

# **CURRICULUM VITAE**

## **Ranjit Das**

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## **Educational Qualification**

**2016** – Ph.D.(Tech) in Photonics from University of Calcutta (Dept. of Applied Optics & Photonics).

**2009** – M.Sc. in Electronic Science from University of Calcutta with 1<sup>st</sup> class.

**2007** – B.Sc.(H) in Physics from Raja Peary Mohan College affiliated under University of Calcutta with 1<sup>st</sup> class.

**2003** – Higher Secondary from Nabagram Vidyapith (W.B.C.H.S.E.) with 1<sup>st</sup> Div.

**2001** – Secondary from Nabagram Vidyapith (W.B.B.S.E.) with 1<sup>st</sup> Div.

## **Academic Achievements**

**2015** – Recipient of Erasmus Mundas (LEADERS) postdoctoral project at City University London, U.K.

**2014** – NET-JRF (Dec, 2014) in Electronic Science.

**2012** – NET-LS (Dec, 2012) in Electronic Science.

**2012** – NET-LS (June, 2012) in Electronic Science.

**2011** – GATE in Electronics and Communication Engineering.

**2009** – GATE in Electronics and Communication Engineering.

**2008** – Recipient of Anil Nath Dey and Anath Nath Dey scholarship (2008), University of Calcutta.

## **Fields of Interest:**

Optics & Photonics, Electricity & Magnetism, Electromagnetic Theory, Mathematical Methods, Circuit & Network theory, Semiconductor Device Physics, Analog & Digital Electronics and Microprocessor.

## Present Status:

Assistant Professor in the Dept. of Electronics, Ramkrishna Mission Vidyamandira, Belur Math, Howrah – 711202

## Teaching Experience:

- Worked as a *Guest Lecturer* in the Department of *Applied Optics and Photonics* of *University of Calcutta* (2013-2015); took courses on Photolithography, Thin-film deposition & characterization, Circuits & Networks, EM theory, Microprocessor and Microcontroller.
- Served as *Visiting Faculty* in the Department of *Engineering Physics* of *Techno India College, Saltlake* (2014); took courses on Optics, Electrostatics, Electromagnetism and EM theory.
- Served as *Visiting Faculty* in the Department of *Computer Science* of *Gurudas College, Fulbagan* (2014); took courses on Circuits & Networks, Analog & Digital Circuits and Microprocessor.

## Research Experience:

- Worked as a *Ph.D. (Tech.)* scholar in the field of “*Integrated Optics & Photonics*” under the supervision of *Prof. Rajib Chakraborty* of the Dept. of *Applied Optics and Photonics* of *University of Calcutta*. Thesis title: **Studies on Different Properties of Lithium Niobate for Photonic Device Applications.**
- Worked as an *S.R.F.* in a *DST, GOI* sponsored project titled “**Study of acousto-optic memory in periodically poled lithium niobate**” under the supervision of *Dr. Rajib Chakraborty* of the Dept. of *Applied Optics and Photonic, C.U.* (2011-2014).
- Worked as a *J.R.F.* in a project named “**Diamond like nanocomposites as protective coating for optical components**” in the *Centre for Research in Nanoscience and Nanotechnology (CRNN), C.U.*, under the supervision of *Dr. Rajib Chakraborty* of the Dept. of *Applied Optics and Photonic, C.U.* (2009-2011).
- Worked on a project named “**Development of conventional and strained-Si n-MOSFET process for comparative study of device performance**” for the partial fulfillment of the *post-graduate degree (M.Sc.)* under the guidance of *Dr. Sanatan Chattopadhyay* of the Department of *Electronic Science, University of Calcutta* (2008-2009).

## Projects undertaken:

- Erasmus Mundas (LEADERS) postdoctoral project at City University London, U.K. (2015-2016)
- Completed TEQIP(II) student project with REF No. TEQIP-II/R&D/13/109(4) dated 18<sup>th</sup> November, 2013, with total fund of Rs 50,000.00.

