

Name: Lipi Goswami

Designation: Assistant Professor & Head(i/c)

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Sex: Female

Date of Birth: 05-02-1977

Educational Qualifications:

Sl. No.	Examination Passed	Year of passing	Board / Council / University	Specialization
1	HSLC/10 <sup>th</sup> Std.	1993	SEBA	
2	HSSLC/10+2 Std.	1995	AHSEC	
3	Degree (Please Specify)	1998	Gauhati University	Physics as Honours
4	Master's Degree (Please Specify)	2001	Gauhati University	Nuclear Physics and Cosmic Radiation
5	M. Phil.(Please Specify)			
6	Ph. D. (Please Specify)	2015	Gauhati University	Nanotechnology
7	Post-Doctoral (Please Specify)			

8	Others(Please Specify)			
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Languages known: Assamese, English, Hindi, Bengali,  
(Read, Write & Speak)

Academic/ Administrative Experience: Academic: 23 years  
Administrative: 7 yrs

### **List of Publications:**

#### **Journal Publications:**

1. Theoretical understanding of Low Dimensional structures, Quantum Confinement & Quantum Dots,  
Lipi Goswami, Volume 9, Issue: 11,(November, 2025) Page nos: 217-223, Vesper Journal,  
ISSN: 2704-7598
2. Shape confirmation of Silver nanoparticles from Characterisation Techniques  
<sup>1\*</sup> Lipi Goswami, <sup>2</sup> Pranayee Datta  
*American Journal of Material Synthesis and Processing*, 3(2): 23-29, July 31<sup>st</sup>, 2018.  
p-ISSN: 2575-2154, e-ISSN:2575-1530
3. Coulomb Blockade effect in Ag/PVA nanocomposites.  
<sup>1\*</sup> Lipi Goswami, <sup>2</sup> Pranayee Datta  
*Journal of Basic and Applied Engineering Research*, Volume 2, Issue 20, (2015 Oct)  
Pg:1724-1727. P-ISSN:2350-0077, e-ISSN: 2350-0255.
4. On the electron transport processes of Lead sulphide/Polyvinyl Alcohol Quantum dots.  
Lipi Goswami<sup>1\*</sup>, Pranayee Datta<sup>2</sup>

*Journal of Nanoelectronics and Optoelectronics*, ISSN: 1555-130X (Print) EISSN: 1555-1318 Online Volume 10, No.1, Pg: 15-23 (2015) February, published by American Scientific Publishers, .

5. TEA LEAF ASSISTED SYNTHESIS OF SILVER NANOPARTICLES AND THEIR ANTIMICROBIAL POTENTIAL.

Lipi Goswami<sup>1</sup>, Debabrat Baishya<sup>2</sup>, Sorra Sandhya<sup>3</sup>, Joyeeta Talukdar<sup>4</sup>, Pranayee Datta<sup>5</sup>  
*International Journal of Pharma and Bio Sciences*, 2014 April; 5(2) p 196-204, ISSN-0975-6299, published by SCImago (powered by scopus of Elsevier)

6. Therapeutic Application of Metal nanoparticles.

Lipi Goswami<sup>1</sup>, Rajib Saikia<sup>2</sup>, Subhas Rajbongshi<sup>3</sup>, Pranayee Datta<sup>4</sup>.  
*IJAP (ISST Journal of Applied Physics)*, 2012, Vol3 No2, p 39-43, ISSN: 0976-903X.

7. Optical and Structural Properties of PbS nanoparticles embedded in starch.

<sup>1</sup>Lipi Goswami, <sup>2</sup>Harendra Das, <sup>3</sup>Prabin Kumar Boruah, <sup>4</sup>Pranayee Datta.  
*International Journal of Innovative Research and Development*, Vol1 Issue 7, p 234-239, ISSN 2278-0211.

8. Some characteristics of doped and undoped semiconductor nanocrystals.

Sweety Sarma<sup>1</sup>, Lipi Goswami<sup>2</sup>, Prof(Mrs) Pranayee Datta<sup>3</sup>.  
*National Conference on Nanoscience and Nanotechnology*, Nov 2007, organized by the Dept. of Physics, University of Lucknow, India, conference proceedings p 91-94.

