

# CURRICULUM VITAE



## DONNEY JIGDUNG

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### EDUCATION

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<b>2019 - Ongoing</b>	<b>Doctor of Philosophy (Ph.D.) in Physics, Gauhati University, Guwahati</b>
<b>2015-2017</b>	<b>Master of Science (M.Sc.) in Physics, Indian Institute of Technology, Delhi</b>
<b>2012-2015</b>	<b>Bachelor of Science (B.Sc.) in Physics, Cotton College (Under Gauhati University), Guwahati</b>
<b>2011-2012</b>	<b>Higher Secondary (AHSEC), Diphu Govt. College, Diphu</b>
<b>2008-2009</b>	<b>Secondary School Examination (CBSE), Saraswati Shishu Mandir Senior Secondary School, Gorakhpur</b>

### NATIONAL EXAMS QUALIFIED

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<b>2018</b>	<b>CSIR-UGC NET in Physical Sciences</b>
<b>2015</b>	<b>IIT-JAM in Physics</b>

### AWARDS AND FELLOWSHIPS

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<b>2018-2019</b>	<b>Junior Research Fellow at CPP-IPR, Sonapur, Assam</b> Awarded by Institute of Plasma Research (IPR) under DAE
<b>2018</b>	<b>First Prize in Oral Presentation</b> Awarded at XI Biennial National Conference of Physics Academy of North East (PANE), at Assam University, Diphu Campus, Assam, India.

## WORKSHOP/PROFESSIONAL DEVELOPMENT PROGRAMME ATTENDED

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<b>2018</b> 01-06, Oct	<b>98<sup>th</sup> DAE BRNS-IANCAS National Workshop on Radiochemistry &amp; Applications of Radioisotopes</b> Jointly organized by USTM and IANCAS
<b>2020</b> January	<b>Two Weeks Online Faculty Development Program on “Latex and Moodle Learning Management System”</b> Organized at Nowgong College under Spoken Tutorial Project, IIT Bombay
<b>2020</b> 04 June- 01 July	<b>Orientation Programme for “Faculty in Universities/Colleges/Institutes of Higher Education”</b> Organized by TLC Ramanujan College (University of Delhi) under the aegis of Ministry Human Resource Development & Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
<b>2020</b> 16 July – 07 Oct	<b>Online Certificate Course in Data Science and Machine Learning</b> Organized by NIELIT
<b>2020</b> 13 – 14, Aug	<b>Two Day Online Workshop on ICT Based Pedagogy</b> Organized by IQAC, Nowgong College, Nagaon with support from Teaching Learning Centre, Tezpur Univesity
<b>2023</b> 12-20, June	<b>Short Term Professional Development Programme on Implementation of NEP-2020 for University and College Teachers (Online)</b> Organized by IGNOU, New Delhi
<b>2024</b> 19-23, Nov	<b>A 5-Day FDP on Artificial Intelligence In Academia: Enhancing Teaching And Research</b> Organized by IQAC Joya Gogoi College in collaboration with Department of Physics and Department of Mathematics.
<b>2025</b> 19 – 20, Sept	<b>RUSA 2.0/PM-USHA Assam Sponsored 2-day Teachers’ Training Programme on Mentoring Cutting Edge Research in the light of NEP 2020</b> Organized by Nagaon University in collaboration with UGC-MMTTC, Gauhati University

## PROJECTS

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1. **Influence of Bond Rigidity in Crystallization.** (Simulation based work on condensed matter physics) under the guidance of Dr. Sujin B. Babu, Assistant Professor, IIT Delhi. (M.Sc. Dissertation Project)

## PUBLICATIONS

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### *Journal Publications*

- D. Bhattacharjee, D. Jigdong, N. Buzarbaruah, S. R. Mohanty and H. Bailung, Studies on virtual electrode and ion sheath characteristics in a cylindrical inertial electrostatic confinement fusion device, Phys. Plasmas 26, 073514 (2019) <https://aip.scitation.org/doi/10.1063/1.5107471>

### *Conference Papers*

(Peer-Reviewed)

- S. R. Mohanty, N. Buzarbaruah, D. Bhattacharjee and D. Jigdong, Basics of inertial electrostatic confinement fusion and its applications, AIP Conference Proceedings 2319, 030012 (2021), <https://aip.scitation.org/doi/abs/10.1063/5.0037011>

## PRESENTATION AT CONFERENCES

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- “Evidence of virtual anode and cathode in an Inertial Electrostatic Confinement Fusion Device” presented in *XI Biennial National Conference of Physics Academy of North East (PANE)* held at Assam University, Diphu campus, Diphu, Assam, India  
**21<sup>st</sup> to 23<sup>rd</sup> November, 2018**
- “Plasma Characterisation in a Spherically Convergent Ion Source” presented in 34<sup>th</sup> *National Symposium on Plasma Science & Technology (PLASMA 2019)* organized by the Division of Physics, School of Advanced Sciences, VIT Chennai.  
**03<sup>rd</sup> to 06<sup>th</sup> December, 2019**
- “Investigation of electron and ion dynamics in a Pulsed Plasma Accelerator using XOOPIC simulation” presented in the International Conference on Frontiers in Pure and Applied Physics (ICFPAP), 2024 Organized by Department of Physics, USTM in collaboration with PANE.  
**29<sup>th</sup> Feb to 02<sup>nd</sup> Mar, 2024**