prabhakar Singh and Om Parkash

Presented in "International Conference on Electroceramics", at Delhi University, Delhi, December 13-17, 2009.

- **21.** Synthesis, DTA and IR Study of (PbSr)TiO<sub>3</sub> Borosilicate Glasses
  - C. R. Gautam, D. Kumar, and O. Parkash

Oral presentation in "International Workshop and Symposium on Synthesis and Characterization of Glass/ glass ceramics (IWSSCGGC-2010)", at PUNE, July 9-10, 2010.

- 22. Dielectric and Impedance Spectroscopy of Ferroelectric (PbSr)TiO<sub>3</sub> Glass Ceramic System doped with La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam, Avadhesh Kumar Yadav D. Kumar, and O. Parkash

16<sup>th</sup> National Seminar on Physics and Technology of Sensors (NSPTS-16) at Department of Physics, University of Lucknow, Lucknow, Feburary 11-13, 2011

- 23. DTA and Crystallization Behavior of Perovskite (BaSr)TiO<sub>3</sub> Borosilicate Glass Ceramic Doped With La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam, Avadhesh Kumar Yadav

In "International Symposium on Materials Education", at PUNE, March 26-28, 2011.

**24.** Effect of Global Warming on Climate Change of the Earth

- C. R. Gautam, Avadhesh Kumar Yadav and Arbind Singh
- National conference on Science of Climate Change and Earth's Sustainability: Issues & Challenges, September 12-14, 2011, University of Lucknow, Lucknow
- 25. Synthesis and dielectric Characteristics of Nano composite (Ba, Sr)TiO<sub>3</sub> Borosilicate Glass-ceramic System Doped With La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam, Avadhesh Kumar Yadav and Prabhakar Singh
  - International conference and workshop Nanostructured Ceramics and other Nanomaterials 13-16 March, 2012, Delhi University, Delhi (India)
- **26.** Synthesis, Crystallization and Mechanical Behavior of (Ba,Sr)TiO<sub>3</sub> Borosilicate Glass Ceramics doped with La<sub>2</sub>O<sub>3</sub>
  - C. R. Gautam and Avadhesh Kumar Yadav
  - National Symposium on Materials & Processing 10-12 October 2012 (MAP-2012), BARC Mumbai-400085
- 27. A Brief Introduction to Ceramic Materials: Synthesis and Applications (Invited Talk)

## C. R. Gautam

Recent Trends in Nanotechnology and Materials Characterizations "RTNMC-2012" during January 12-13, 2012 at Prasad Institute of Management and Technology, Kanpur Road, Banthara, Lucknow-227101

- 28. Synthesis and Crystallization of Silica Based Bioactive Glasses for Dental Ceramics (Invited Talk)
  C. R. Gautam
  - International Seminar on Advances in Bio-&Nano-Materials,17 November, 2013, at Department of Physics, University of Lucknow, Lucknow-226007
- 29. Synthesis, Structural and Optical Investigations of [(Pb<sub>x</sub>Bi<sub>1-x</sub>)TiO<sub>3</sub>]-[(2SiO<sub>2</sub>B<sub>2</sub>O<sub>3</sub>)]-La<sub>2</sub>O<sub>3</sub> Glass System (Poster)
  - C. R. Gautam, Abhishek Madheshiya, Sunil Kumar
  - International Seminar on Advances in Bio-&Nano-Materials,17 November, 2013, at Department of Physics, University of Lucknow, Lucknow-226007
- 30. Perovskite PbTiO<sub>3</sub>/BaSrTiO<sub>3</sub> Borosilicate Glass Ceramics Doped with La<sub>2</sub>O<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub>, Fe<sub>2</sub>O<sub>3: High</sub> Dielectric Constant Materials (Invited Talk)

## C. R. Gautam

- 5<sup>th</sup> National Conference on Nanotechnology and Materials Science (NATCON NAMTECH) December 21-23, 2013, at Department of Physics, University of Lucknow, Lucknow-226007
- 31. Synthesis, Crystallization and Dielectric Behavior of (Pb,Bi)TiO<sub>3</sub> Borosilicate Glass Ceramics C. R. Gautam, Abhishek Madheshiya, Anod Kumar Singh, Sunil Kumar, Ranabrata Mazumder 5<sup>th</sup> National Conference on Nanotechnology and Materials Science (NATCON NAMTECH) December 21-23, 2013, at Department of Physics, University of Lucknow, Lucknow-226007
- 32. Preparation, Crystallization and machinability of Silica Based Glass Ceramics for Dental Applications

