

CURRICULAM VITAE

J ANTO PRADEEP

548/1 Thillai Nagar Main Street,
Tirupattur – 635 601, Vellore District,
Tamilnadu, India
E-mail: antopradeep@gmail.com
Contact Number: +91 9600741702



EDUCATION QUALIFICATIONS

- THE AMERICAN COLLEGE, Madurai, India
Bachelor of Science in Physics (Secured Percentage: 68/100), 2002
- INDIAN INSTITUTE OF TECHNOLOGY MADRAS, Chennai, India
Master of Science in Physics (Secured CPI: 6.69/10), 2004
Thesis: *Thin Film Thermopiles of Semiconductor and Thin Film Thermoelectric Power*
- INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI, Guwahati, India
Doctor of Philosophy in Physics (Secured CPI: 8/10), 2013
Thesis: *An Investigation of Optical Properties of Porous Silicon: Refractive index, Photoluminescence and Raman Scattering Studies.*

OTHER QUALIFIED EXAMINATIONS

- Joint CSIR-UGC NET for Lectureship, 2004
- Graduate Aptitude Test in Engineering (GATE) (Secured Percentile: 89.48), 2004

SCHOLARSHIP

- Ministry of Human Resource Development (MHRD) scholarship from August 2004 to 2009

RESEARCH EXPERIENCE

- Knowledge on the optical properties of bulk and nanocrystalline semiconductors and electromagnetic wave propagation in porous and other composite media
- Knowledge on material characterization techniques like X-ray diffraction, Raman scattering spectroscopy, Photoluminescence spectroscopy, Photoluminescence excitation spectroscopy, UV-Vis-NIR and FIR spectroscopy, Spectroscopic ellipsometry, Scanning electron microscopy, Transmission electron microscopy and Confocal microscopy.
- Hand-on experience on the thermal evaporative deposition technique for the preparation of thin films.
- Experienced in handling the characterization instruments like Photoluminescence spectrometer, UV-Vis-NIR spectrometer, FTIR spectrometer, Confocal microscope and Scanning electron microscope

ACADEMIC EXPERIENCE

- Tutor in Physics laboratory for B.Tech 1st year students in even semesters during the academic year July 2004 – July 2006 and in July 2008.
- Student operator for the Scanning Electron Microscopy (SEM) at Central Instrumental Facility (CIF), Indian Institute of Technology Guwahati, India during August 2007 – May 2008

TEACHING EXPERIENCE

- Worked for about one and a half (1½) year at the level of Assistant Professor at Sacred Heart College (Autonomous), Tirupattur, Tamilnadu, India (February 2017 – June 2018).
- Worked for one and a half (1½) year at the level of Assistant Professor (contract) at the Central University of Tamilnadu, Thiruvarur, Tamilnadu, India (July 2015 – January 2017).
- Worked for three (03) years at the level of Assistant Professor at Vickram College of Engineering, Enathi, Tamilnadu, India (July 2012 – July 2015).

SPECIAL TALKS

- An invited talk entitled “Optical Properties of Porous Silicon – A Photoluminescence Study” in Condensed Matter Days 2011, a national conference held at Gauhati University, Guwahati, India on August 24, 2011.
- A talk entitled “Scanning Electron Microscopy” in Vortex, a students’ forum, in the Department of Physics, IIT Guwahati, Guwahati, India on April 13, 2007.
- A talk entitled “Raman Scattering from Solids” in Corral, a students’ forum, in the Centre for Nanotechnology, IIT Guwahati, Guwahati, India on September 8, 2006.

CONFERENCES, WORKSHOPS AND SHORT-TERM COURSES ATTENDED

- Attended an orientation programme for two days on “Bridge course in Physics” held at Anna University, Chennai during June 24 – 25, 2015
- Attended an one day program “Grants to Grab in Science and Technology” held at M Kumarasamy College of Engineering, Karur, India on July 26, 2012
- Attended the national conference Condensed Matter Days 2011 held at Gauhati University, Guwahati, India on August 24, 2011
- Attended the international conference ICANN 2009 held at IIT Guwahati, India during December 9 – 11, 2009
- Attended the national conference DAE-SSPS 2007 held at University of Mysore, Mysore, India during December 27 – 31, 2007
- Attended the workshop MESODIS06 held at IIT Kanpur, India during December 4 – 8, 2006
- Attended the national conference CMDAYS-06 held at Tezpur University, Tezpur, India during August 29 – 31, 2006
- Attended the short-term course on “Advanced Experimental Techniques”, held at IIT Guwahati, India during February 6 – 10, 2006
- Attended the national conference DAE-SSPS 2005 held at BARC, Mumbai, India during December 5 – 9, 2005

COMPUTER SKILLS

- C and Matlab for numerical programming
- LabView for the automation of scientific instruments