## Professional membership:

- Fellow member of **Optical Society of India** (Expiry: Nov, 2017)
- Ex-student member of **SPIE (America)**

## Publications:

### A. *Journal Papers:*

- 1. Analysis of Electric Field for Inclined Electrodes and Use of Such Configuration for Generating Tunable Differential Polarization Phase;** *The European Physical Journal - Applied Physics*; vol. 72, pp. 30501(1-9); 1<sup>st</sup> Dec, 2015; Ranjit Das, Souvik Ghosh and Rajib Chakraborty.
- 2. Tunable Differential Polarization Phase Shifter Using Electro-optic Property of Trapezoidal Lithium Niobate Crystal;** *Proc. of SPIE*; vol. 9654, pp. 96541M(1-4); 15<sup>th</sup> June, 2015; Ranjit Das, Souvik Ghosh and Rajib Chakraborty.
- 3. Dependence of Effective Internal Field of Congruent Lithium Niobate on its Domain Configuration and Stability;** *Journal of Applied Physics*; vol. 115, no. 24, pp. 243101(1-5); 13<sup>th</sup> June, 2014; Ranjit Das, Souvik Ghosh and Rajib Chakraborty.
- 4. Interferometric Measurement of Internal Field of Lithium Niobate without High Voltage Electric Field Poling;** *Optical Engineering*; vol. 53, no. 5, pp. 054105(1-6); 24<sup>th</sup> April, 2014; Ranjit Das and Rajib Chakraborty.
- 5. Enhanced Electro-optic Property in LiNbO<sub>3</sub> by Electric Field Domain Inversion;** *IEEE - Photonic Technology Letter*; vol. 25, no. 16, pp. 1626; 15<sup>th</sup> August, 2013; Ranjit Das and Rajib Chakraborty.
- 6. Studies on the Influence of Argon Flow Rate on PECVD Grown Diamond-Like Nanocomposite Film;** *Optik*; vol. 124, no. 24, pp. 6915; December, 2013; Rajib Chakraborty, Rahul Mondal and Ranjit Das.

### B. *Conference Papers:*

- 1. Characterization of Supercontinuum in Dispersion Engineered Silicon Nanowire;** (Communicated) *Photonics 2016* (December, 2016); R. Das, M.R. Karim, and B.M.A. Rahman.

- 2. Effect of Input Pulse Profile and Guiding Media Features on Supercontinuum Generation in Silicon Nanowire;** (Accepted) *40<sup>th</sup> OSI Symposium* (November, 2016); Ranjit Das, Rajib Chakraborty and B.M.A. Rahman.
  - 3. Tunable Differential Polarization Phase Shifter Using Electro-optic Property of Trapezoidal Lithium Niobate Crystal;** *39<sup>th</sup> OSI Symposium* (February, 2015); Ranjit Das, Souvik Ghosh and Rajib Chakraborty.
  - 4. Comparative Study of Internal Fields in Single Domain, Domain Inverted and Temporary Domain Inverted LiNbO<sub>3</sub>;** *38<sup>th</sup> OSI Symposium* (March, 2014); Ranjit Das, Souvik Ghosh and Rajib Chakraborty.
  - 5. Controlling Phase Difference between Orthogonally Polarized Light Beams Passing Through a Specially Cut LiNbO<sub>3</sub> Crystal;** *38<sup>th</sup> OSI Symposium* (March, 2014); Souvik Ghosh, Ranjit Das and Rajib Chakraborty.
  - 6. Interferometric Measurement of Internal Field Strength of Unpoled Lithium Niobate;** *37<sup>th</sup> OSI Symposium* (January, 2013); Ranjit Das, Sounak Bhattacharya and Rajib Chakraborty.
  - 7. Modified Fabry-Perot Interferometric Technique for Accurate Alignment in the Study of Electro-optic Modulation in LiNbO<sub>3</sub>;** *Proceedings of International Conference on Trends in Optics and Photonics* (December, 2011); Ranjit Das, Ajoy Ghosh and Rajib Chakraborty.
  - 8. A Simple Optical Technique to Measure Surface Quality of Nano Films;** *35<sup>th</sup> OSI Symposium* (January, 2011); Rahul Mondal, Ranjit Das and Rajib Chakraborty.
  - 9. Fabrication and Characterization of Different Types of Stain Etched Porous Silicon;** *35<sup>th</sup> OSI Symposium* (January, 2011); Reshmi Das, Ranjit Das and Rajib Chakraborty.
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**Last Updated on:** 2<sup>nd</sup> December, 2016

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