## C. R. Gautam

International Symposium on Advances in Biological & Material Sciences (ISABMS-2014) July 15, 2014 at Lucknow University, Lucknow

- 33. Synthesis Microstructure and Dielectric Properties of (Pb, Bi)TiO<sub>3</sub> Ceramics
  - C. R. Gautam, Abhishek Madheshiya, R.K. Diwedi
  - International Symposium On Advances In Biological & Material Sciences (ISABMS-2014) July 15, 2014 at Lucknow University, Lucknow-226007
- **34.** Synthesis and Optical Investigations on (Sr<sub>1-x</sub>Bi<sub>x</sub>) TiO<sub>3</sub> Borosilicate Glass
  - C. R. Gautam, Anod Kumar Singh, Abhishek Madheshiya
  - International Symposium On Advances In Biological & Material Sciences (ISABMS-2014) July 15, 2014 at Lucknow University, Lucknow-226007
- 35. Synthesis and Spectroscopic Investigation of Nano Hydroxyapatite via Microwave Irradiation Technique

Sunil Kumar, C. R. Gautam, Vijay Mishra

International Symposium On Advances In Biological & Material Sciences (ISABMS-2014) July 15, 2014 at Lucknow University, Lucknow-226007

36. Synthesis of Low Density Porous Haxagonal Boron Nitride for Effective Water Cleaning Application.

## **Chandkiram Gautam**

2<sup>nd</sup> National Workshop on Advanced Ceramics and Nanotechnology, December 4-5, 2015, at Department of Ceramic Engineering, Indian Institute of Technology, BHU, Varanasi-221005, India (Invited Talk)

37. Synthesis of Ultra Low Density of 3 D Porous h-Boron Nitride for Removal of Oil and Organic Impurities from Water.

## C. R. Gautam

International Conference on Advances in Light Technologies and Spectroscopy of Materials (ICALTSM-2016) January 16-18, 2016, at Department of Physics, University of Lucknow, Lucknow-226007 India (Invited Talk)

38. Synthesis, Structural and Improved Mechanical Properties of MgO/La<sub>2</sub>O<sub>3</sub> Substituted Hydroxyapatite for Bone Substitute Material Applications.

#### C. R. Gautam

International Conference on Perspectives in Vibrational Spectroscopy" – ICOPVS-2016 during November 5-8, 2016 at University of Lucknow, Lucknow, India (Invited Talk)

39. IR and Raman Spectroscopy of (Pb,Bi)TiO<sub>3</sub> Borosilicate Glasses Doped with 1 mole percent of CeO<sub>2</sub>. (Oral Presentation)

Abhishek Madheshiya, Atul Khanna, C. R. Gautam

104<sup>th</sup> Indian Science Congress, Section of Materials Science, pp. 16, Jan 3-7, 2017 organized by Sri Venkateswara University, Tirupati, Andhra Pradesh (O-1).

**40.** Dental Glass

and Hydroxyapatite Bioceramic Composites for Bone Implant Applications: Synthesis and Characterizations.

#### C. R. Gautam

International Conference on "Emerging Materials and Applications" (ICEMA-2017) at Physics Department, University of Allahabad, Allahabad, India during February 20-22, 2017 (Invited Talk)

- 41. Effect of Pb/Bi on Dielectric Properties of Lead Bismuth Titanate Borosilicate Glass Ceramics. Abhishek Madheshiya, C. R. Gautam, Shail Upadhyay International Conference on Emerging Materials and Applications (ICEMA-2017), pp. 55, Feb 20-22, 2017 organized by Department of Physics, University of Allahabad, Allahabad (PP-09).
- 42. Synthesis, Structural and Morphological Study of Zirconia Based Composites for Biomedical Applications.

Ajaz Hussain, C. R. Gautam, Abhishek Madheshiya, Maneesha Gupta

International Conference on Emerging Materials and Applications (ICEMA-2017), pp. 56, Feb 20-22, 2017 organized by Department of Physics, University of Allahabad, Allahabad (PP-10).

**43.** Synthesis of Glass and Glass Ceramics and Porous 3D, h-BN Based Nanomaterials for Oil Absorption and Biomedical Applications.

