

CURRICULUM VITAE

Dr. BHANU P. S. DOHARE

Associate Professor

Department of Electronics & Communication Engineering

SoS Engineering & Technology

Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur, C.G.

Member-SMIEEE, OPTICA, OSI & SPIE

Research Area: VLSI, Semiconductors, AIML, Optics & Photonics

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EDUCATION:

Sept. 2021-Sept. 2023.

National Institute of Technology (NIT), Warangal India

PG Diploma in AIML: Completed from NIT Warangal.

-Python for AI-ML

-Machine Learning

-Predictive Analytics

Aug.2012-Feb.2017

Indian Institute of Technology (Indian School of Mines) Dhanbad India

Ph.D. (Awarded in Feb. 2017)

Dept.- Electronics Engineering

Guide- Prof. V. Kumar, IIT(ISM) Dhanbad

Aug.2008-Nov.2010

SGSITS Indore, India

M.Tech- Microelectronics & VLSI Design

Aug.2004-June2008

Samrat Ashok Technology Institute (SATI) Vidisha India

B.E.- Electronics & Communication Engineering

PROFESSIONAL/TEACHING EXPERIENCE:

April 2025 to Present

Associate Professor

ECE, SoS Engineering & Technology, Guru Ghasidas University (A Central University)
Bilaspur C.G.

Jan 2024 to March 2025

Associate Professor & Head

Electronics & Communication Engineering, Prestige Institute of Management & Research (PIMR), Bhopal M.P.

Jan 2020 to Dec. 2023

Assistant Professor

Electronics & Communication Engineering, Lakshmi Narain Institute of Technology (LNCT)
Bhopal M.P.

Jan 2017 to July. 2017

Assistant Professor

Electronics & Communication Engineering, E R Engg. College (S R University), Warangal.

ATTAINMENTS IN SPORTS/EXTRA-CURRICULAR ACTIVITIES:

- B-Certificate in **NCC**, and **TSC** certificate in **NCC**
- Certificate of **National grade** in Cricket Tournament at school level and college level both.
- Former **Treasurer** as official post of OPTICA (formerly OSA) IIT(ISM) Student Chapter.
- Former **President** as official post of OPTICA (formerly OSA) IIT(ISM) ISM Student Chapter.

FELLOWSHIPS:

- Received fellowship from MHRD for Ph. D. research work during 2012 to 2016.
- Received fellowship from MHRD for M. Tech program during 2008 to 2010.

ACHIEVEMENTS, AWARD AND RECOGNITION:

- **Received Grant** of Rs. 50000 from ISMAA, IIT(ISM) Dhanbad to presented a paper in International Conference “IONS Nanjing” **China**, 10-12 July (2015).
- **Received Certificate with memento** for the **Session Chair** in international conference on Soft Computing: Theories and Applications held on December 17-19, 2021 at IIIT Kota.
- **Sanctioned** a grant of Rs. 45000/ from **Madhya Pradesh Council of Science & Technology** for organizing workshop on “Intellectual Property rights and Publication Indexing” in session 2023-24.
- **Received Certificate with memento** for the **Session Chair** in international conference on 2nd Int. Conf. on VLSI & Microwave and Wireless Technologies, held on 17-18, May, 2024 at MMMUT Gorakhpur.
- **Received Grant** of 3.5 Lakh from **AICTE ATAL Academy** to organize a ATAL FDP from 30 sept. to 05 Oct., 2024 at PIMR Bhopal.
- **Received Travel Grant** from OPTICA to attend Career Accelerator Program held in dec. 9-11, 2024 at **Berlin, Germany**.
- **Form a New IEEE Student Branch in PIMR Bhopal in Dec. 2024.**

PUBLICATIONS:

A. Journals (SCI)

- [1]. V. Kumar, **Bhanu P. Singh** and Bramha P. Pandey “First-principle calculations of the elastic properties of $A^{II}B^{IV}C_2^V$ semiconductors” *Comput. Mater. Sci.*, 87 (2014) 227.
- [2]. V. Kumar, S. K. Tripathy, Vijeta Jha and **B. P. Singh** “Second harmonic generation properties of $A^{II}B^{IV}C_2^V$ chalcopyrite semiconductors” *Phys. Lett. A*, 378 (2014) 519–523
- [3]. V. Kumar, Anita Sinha, **B. P. Singh**, A. P. Sinha and V. Jha “Refractive index and electronic polarizability of ternary chalcopyrite semiconductors” *Chin. Phys. Lett.*, 32 (2015) 127701.
- [4]. V. Kumar, Anita Sinha, **B. P. Singh** and S. Chandra,” Second-order nonlinear optical susceptibilities of $A^{II}B^{VI}$ and $A^{III}B^V$ semiconductors” *Phys. Lett. A*, 380 (2016) 3630-3633.
- [5]. V. Kumar, **Bhanu P. Singh** and S. Chandra “Optical, elastic and thermal properties of ZB-AlN semiconductor from first-principle calculations” *Ind. J. Phys.* 91(4) (2017) 445-451.
- [6]. V. Kumar and **Bhanu P. Singh** “Structural and elastic properties of $A^IB^{III}C_2^{VI}$ semiconductors” *Ind. J. Phys.* 92(1) (2018) 29-35.
- [7]. Shailendra Singh Ojha, Sadhana Mishra, Bhupendra Dhakad & **Bhanu Pratap Singh**, “Dual-Wideband Rectenna for RF Energy Harvesting from 5G and WIMAX”, *International Journal of Electronics*, Aug. 2024, 1-18, Taylor & Francis

B. Other Journals

- [8]. Akhilesh Kumar, **Bhanu Pratap Singh** and Jyoti Athiya “Design and Noise Analysis of Biquad GIC Notch Filter in 0.18 μm CMOS Technology” *IJAET Journal*, vol. 1, Issue 3, July 2011, pp.138-144, turkey, IF-0.86
- [9]. Akhilesh Kumar, **Bhanu Pratap Singh** and Jyoti Athiya “Design of Low Power Low Noise Biquad GIC Notch Filter in 0.18 μm CMOS Technology” *IJAET Journal*, vol. 1, Issue 5, Nov 2011, pp.500-506, turkey
- [10]. **Bhanu Pratap Singh**, D. S. Ajnar and P. K. Jain “Low power high gain Folded-cascode CMOS Opamp with slew rate enhancement circuit for 100mW 10 bit 50 MS/s High speed ADC Designed in 0.18 μm CMOS Technology” *IJCNS Journal*, vol.2 No.8, August 2010.

C. Conference Publications

- [1]. **Bhanu Pratap Singh**, Jyoti Athiya and P. K. Jain “Design of Low Power Low Noise Biquad GIC Notch Filter in 0.18 μm CMOS Technology” *CICN-IEEE Proceeding*, Gwalior, Oct-2011.
- [2]. V. Kumar, **Bhanu P. Singh**, S. K. Tripathy “First-principles calculations of the elastic properties of ternary chalcopyrite semiconductors” *ICMAP-IEEE Proceeding*, IIT(ISM) Dhanbad, Dec-2013.
- [3]. **Bhanu P. Singh**, V. Kumar and S. K. Tripathy, First-principle calculations of optical and phonon properties of wurtzite gallium nitride, *SLIET Longowal, Punjab*, March 13-14, 2015. *Advanced Materials and Radiation Physics (AMRP-2015): AIP Conference Proceedings* 1675, 030046 (2015) ISSN: 0094-243X.,
- [4]. **Bhanu P. Singh** and V. Kumar, Optical and Phonon Properties of Zinc-Blende AlN from First-principle Calculations, 4th Int. Conf. CDAMOP, University of Delhi, Delhi, March 11- 14, (2015) 116.
- [5]. **Bhanu P. Singh** and V. Kumar “First-principle calculations of optical properties of zinc-blende indium nitride under pressure” *IONS Nanjing Proceeding*, **China**, 10-12 July (2015) 34.
- [6]. P. S. Gayathri, D. V. Satyanand, B. S. Kiran, T. N. Sravya, **Bhanu P. Singh** and V. Kumar, “Elastic properties of ZB III-Nitrides: A first-principles study”, *IEEE Int. Conf. on Microwave and Photonic (ICMAP-2015)*, IIT(ISM), Dhanbad, Dec.11-13, 2015. doi: 10.1109/ICMAP.2015.7408762.
- [7]. **Bhanu. P. Singh** and Prachi Parashar “Optical properties of ZB-InN by DFT” abstract id-2075, 21st National Symposium on Radiation Physics (NSRP-21), CAD Indore, March,5-7, 2018.
- [8]. **Bhanu P. Singh**, Prachi Parashar and Jyoti Athiya “Study of Cascode Current-Source Based Operational Transconductance Amplifier Using AMS 0.35 μm Technology” *National Conference on Recent Trends in Devices, Circuits and Communication*, MMMUT Gorakhpur,

