# **CURRICULUM VITAE**

## Mr. Kshirud Chandra Handique

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**Career Objective:** My passion is to teach and carry out research in Physics. I aspire to create a niche for myself in this competitive world through my research and teaching which would contribute valuably to the society.

#### **Academic details:**

Bachelor's Degree: Physics, North Lakhimpur College, Dibrugarh University
Master's Degree: Physics, Rajiv Gandhi University, Arunachal Pradesh.
Ph.D in Physics (Pursuing)
Cleared <b>State level eligibility test (SLET)</b> for Lectureship, N E Region 2019.

#### **Awards and Fellowships:**

- Anundoram Borooah award in HSLC examination in 2010.
- OIL Merit Scholarship 2010 for excellence in HSLC examination.
- 1<sup>st</sup> **Position in Science Model** in UGC sponsored celebration of "The International Year of Chemistry 2011" organized by Department of Chemistry, North Lakhimpur College, Assam.
- Passed **SLET** (**State Level Eligibility Test, North East**) on 26<sup>th</sup> June, 2019.
- 4<sup>th</sup> Best Postgraduate in Physics from Rajiv Gandhi University, Arunachal Pradesh in 2017.

### **List of Publications:**

- **K. C. Handique**, D. Siboh, Y. Nanung, B. Barman, and P. K. Kalita, "Effect of temperature on the optical properties of chemically synthesized CdSe nanostructures", Materials today proceedings, In press, <a href="https://doi.org/10.1016/j.matpr.2020.04.158">https://doi.org/10.1016/j.matpr.2020.04.158</a>
- B. Barman, <u>K. C. Handique</u>, Y. Nanung and P.K. Kalita, "Synthesis and characterization of chemically synthesized CuSe nanoparticles for photovoltaic application", In press, <a href="https://doi.org/10.1016/j.matpr.2020.04.658">https://doi.org/10.1016/j.matpr.2020.04.658</a>
- **K. C. Handique**, P. K. Kalita, "Effect of weak confinement on the optical properties of chemically synthesized ZnS nanoparticles" *J. nano electron. Phys.* 12(4):04015-1-04015-5 DOI:10.21272/jnep.12(4).04015
- **K. C.Handique,** P.K. Kalita, "Effects of cadmium ion concentration on the optical and photoresponse properties of CdSe nanoparticles for white light sensing application", *Appl. Phys. A* **126,** 755 (2020). <a href="https://doi.org/10.1007/s00339-020-03934-3">https://doi.org/10.1007/s00339-020-03934-3</a>

### **Book Chapter (ISBN):**

• <u>K. C. Handique</u>, B. Barman, Y. Nanung, D. Siboh and P. K. Kalita (2019). "**Synthesis and characterization of CdS/PbS core-shell nanocomposites for photovoltaic application**" in the book "Advances in nuclear Physics and Condensed Matter" edited by Lakshmi K. Singh, published by **Eastern Book House Publishers (India)**. (ISBN-**9789388881203**.

• K.C. Handique, M. P. Borah, N. M. Nath & P. K. Kalita, (2020) "Design and simulation studies of CdTe and CIGS based solar cells using SCAPS-1D" in the book "Frontiers of basic Physics and Applications", Knowledge Publication, ISBN- 978-81-933014-8-7

### Papers presented at International Conferences:

- Presented a paper in the International Conference 'Advanced Materials for Energy Science and Technology (AMEST-2019)' organized by Department of Energy Engineering, North-Eastern Hill University, Shillong from 26<sup>th</sup> Feb to 28<sup>th</sup> Feb, 2019.
- Presented a paper in the International Conference 'Second International Conference on Advances in Electrical, Electronic and System Engineering' organized by Gauhati University in collaboration with International Centre for Theoretical Physics, Malaysia from 2<sup>nd</sup> to 3<sup>rd</sup> Nov 2019.
- Presented a paper in the International Conference 'Recent Trend and Practices in Science, Technology, Management and Humanities for Sustainable Rural Development (STMH 2019)' organized by University of Science and Technology, Meghalaya from 6<sup>th</sup> to 7<sup>th</sup> Sept 2019.

#### **National Conferences:**

- Presented a paper in a National Conference 'Recent Advances in Applied Science (RAAS'2019)' organized by Department of Applied Science, Gauhati University from 17<sup>th</sup> to 18<sup>th</sup> May, 2019.
- Presented a paper in a National Conference 'Materials, Condensed Matter & Theoretical Physics (NCMCTP-2018)' organized by Department of Physics, ADP College, Assam from 20<sup>th</sup> to 21<sup>st</sup> Dec, 2018.
- Presented a paper in the national conference **'XI Biennial National Conference of Physics Academy of North-East(PANE-2018)',** organized by Department of Physics, Assam University, Diphu Campus(AUDC) from 21<sup>st</sup> to 23<sup>rd</sup> Nov, 2018.
- Presented a paper in the national conference 'Hard and Soft Condensed Matter Physics', organized by Department of Physics, Tezpur University, Assam from 4<sup>th</sup> to 6<sup>th</sup> March, 2019.
- Presented a paper in the national conference 'National Conference on Emerging Trends in Physics' organized by Department of Physics, Tezpur University, Assam from 16<sup>th</sup> to 17<sup>th</sup> June, 2021.

#### Workshops:

- Participated in the workshop on "**LATEX Documents 2019**" organized by the Department of Physics, Assam Don Bosco University from 29<sup>th</sup> to 30<sup>th</sup> March, 2019.
- Participated at the "Inter-University Accelerator Centre (IUAC) Acquaintance Workshop" organized by Department of Physics, Rajiv Gandhi University, Doimukh, Arunachal Pradesh on 25<sup>th</sup> April, 2019.
- Participated in "One Day Awareness Workshop on Intellectual Property Rights(IPR)" organized by Patent Information Centre under Arunachal Pradesh State Council for Science and Technology (Department of Science and Technology), Govt. of Arunachal Pradesh in collaboration with Rajiv Gandhi University on 26<sup>th</sup> April, 2019.

## Other Skills and endorsements:

- Programming languages Python, Matlab, C, C++
- Skilled in solar cell simulation with SCAPS-1D software.
- Skilled in optoelectronic Device simulation using SILVACO TCAD.
- Completed one year "Advance Diploma Course in Computer Application" from Abacus Compu -Tech Institute in 20015.