Biodata of Prof. (Dr.)GOPA SEN(GUHA MAJUMDAR)

A. Name and full address — Prof. (Dr.) Gopa Sen (Guha Majumdar)

B. Address & contact details

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C. Date of birth — 03.09.1957

D. Academic Qualifications

	Degree	Subject	University/Institution	Year	% of marks/class
1.	B.Sc.	Physics (Honours)	University of Calcutta	1976	64.4%/ 1st class
2.	B. Tech	Radio Physics & Electronics (RPE)	Do	1979	75.4%/1st class
3.	M. Tech	RPE	Do	1982	GPA- 4.0 out 0f 4.0.1st class
4.	Ph.D.(Tech)	RPE	Do	1989	Not applicable

E. Work experience (in chronological order)

Assistant Professor	CU	08.11.1989 ----	07.11.2000
Associate Professor	CU	07.11.2000 ----	24.12.2008
Professor	CU	24.12.2008 --	Till now

Area of Specialization : Microwave and Millimeter wave Technology, Light wave Technology and Semiconductor Photonics**.**

List of Publications:

I. Journal Publications:

1. **Gopa Guha Majumdar** and Pradip kumar Saha " A novel rectangular waveguide double T-septums" , IEEE Trans. On Microwavw Theory & Techniques, vol-33, pp-1235-1238, Nov.1985.

2. **Gopa Guha Majumdar** and Pradip kumar Saha " Rectangular waveguide with T- shaped septa" , IEEE Trans. On Microwavw Theory & Techniques, vol-35, pp-201-204, Nov.1987.

3. Pradip kumar Saha and **Gopa Guha Majumdar** " Cut-off bandwidth characteristics of inhomogeneous T-septum waveguides" , JIETE vol-32, No.5, Sept- Oct 1986.

4. Pradip kumar Saha and **Gopa Guha Majumdar,** " Bandwidth Characteristics of Inhomogeneous T- septum waveguides", IEEE Trans. On Microwave Theory and Techniques, vol. 37, pp 1021 – 1026, June 1989.

5. Pradip kumar Saha and **Gopa Guha Majumdar**, " Dispersion Characteristics of unilateral and bilaterai finlines by Ritz-Galerkin Techniques", International Journal of Electronics, vol.68, no. 5, pp 839 -948, June 1990.

6. P.K.Basu, N.R.Das, Bratati Mukhopadhyay, **Gopa Sen** and Mukul Kumar Das, "Ge/Si photodetectors and group IV alloy based photodetector materials", Opt. Quant Electron, vol. 41, 567-581, 2009.

7. Soumava Ghosh, Bratati Mukhopadhyay, **Gopa Sen** and P.K. Basu, "Study of Si-Ge-Sn based Heterobipolar Phototransistor (HPT) exploiting Quantum Confined Stark Effect and Franz Keldysh effect with and without resonant cavity", **Physica E**, vol 106, 62-67, 2019.

8. Bratati Mukhopadhyay, **Gopa Sen,** Souradeep De, Rikmantra Basu, Vedatrayee Chakraborty, and Prasanta K. Basu, "Calculated Characteristics of a Transistor Laser Using Alloys of Gr-IV Elements", **Phys. Stat. sol. B**., vol 255, 1800117 (6pp) 2018.

9. Swagata Dey, Vedatrayee Chakraborty, Bratati Mukhopadhyay and **Gopa Sen,** "Modeling of tunneling current density of GeC based double barrier multiple quantum well resonant tunneling diode", **Journal of Semiconductors**, vol 39, 1-5, 2018.

10. Swagata Dey, Bratati Mukhopadhyay, **Gopa Sen** and P.K. Basu, "Type II band alignment in $Ge_{1-x-y}Si_xSn_y/Ge_{1-\alpha-\beta}Si_\alpha Sn_\beta$ heterojunctions", **Solid State Communications**, vol 270, 155-159, 2018.