April, 15-16, 2019.

- [9]. Kanchan Cecil, Meena Panchore and **Bhanu P. Singh** “Impact of High-K Dielectric on Charge Plasma based CPSB-JLT” Proceedings of International conference on Synthesis, Characterization & Applications of Emerging Materials with special reference to sustainable technologies” during 22-24 Feb. 2021.
- [10]. **Bhanu P. Singh** and Anand Agrawal, “ Design and Analysis of GIGA Fiber like Connectivity of 5G Technology Using 60 GHz Band, Proceedings of 7th International Conference on Soft Computing: Theories and Applications (SOCTA 2022), Springer, Singapore, Apr, 2023 pp 777–785, Part of the Lecture Notes in Networks and Systems bookseries (LNNS, volume 627), 25 April 2023. **SCOPUS**, https://doi.org/10.1007/978-981-19-9858-4_66.
- [11]. **Bhanu P. Singh**, S. P. Kori, Sourabh Pandey, Hari S. Shrivastav and Uma S. Kurmi, “Optical Properties Of Zink-Blende Indium Nitride Under Pressures Using Density Functional Theory” 2nd Int. Conf. on VLSI & Microwave and Wireless Technologies, held on 17-18, May, 2024 at MMMUT Gorakhpur. **Accepted** in Lecture Notes in Electrical Engineering, Springer Nature, **Scopus**.
- [12]. Presented a poster on “Implementation of Quantum Combinational Circuits Using XOR- AND Reduction Techniques”, in Madhya Pradesh Vigyan Sammelan and Expo (MPVS-2021) during December 22-25, 2021, organized by IIT Indore.

BOOKS/CHAPTERS PUBLISHED:

- **Book Chapter**, Bhanu P. Singh “Studies of Optical and Phonon Properties of Wurtzite Gallium Nitride: First-principle Calculations” Advanced Aspects of Engineering Research Vol. 15, 11 June 2021, Page 17-24. ISBN 978-93-91215-90-3, B. P. International
- **Book Chapter**, Bhanu P. Singh, Trishu Singh and Raju Narwade ‘Recent progress of fibre optic sensors for the structural health monitoring of civil infrastructure’ in Book ‘Sensors and Fiber Optics: Recent Trends’, Namya Press, New Delhi, Ed.1, January 2023, page 61-77. ISBN: 9789355451712

PATENTS FILED/PUBLISHED/GRANTED:

- [1] **Bhanu P. Singh**, Vivek Jain, S. P. Kori, Uma Shankar Kurmi and Arun Patel, “Framework for Enhancing the Performance of the Rail Industry Using Digitalization”, Application Ref Number-202221054436, Filing Date-22/09/2022 -Indian Patent Office, published on: 29/03/2024.
- [2] Shailendra Singh Ojha, Ranjeet Singh Tomar, Bhupendra Dhakad, Sadhana Mishra, Rachit Jain and **Bhanu Pratap Singh** “Triple Wideband Antenna for RF Energy Harvesting Applications” Appn No. 202321009683, Published on 17/03/2023. Filed: 20/02/2023.

