

## Bio-Data

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**5. Educational Qualifications:** MSc, PhD in Physic from Gauhati University.

**6. Married:** Unmarried

**7. Languages known:** Assamese, Hindi, English

**8. Whether NET/SLET qualified (Conducted by UGC/CSIR/ICAR/State):** SLET qualified

**9. (A) Research Degree(s):** PhD from Gauhati University

### **10. Publications**

1. Bhabesh Kumar Nath, Aziz Khan, Joyanti Chutia et al "*Enhancement of proton conductivity of sulfonated polystyrene membrane prepared by plasma polymerization process*" *Bull Mat Sci.* 37 (2014) 1613-1624. (Impact factor 1.017)
2. Bhabesh Kumar Nath, Aziz Khan, Joyanti Chutia, "*Composite plasma polymerized sulfonated polystyrene membrane for PEMFC*" *Mat Res Bull* 70 (2015) 887-895. (Impact factor 2.87)
3. Bhabesh Kumar Nath, Joyanti Chutia "*Synthesis of plasma polymerized PEM with pillar surface structure and its fuel cell performance*" *Mat Res Bull* 100 (2018) 62-71. (Impact factor 2.87)
4. Aziz Khan, Bhabesh Kumar Nath, Joyanti Chutia, "*Nanopillar structured Platinum with enhanced catalytic utilization for electrochemical reactions in PEMFC*" *Electrochim Acta* 146 (2014) 171-177. (Impact factor 5.11)
5. Aziz Khan, Bhabesh Kumar Nath, Joyanti Chutia, "*Conical nano-structure arrays of Platinum cathode catalyst for enhanced cell performance (proton exchange membrane fuel cell)*" *Energy* 90 (2015)1769-1774. (Impact factor 4.96).
6. Kibriya siddique, Bhabesh Kumar Nath, Sanjib Karmakar "Study of Structural and Dielectric Properties of Copper Oxide Nanoparticles Prepared by Wet

Chemical Precipitation Method” International Journal of Nanoscience 12 (2013) 1350036.

## **11 Patent**

⊗ Sanjeeb Kalita · Raghuram Kandimalla · Bhabesh Kumar Nath, Joyanti chutia, Jibon Kotoky, **Antimicrobial Suture Biomaterial**, February 2016.

## **12 Ongoing Project**

Currently I have been working as a NPDF fellow in the project (file no-PDF/2016/003518) titled "Chemically modified Bio-membrane (Extracted from the plants) for Proton Exchange membrane Fuel Cell" since June 12, 2017 in the Department of Energy, Tezpur University under the mentorship of Dr. Biraj Kumar Kakati, Assistant professor, Department of Energy, Tezpur University. The project was sanctioned on August 2, 2017 (SERB/F/4168/2017-18).