

Dr. Rajib Saikia



Present position: Assistant Professor (II)

Office address: Department of Physics

Sibsagar College, Joysagar-785665, Assam.

E-mail: raja199@rediffmail.com, rajibsaikia4@gmail.com

Mobile No: 9954135781

Academic profile

2013 Ph.D Thesis Title: “Synthesis and Characterization of Ag/PVA nanocomposites and their applications in Electronics and Photonics”. Gauhati University, Assam.

2005 MSc Physics, 1st Class (Rank 1st), Specialization: (i) Nuclear Physics, (ii) High Energy Physics, Gauhati University, Guwahati, Assam.

2002 BSc Physics, 1st Class (Rank 3rd, Distinction), Dibrugarh University, Assam.

Academic Recognition

- (i) Qualified for JRF (NET) under CSIR (UGC).
- (ii) Topper in M.Sc. (Physics) 2005.

Research Interest

- (i) Nanocomposites of Plasmonic metal and polymer
- (ii) Nano devices.
- (iii) Photonic device modeling

Research Project Undertaken

UGC sponsored minor research project entitled “Fabrication of Thin Film Capacitor with Metal Polymer Nano Composite as Dielectric Layer”.

Project Cost: **1.95 Lakhs**

Sanction letter no.: **F. 5-185/2011-12/MRP/NERo/10717**

Duration: 18 months (Completed on 12-09-2013)

Publications

1. **Rajib Saikia**, P. Gogoi, P.K. Borua and P. Datta “Spectroscopic Studies on Ag/PVA Nanocomposite Thin Films Prepared by thermal Annealing Process” *International Journal of Nanoscience(IJN)* Vol. 10 No.3 pp 427-432 (2011). [ISSN Print: 0219-581X; ISSN Online: 1793-5350]
2. **Rajib Saikia**, P. Gogoi and P. Datta “Fabrication of Ag/PVA nanocomposites and their potential applicability as dielectric layer in thin film capacitor” *Journal of Experimental Nanoscience* Vol.8 No.2 pp.194-202 (2013). [ISSN Print: 1745-8080; ISSN Online: 1745-8099]
3. Paragjyoti Gogoi and **Rajib Saikia** “Effect of Ag doping on the electrical properties of thermally deposited CdS-La₂O₃ TFTs” *International Journal of Electronics* Vol 99 No. 6 pp 869-876 (2012). [ISSN Print: 0020-7217; ISSN Online: 1362-3060]
4. **Rajib Saikia**, M. Buragohain, P. Datta, P. Nath and K. Barua “Fiber-Optic pH nanosensor based on SPR of Silver nanostructured film” *AIPConf. Proc.* Vol.1147, pp249-255 (2009) [ISSN: 978-0-7354-0684-1]
5. **Rajib Saikia**, P. Gogoi and P. Datta “Development and Performance Analysis of High Energy Density Thin Film Capacitors with Ag/PVA Nanocomposites as Dielectric Medium” *International Journal of Innovative Research and Development* Vol. 1 No. 7 pp. 83-91 (2012) [ISSN Print: 2278-7631; ISSN Online: 2278-0211].
6. Lipi Goswami, **Rajib Saikia**, Subhas Rajbongshi and Pranayee Datta “Therapeutic Applications of Metal Nano-particles” *ISST Journal of Applied Physics* Vol. 3 No.2 pp 39-43 (2012).
7. Paragjyoti Gogoi, **Rajib Saikia** and Sanjeev Changmai “Top gate ZnO-Al₂O₃ thin film transistors fabricated by chemical bath deposition technique.” *Journal of Semiconductors* Vol. 36 No.4 pp 044002(1-4) (2015) [ISSN: 1674-4926].
8. Paragjyoti Gogoi, **Rajib Saikia**, Dipok Saikia, Ronen Prakash Dutta and Sanjeev Changmai “ZnO TFTs prepared by chemical bath deposition technique with high-*k* La₂O₃ gate dielectric annealed in ambient atmosphere” *Physica Status Solidi (a)* Vol. 212 No.4 pp 826-830 (2015) [ISSN Online: 1862-6319].

Conference Proceedings

8. **Rajib Saikia**, P. Datta “Comparative Study of Metal and Semiconductor Nanoparticles” Presented in the *National Conference on Nanomaterials & Nanotechnology, University of Lucknow (08-10 Dec. 2007)*. P88.

Professional Experience

- (i) Asst. Professor in the Dept. of Physics, Girijananda Chowdhury Institute of Management and Technology (GIMT), Azara, Guwahati-17, Assam. (2006-2009)
- (ii) As Asst. Professor of Dept. of Physics, Sibsagar College, Joysagar, Assam. (2009-)

Courses taught

Thermodynamics, Mathematical Physics, LASER and Nuclear Physics.

Other responsibilities

- (i) Editor for the year 2014-2015, Journal of Frontline Research in Arts and Science, published by Sibsagar College Teachers Unit.
- (ii) Asst. Editor of the Conference Proceeding and Journal (IJIRD) in the International Seminar and Workshop on Energy, Sustainability and Development (ISWESD-2012).
- (iii) Convener, Board of Examination (BOE) for 2015-2018, Sibsagar College, Joysagar, Assam.

Peer reviewer of following journals

- (i) **Polymer-Plastics Technology and Engineering**