INVITED TALKS/LECTURES:

- [1] **Delivered an Expert Talk** on “Publication of Faculty Research Work” in one day workshop, organized by LNCT Bhopal, held on 5th June 2018. (MPCOST)
- [2] **Delivered a keynote lecture** in FDP on 5G Mobile Communication, organized by LNCT Bhopal in association with RGPV, TEQIP-III Bhopal, held on 23-27, Sept. 2019.

PROFESSIONAL BODIES MEMBERSHIP:

- Active member of OPTICA (formerly OSA) **Member No.: 1094731**
- Active member of Society of Photo-Optical Instrumentation Engineers (SPIE) **ID: 3722462**
- **IEEE Professional Senior Member**, *Membership No. 92847590*
- Life Fellow of Optical Society of India (OSI), Life Fellow Member: **L-756**

REVIEWER/COMMITTEE MEMBER:

- **Committee member**- Siegman International School on Lasers Review Committee
- **Reviewer**- OSA, J. Nanoelectronics & Optoelectronics, SCI Journal, Elsevier

- **Reviewer-** Computational Material Science, SCI Journal, Elsevier
- **Received** OSA reviewer certification course on 25 July, 2020.
- **Received** an appreciation certificate to **review the articles** in international conference on VLSI and microwave and wireless technology-2021, organized by MMMUT Gorakhpur during March, 20-21, 2021.
- **Received** an appreciation certificate to **review the articles** in international conference on Soft Computing: Theories and Applications held on December 17-19, 2021 at IIIT Kota.

WORKSHOPS/FDPs/OTHERS:

- [1] **Organized** an international conference “**IONS Dhanbad 2016**” held on Sept. 7-10, 2016 at IIT(ISM) Dhanbad, sponsored by OSA and ISM OSA student chapter.
- [2] **Organized** a National Conference(online) as an organizing secretary, “emerging trends and innovations in electronics technology” held on 30 April, 2020 at dept. of electronics & Commn. LNCT Bhopal.
- [3] **Proctor Coordinator** in **FDP** on “Demystifying 5G RF ASICs”, jointly organized by Electronics and ICT academies held from 24 Aug. to 04 Sept. 2020 under Meity, Govt. of India.
- [4] **Attended** virtual conference on laser and electro-optics (**CLEO**) held from 11-15, May 2020, sponsored by APS, IEEE photonics society and OSA.
- [5] **Attended** virtual 2020 Advanced Photonics Congress held from 13-16, July 2020, sponsored by OSA.
- [6] **Organized** Orientation Program of IEEE LNCT Student Branch on 20 May 2023 in the presence of guest Mr. Shubham Gupta, SAC Chair IEEE MP Section.
- [7] **Organized** a National Conference as an organizing Coordinator/secretary, “Recent Advances in Electronics Engineering and Technology” held on 30th June-1st July, 2023 at dept. of Electronics & Commn. LNCT Bhopal.
- [8] **Organized as a Co-coordinator** PIMR Ist Int. Conference on “Effects of Technological Change in Green Growth”, June 14-15, 2024 at PIMR Bhopal Campus.
- [9] **Organized** ATAL FDP on Emerging Trends and challenges on Semiconductor Technologies for next generation, Sept 30- Oct 5, 2024 at PIMR Bhopal.

CAMPUS INVOLVEMENT/COMMUNITY SERVICE:

- [1] **Placement Coordinator**-Central Placement Cell, GGV
- [2] **Branch Counselor/Coordinator**, IEEE STB GGV Bilaspur.
- [3] **Nominated Faculty**- CBDE for the session 2025-2026.
- [4] **Member**-submitting data and preparation/ publishing reports of various Rankings of GGV under IQAC.
- [5] **Member**-Installation and maintenance the alternative internet leased line in the University.
- [6] **Coordinator**-Departmental R&D Committee.
- [7] **Ex-Branch Counselor** in Prestige IEEE Student Branch
- [8] **Ex-Branch Counselor** in IEEE LNCT Student Branch

Declaration:

I hereby declare that the above is true to the best of my knowledge.

Place: Bilaspur

Dr. Bhanu P. S. Dohare