RESEARCH PUBLICATIONS

Referred Journals

- A Sivakumar, S Suresh, **J Anto Pradeep**, S Balachandar and S A Martin Britto Dhas, “Effect of Shock Waves on Dielectric Properties of KDP Crystal”, Journal of Elec. Matri. **47**, 4831 (2018)
- **J Anto Pradeep** and Pratima Agarwal, “Determination of Thickness, Refractive Index and Spectral Scattering of an Inhomogeneous Thin Film with Rough Interfaces”, J. Appl. Phys. **108**, 043515 (2010)
- **J Anto Pradeep** and Pratima Agarwal, “An Alternative Approach to Understand the Photoluminescence and the Photoluminescence Peak Shift with Excitation in Porous Silicon”, J. Appl. Phys. **104**, 123515 (2008)
- **J Anto Pradeep**, Purabi Gogoi and Pratima Agarwal, “Single and Multilayer Porous Silicon for Photonics Applications”, J. Non-Cryst. Solids **354**, 2544 (2008)

International Conferences

- **J Anto Pradeep** and Pratima Agarwal, “Refractive Index Calculation for Composites and Its Application in Fabricating Porous Silicon based Photonic Structures” in the abstract book of ICANS24, p. 249 (Aug 21–26, 2011 at Nara, Japan)
- **J Anto Pradeep** and Pratima Agarwal, “Variation of Photoluminescence Peak Centre with the Excitation Energy in Porous Silicon”, presented as poster in ICANN 2009 (Dec 9 – 11, 2009 at IIT Guwahati, India)
- **J Anto Pradeep** and Pratima Agarwal, “Structural Investigation of Porous Silicon by Raman Scattering Spectroscopy” in the abstract book of ICANS23, p. 275 (Aug 23 – 28, 2009 at Utrecht, the Netherlands)
- **J Anto Pradeep**, Purabi Gogoi and Pratima Agarwal, “Single and Multilayer Porous Silicon for Photonics Applications”, J. Non-Cryst. Solids **354**, 2544 (2008) through ICANS22 (Aug 19 – 24, 2007 at Colorado, USA)
- **J Anto Pradeep** and Pratima Agarwal, “Preparation and Characterization of Porous Silicon Single and Multilayer for Photonic Applications”, in the abstract book of MESODIS06, p. 121 (Dec 04 – 08, 2006 at IIT Kanpur, India)

National Conferences

- **J Anto Pradeep**, M Pandey, S M Sharma and Pratima Agarwal, “Effect of Anodization Current Density and Wafer Resistivity on the Raman Scattering in Porous Silicon”, in proceedings of DAE-SSPS 2009, p. 723 (Dec 14–18, 2009 at The Maharaja Sayajirao University of Baroda, Vadodara, India)
- **J Anto Pradeep** and Pratima Agarwal, “X-ray Diffraction Studies on Porous Silicon”, in proceedings of DAE-SSPS 2007, p. 395 (Dec 27 – 31, 2007 at University of Mysore, Mysore, India)

- **J Anto Pradeep**, Pratima Agarwal and Alike Khare, “Selective Formation of SiO₂ Nanostructures via Laser Ablation” in abstract book of CMDAYS-06, p. 68 (Aug 29 – 31, 2006 at Tezpur University, Tezpur, India)
- Purabi Gogoi, Bulumoni Kalita, **J Anto Pradeep**, Bikas Bhattacharyya and Pratima Agarwal, “Photoconductivity Studies on Amorphous Silicon Germanium Thin Films”, in proceedings of DAE-SSPS 2005, p. 385 (Dec 5 – 9, 2005 at BARC, Mumbai, India)
- **J Anto Pradeep**, Kamlesh Alti, Siddananda Sarma, Pratima Agarwal and Alike Khare, “Nanostructure Formation of Si and SiO₂ from Laser Ablation of Amorphous Si”, in abstract book of PLD 2005, p. 78 (Nov 7 – 8, 2005 at Sri Venkateswara University, Tirupati, India)

PERSONAL DETAILS

Name : J Anto Pradeep
Date of Birth : January 17, 1982
Sex : Male
Marital status : Married
Nationality : Indian
Known languages : Tamil and English
Permanent Address : 1/101, Shanmuga Nagar 1st Street,
K Pudur, Madurai – 625 007
Tamilnadu, India
Mobile Number : +91 9600741702

REFERENCES

1. Dr. Pratima Agarwal
Professor,
Department of Physics,
Indian Institute of Technology Guwahati,
Guwahati – 781 039
Assam, India
E-mail: pratima@iitg.ernet.in
Phone: 0361 – 2582702
2. Dr. Alika Khare
Professor,
Department of Physics,
Indian Institute of Technology Guwahati,
Guwahati – 781 039
Assam, India
E-mail: alika@iitg.ernet.in
Phone: 0361 – 2582705
3. Dr. Saurabh Basu
Professor,
Department of Physics,
Indian Institute of Technology Guwahati,
Guwahati – 781 039
Assam, India
E-mail: saurabh@iitg.ernet.in
Phone: 0361 – 2582711

DECLARATION

I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief.

Signature