#### **Books Published:**

1. Engineering Physics-II

Prof R.C Goswami, Dr. L.Goswami, Dr. D.Phukan

First Edition: Feb, 2016, Publisher: Mani Manik Prakash, Panbajar, Guwahati

ISBN: 978-81-85917-58-2

2. Engineering Physics-I

Prof R.C Goswami, Dr. L.Goswami, Dr. D.Phukan

First Edition: July, 2016, Publisher: Mani Manik Prakash, Panbajar, Guwahati

ISBN: 978-81-85917-58-2

#### **List of Presentations:**

1. ‘Challenges regarding flexible curriculum of NEP-2020’

Lipi Gosswami

National Conference of Quality in Academics & Research (AQAR 2025) March 12-13, 2025, organized by IQAC Cell, NEHU, Shillong.

2. Low Dimensional Structures, Quantum Confinement and Quantum Dots',

Lipi Goswami

presented in the 'Research Conclave 2024-GCU, Assam Dated: 28th November, 2024 organised by the Department of Computer Science and Engineering, Girijananda Chowdhury University (Oral Presentation).

3. Strong confinement and the synthesis of nanoparticles(quantum dots) in strong confinement region.

**Lipi Goswami**

3<sup>rd</sup> National Conference in Recent Advances in Science and Technology, NCRST, 2020, organized by Assam Science and Technology University, through Online mode, Aug 17-Aug19, under TEQIP-III Project of World Bank and MHRD, New Delhi.

4. Coulomb Blockade effect in Ag/PVA nanocomposites

<sup>1</sup>Lipi Goswami, <sup>2</sup> Pranayee Datta

*International Conference On Electronic Devices, Circuits, Applied Electronics and Communication Technology (EDCAECT 2015) organized by Department of Electronics and Communication Technology, Gauhati University, Gauhati, Assam, India and Krishi Sanskriti, New Delhi, India on 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> October, 2015.*

5. Fabrication of PbS/PVA Quantum Dot devices and their applications as photodetector.

<sup>1</sup>Lipi Goswami, <sup>2</sup> Pranayee Datta.

*International Conference on Green Energy, Smart Materials through Science, Technology and Management, organized by Faculty of Technology in association with UNISA, and SECONE, 21<sup>st</sup> Jan-23<sup>rd</sup> Jan, 2014.*

6. Optical and Structural properties of PbS nanoparticles embedded in starch.

<sup>1</sup>Lipi Goswami, <sup>2</sup> Hirendra Das, <sup>3</sup>Prabin Kumar Boruah, <sup>4</sup>Pranayee Datta.

*International Seminar and Workshop on Energy, Sustainability and Development (ISWED, 2012), organized by the Dept. of Physics, Sibsagar College in association with NEIST, Jorhat held during 12<sup>th</sup>-14<sup>th</sup> Oct'2012.*

7. Silver Nanoparticles: Synthesis through green route and characterization.

<sup>1</sup>Lipi Goswami, <sup>2</sup> Prabin Kumar Boruah, <sup>3</sup> Pranayee Datta.

*57<sup>th</sup> Annual Technical Session of Assam Science Society, Khanapara, Guwahati, held on 16<sup>th</sup> March, 2012, G.U.*

8. An approach towards green synthesis of silver nanoparticles.

<sup>1</sup>Lipi Goswami, <sup>2</sup> Prabin Kumar Boruah, <sup>3</sup> Pranayee Datta.

*International Conference of NanoScience and Technology, organized by ARCI (International Advanced Research Centre for Powder Metallurgy and New Materials) sponsored by Nano Mission, Department of Science and Technology, Govt. of India, Jan 19- Jan23, 2012.*

9. Some characteristics of doped and undoped semiconductor nanocrystals.

Sweety Sarma<sup>1</sup>, Lipi Goswami<sup>2</sup>, Prof(Mrs) Pranayee Datta<sup>3</sup>.

*National Conference on Nanoscience and Nanotechnology, Nov 2007, organized by the Dept. of Physics, University of Lucknow, India,*

#### Research Experience:

- Doctoral thesis guided :
- Research & Consultancy Projects:

Membership of Professional bodies: Life Member of PANE (Physics Academy North East)

Award, Fellowship & Recognition: 'Best Faculty Award', Dept. of Physics, 2010

Date: 01-12-2025

(Name) : Lipi Goswami