11. Bratati Mukhopadhyay, **Gopa Sen**, P. K. Basu, Rikmantra Basu, Shyamal Mukhopadhyay, "Prediction of Large Enhancement of Electron Mobility in Direct Gap $Ge_{1-x}Sn_x$ Alloy", **Phys. Stat. sol. B**., vol 254, 1700244 (7pp) 2017.

II. Conference Proceedings:

1. "Group IV Photonics: Prospects and Challenges", P.K. Basu, Bratati Mukhopadhyay and **Gopa Sen**, 10th International Conference on Fiber Optics and Photonics, Photonics-2010, held on Dec 11-15, 2010, IIT Guwahati, India.

2. "Prediction of Lasing Action at 1550 nm from Direct Band Gap Typt I GeC/GeSiSn QW Structure", Bratati Mukhopadhyay, **Gopa Sen** and P.K. Basu, 10th International Conference on Fiber Optics and Photonics, Photonics-2010, held on Dec 11-15, 2010, IIT Guwahati, India.

3. "Ge/Si Photodetectors and Group IV Alloy Based Photodetector Materials", P.K.Basu, N.R.Das, Bratati Mukhopadhyay, **Gopa Sen** and Mukul Kumar Das, 9th International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD, held on Sept. 14-18, 2009, Gwangju, Korea.

4. "Feasibility of Laser Action in Strained Ge and Group Iv Alloys on Si Platform", P.K. Basu, **Gopa Sen** and Bratati Mukhopadhyay, International Conference on Emerging Trends in Electronics and Photonic Devices and Systems, Electro-2009, held on Dec. 22-24, 2009, BHU, Banaras, India.

5. "Feasibility of Laser Action at 1550 nm by Type I GeC/GeSiSn Heterojunctions", Bratati Mukhopadhyay, **Gopa Sen** and P.K. Basu, 4th International Conference on Computers and Devices for Communication, CODEC-09, held on Dec. 14-16, 2009, Kolkata, India.

6. "GeSn/SiGe RCE Photodetectors: A comparative study based on Franz-Keldysh effect and Quantum Confined Stark effect", **Gopa Sen**, Bratati Mukhopadhyay, and P.K. Basu, 4th International Conference on Computers and Devices for Communication, CODEC-09, held on Dec. 14-16, 2009, Kolkata, India.

7. "Design of Ge/SiGe MQW Directional Coupler", **Gopa Sen**, Bratati Mukhopadhyay, and P.K. Basu, International Conference on Computer, Communication, Control and Information Technology, C^3IT-2009, held on Feb. 6-7, 2009, Adisaptagram, W.B., India

8. "Performance Optimization of Ge/SiGe MQW Electroabsorption Modulator for Optical Short Pulse Generation", **Gopa Sen,** Bratati Mukhopadhyay, and P.K. Basu, National Workshop on Advanced Optoelectronic Material and Devices, AOMD-2008, held on Dec. 22-24, 2008, BHU, Banaras, India.

9. :Quest for Direct Gap in Indirect gap Group IV Semiconductors for photonic device application", P.K.Basu, Bratati Mukhopadhyay, Sumitra Ghosh and **Gopa Sen**, 9th International Conference on Fiber Optics and Photonics, Photonics-2008, held on Dec 13-17, 2008, IIT, Delhi, India.

10. "Modeling Electroabsorption and Electrorefraction in Ge/SiGe Multiple Quantum Wells for Applications as Modulators", **Gopa Sen**, Bratati Mukhopadhyay, and P.K. Basu, 9th International Conference on Fiber Optics and Photonics, Photonics-2008, held on Dec 13-17, 2008, IIT, Delhi, India.

11. "Ge/SiGe Quantum Wells on Si for Electroabsorption Optical Intensity Modulators at 1.55 μm", **Gopa Sen**, Bratati Mukhopadhyay, and P.K. Basu, National Conference on Device, Intelligent

Systems and Communication & Networking, AEC-DISC 2008, held on Aug. 1-2, 2008, Asansol, W.B. India.