## C. R. Gautam

4<sup>th</sup> Lucknow Science Congress (LUSCON-2017) during 2<sup>nd</sup> to 3<sup>rd</sup> March 2017, at Department of Applied Physics, Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Raebareli Road, Lucknow (Central) University, Lucknow, U.P., India (Invited Talk)

**44.** Synthesis of HAp/h-BN Based 3-D Nanostructured Composites: For Bone Substitute Biomaterial Applications

## Chandkiram Gautam

International Conference On "Nanoscience and Nanotechnology" (ICNN) During 22-24, September 2017, Department of Applied Physics, Babasaheb Bhimrao Ambedkar University, Vidya Vihar,

- Raebareli Road, Lucknow (Central) University, Lucknow, U.P., India. (Invited Talk)
- **45.** Synthesis and Mechanical Behavior of h-BN Reinforced Zirconia: A Novel Bio-composite for Bone Implant Applications

A. Gautam, C. R. Gautam, V. K. Mishra

International Conference On "Nanoscience and Nanotechnology" (ICNN) During 22-24, September 2017, Department of Applied Physics, Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Raebareli Road, Lucknow (Central) University, Lucknow, U.P., India.

**46.** Synthesis of Borosilicate Glasses Containing (Pb,Bi).TiO<sub>3</sub> in Relation to Its Electrical Properties. **(Oral Presentation)** 

Abhishek Madheshiya, C. R. Gautam

National Seminar on Science Communication: Issues and Challenges, pp. 20-21, Feb 16-17, 2018 organized by Department of Physics, Fakhruddin Ali Ahmad Government PG College, Mahmoodabad, Sitapur.

47. Synthesis, Crystallization, Microstructure and Mechanical Behavior of Silica and h-BN Based Biocomposites for Bone Implant Applications

C. R. Gautam

National Conference on Advanced Materials and Nanotechnology (AMN-2018) during 15-17 March, 2018 at Jaypee Institute of Information Technology (JIIT), Noida (India). (Invited Talk)

- Synthesis, structural and Sensing properties of graphene reinforced hexagonal boron nitride

   A. Gautam, C. R. Gautam
   National Conference on Advanced Materials and Nanotechnology (AMN-2018) during 15-17
   March, 2018 at Jaypee Institute of Information Technology (JIIT), Noida (India).
- 49. जैव-चिकित्सा अनुप्रयोग के लिए नैनो-समग्र का संश्लेषण तथा रूपात्मक और यांत्रिक लक्षणों का वर्णन C. R. Gautam

सूछ्म पदार्थ एवं संबद्ध चेतन ऊर्जा पर राष्ट्रीय संगोष्ठी, 1-3 फरवरी 2019, भौतिकी विभाग, भौतिकीय और निर्णय विज्ञान विद्यापीठ, बाबासाहेब भीमराव अम्बेडकर विश्वविद्यालय, विद्या विहार, रायबरेली रोड, लखनऊ -226025, यूपी, भारत (Invited Talk)

50. Synthesis and Multifunctional Activities of Novel 3-D Nanocomposites for Biomedical ApplicationsC. R. Gautam

International Symposium on Advances in Functional & Biological Materials ISAFBM-2019 February 28, 2019 Department of Physics, University of Lucknow, Lucknow (Invited Talk)

**51.** 3-D nanocomposites for emerging biomedical applications: synthesis, structural, morphological and mechanical characteristics

#### **Chandkiram Gautam**

National Conference on Industrial Applications for Nanoscience and Nanotechnology' held during 15-16 November, 2019 at Motilal Nehru National Institute of Technology (MNNIT) Allahabad, Pryagraj. (Oral presentation)

**52.** Synthesis and characterizations of hydroxyapatite (HAp) based 3-D nanocomposites for bone/dental implant applications

## **Chandkiram Gautam**

11th National Conference on Solid State Chemistry and Allied Areas (NCSCA-2019 to be held during 20-21 December, 2019 at S K Porwal College of Arts, Science and Commerce, Nagpur. (Invited Talk)

53. Synthesis of 3-D Nanocomposites: Mechanical and Biological Characterizations for Dental/Bone Implant Restorations

## **Chandkiram Gautam**

Recent Advances in Materials Processing and Materials Tribology during 06 January 2020 to 10 January 2020 at Department of Mechanical Engineering, Indian Institute of Technology (BHU) Varanasi. (Invited Talk)

54. Bioactive Composite Glass and Glass Ceramics For Biomedical Applications

**Chandkiram Gautam** 

International Conference on Advanced Materials and Nanotechnology (AMN-2020) during 20-22 February 2020 at Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology, Noida (Invited Talk)

55. Synthesis, Structural and Mechanical Properties of 3-D Interconnected HAp-ZrO<sub>2</sub>-hBN Composites for Bone Implant Application

Amarendra Gautam Chandkiram Gautam

- International Conference on Advanced Materials and Nanotechnology (AMN-2020) during 20-22 February 2020 at Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology, Noida (Oral presentation)
- 56. Synthesis, Structural and Crystallization Behavior of [30BaCO<sub>3</sub>-(15-x) ZrO<sub>2</sub>-20TiO<sub>2</sub>-35SiO<sub>2</sub>-xCrO<sub>3</sub>] Glass System

Shweta, Zaireen Fatima, Ajaz Hussain and C.R. Gautam

International Conference on Advanced Materials and Nanotechnology (AMN-2020) during 20-22 February 2020 at Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology, Noida (Poster presentation)

- 57. Synthesis, Structural and Morphological Analysis of Hexagonal Boron Nitride Doped BaCO<sub>3</sub> -TiO<sub>2</sub> Composites for Sensing Applications
  - Abhishek Madheshiya, Sarvesh Kumar Avinashi, Swajal Kumar Srivastava, Subodh Kumar, Chandkiram Gautam

International Conference on Advanced Materials and Nanotechnology (AMN-2020) during 20-22 February 2020 at Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology, Noida (Poster presentation)

**58.** 3-D Nano Composites for Bone/Dental Implant

**Chandkiram Gautam** 

Resource person to participants of the Refresher Couse in Physics and Astronomy on dated 18 February 2020 at UGC Human Resource Development Center (HRDC), University of Lucknow, Lucknow. (Invited Talk)

- 59. Brief Introduction to Ceramics: Synthesis and Characterizations For Biomedical Applications Chandkiram Gautam
  - Resource person to participants of the on line Refresher Couse in Physics and Astronomy on dated 26 November, 2020 at University of Allahabad, Prayagraj 211 002 (INDIA) (Invited Talk)
- **60.** Fabrication of 3-D Nanocomposites for Biomedical Applications

**Chandkiram Gautam** 

Resource person for AICTE Sponsored QIP-Short Term Course (STC) in **ONLINE Mode** on "**Advances** in **Machining and Processing Technology**" during February 01-06, 2021. (INDIA) (**Invited Talk**)

- **61.** Ceramics: Synthesis and Characterizations
  - **Chandkiram Gautam**

Resource person for the on line Refresher Couse in Physics, on dated 17 February, 2021 at University of Lucknow, Lucknow - 226007 (INDIA) (Invited Talk)

## **Conference / Workshops Participated: 10**

- 62. "AsCA'01 IV Meeting of the Asian Crystallographic Association" Held at I.I.Sc., Bangalore Molecular Biophysics Unit 18-21, November 2001.
- **63.** Exchange Awareness of Intellectual Property in Export Oriented Industries, Held at Department of Ceramic Engineering I.T.B.H.U., Varanasi on 5<sup>th</sup>November, 2003
- **64.** IAPT, A workshop on Renovation of U.G. Physics Laboratories, Held at Christ Church College, Kanpur (India) October 21-22, 2005.
- 65. "National Conference on Nanomaterials and Nanotechnology" Held a Department of Physics,

	University of Lucknow, Lucknow on 08-10 December, 2007
66.	International Workshop on Nuclear Reaction Data for Advanced Reactor Technologies at ICTP,
	Trieste, Italy, 19 - 30 May 2008.
<b>67.</b>	"International Workshop on Synthesis and Characterization of glass/glass ceramics
	(IWSSCGGC-2010)", at PUNE, July 7-8, 2010.
<b>68.</b>	249th American Chemical Society (ACS) National Meeting & Exposition, March 22-26, 2015 at
	Denver, USA.
<b>69.</b>	Empowering Your Protein Research with Protein Simple's Cutting-Edge Technology held on
	14 <sup>th</sup> August, 2015 at Texas Southern University, Houston, Texas, USA.
<b>70.</b>	IUPAC Acquaintance Programme, New Delhi at Department of Physics, University of
	Lucknow, Lucknow on date 19 <sup>th</sup> September, 2018.
<b>71.</b>	Workshop on High Performance Computing (HPC), Department of Physics, University of
	Lucknow, Lucknow on dated 5-9 August, 2019.