

ANIL KUMAR VERMA

School of Studies in Electronics & Photonics

Pt. Ravishankar Shukla University,

Raipur (Chhattisgarh) - 492010, India.

Mobile: **8225827323**

Email: **akverma.prsu@gmail.com**

**CAREER OBJECTIVE:**

- To secure a challenging position that utilizes my Teaching & Research skills and contributes to the overall growth of the organization.

WORK EXPERIENCES:

- Working as a Guest Lecturer in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 30 July, 2018 to till date.
- Worked as a Guest Lecturer in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 26 July, 2017 to 30 April, 2018.
- Worked as an Assistant Professor (On Contract) in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 17 September, 2016 to 10 March, 2017.
- Worked as an Assistant Professor (On Contract) in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 24 July, 2015 to 30 April, 2016.
- Worked as an Assistant Professor (On Contract) in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 02 September, 2014 to 30 April, 2015.
- Worked as a Guest Lecturer in School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur (C.G.) from 09 October, 2013 to 30 April, 2014.
- Worked as Ad-hoc Assistant Professor (Physics) in Pragati College Raipur, C.G. from 26 September, 2013 to 31 August 2014.
- Worked as Ad-hoc Assistant Professor in the Department of Electronics, Maharana Pratap Post Graduate College, Gorakhpur (U.P.) from 16 July, 2011 to 31 July, 2013.

ACADEMIC QUALIFICATIONS:

- Qualified "UGC-NET" for Lectureship and Assistant Professor (June-2013, June-2014 and December-2014) in Electronic Science Subject.
- Completed Pre-Ph.D. Presentation in Electronics from School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University Raipur (C.G.).
- M.Sc. in Electronics (2006) from D.D.U. Gorakhpur University, Gorakhpur with First Division.

- B.Sc. in Electronics, Physics (2004) from D.D.U. Gorakhpur University, Gorakhpur with First Division.
- Intermediate (2001) in Science (Mathematics) from U. P. Board with First Division.
- High School (1999) in Science from U.P. Board with First Division.

ACHIEVEMENTS:

- Worked as a Joint Secretary for National Conference on Recent Trends in Photonics (NCRTP-2014) organized by S.O.S in Electronics & Photonics, Pt. Ravishankar Shukla University Raipur (C.G.).
- Worked as Dean of Science, Maharana Pratap Post Graduate College, Gorakhpur (U.P.).
- Worked as Department In-charge (Electronics), Maharana Pratap Post Graduate College, Gorakhpur (U.P.).
- On-line Certificate “Course on Computer Concepts” (CCC) with Grade: B from DOEACC Society, New Delhi.
- Completed “Placement Preparation Program” conducted by MA FOI Academy Career Training.
- Completed “Diploma in Photography” from D.D.U. Gorakhpur University, Gorakhpur (U.P.).
- Participated in NSS day-night Camp (2002-03 to 2003-04) held by D.D.U. Gorakhpur University, Gorakhpur and received “NSS” Certificate.
- Completed “Computer Saksharata Yojana (1999-2000) from Govt. Jubilee Inter College Gorakhpur with Second Division.
- Achieved 1st Position student award in High School at School.

SOFTWARE PROFICIENCIES:

Languages	: C, C++
Operating System	: Windows-7/Vista/ XP /2000/9X, DOS 6.0
Software Tools	: MatLab, VHDL, MicroSim, Tanner, Silvaco
Assembly	: 8085, 8086, 8051

ACADEMIC PROJECTS:

1. Executed a Ph.D. Research Project Proposal entitled” Fabrication, Simulation and Characterization of Organic Photovoltaic Cells” at IIT-Bombay under Indian Nano-electronic User Program (INUP).
2. “Design & Simulation of 4-T CMOS SRAM Cell.” for M.Sc. (Electronics).

Institute: Centre for Research in Microelectronics (CRME), Department of Electronics Engineering, Indian Institute of Technology (Formerly I.T. BHU) Varanasi (U.P.).

2. "Fabricated Organic Solar Cell" in CSIR-National Chemical Laboratory, Pune.
3. "Fabricated Inverted Organic Solar Cell" in SCDT-IIT Kanpur (U.P.).
4. "Fabricated MOS-Capacitor" in CRME Lab, IT-BHU.
5. "Optical Sources & Detector" for B.Sc. (Electronics).
6. "Design a Switched Mode Power Supply" (SMPS) in B.Sc. (Electronics).

LIST OF PUBLICATIONS

JOURNALS/CONFERENCE Proceedings:

- [1] "Structural Analysis of sol-gel ZnO thin films for Organic Solar Cells Application" **Anil Kumar Verma**, Swati Sahu, Mohan Patel, Sanjay Tiwari *Journal of Organic Photonics & Photovoltaics*. (**Communicated**).
- [2] "Enhanced Photovoltaic Performance of Dye Sensitized Solar Cells via Sensitization of Nanocrystalline TiO₂ Films with metal free Indoline Dye." Swati Sahu, Rajesh Awathy, **Anil Verma**, Mohan Patel, Sanjay Tiwari. *Journal of Ravishankar University-Part B Science*, 30(1&2), 78-81, 2018.
- [3] "Enhanced Photovoltaic Performance via Co-sensitization of Ruthenium (II)-Based Complex Sensitizers with Metal-Free Indoline Dye in Dye-Sensitized Solar Cells." Swati Sahu, Mohan Patel, **Anil Verma** and Sanjay Tiwari. *Journal of Organic Photonics and Photovoltaics*, manuscript number: OPH-D-17-00001.
- [4] "Study of light trapping geometries for different structure of photoanode in dye-sensitized solar cells." Swati Sahu, Mohan Patel, **Anil Verma** and Sanjay Tiwari. *International Journal of Scientific and Engineering Research*.
- [5] "Solution processed solar cells based on in-situ synthesis of CdSe quantum dots." Patel, Mohan, Swati Sahu, **Anil Kumar Verma**, and Sanjay Tiwari. In International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), pp. 1683-1687. IEEE, 2017.
- [6] "Analytical study of current density-voltage relation in dye-sensitized solar cells using equivalent circuit model." Sahu, Swati, Mohan Patel, **Anil Kumar Verma**, and Sanjay Tiwari. In International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), pp. 1489-1493. IEEE, 2017.

- [7] "Fabrication and Characterization of Novel Inverted Organic Solar Cells Employing ZnO ETL and MoO₃ HTL." **Anil Kumar Verma**, Pooja Agnihotri, Mohan Patel, Swati Sahu and Sanjay Tiwari. *International Conference on Fibre Optics and Photonics*, pp. Tu4A-18. *Optical Society of America*, 2016.
- [8] "Optoelectronic Simulation for Light enhancement of P3HT:PC70BM Conventional BHJ OSCs." Pooja Agnihotri, **Anil Kumar Verma**, Mohan Patel, Swati Sahu and Sanjay Tiwari. *International Conference on Fibre Optics and Photonics*, pp. Th4B-4 *Optical Society of America*, 2016.
- [9] "Fabrication and Characterization of CdSe Quantum Dot- Sensitized Solar Cells by Successive Ionic Layer Adsorption and Reaction (SILAR) Process." Mohan Patel, Shiv Prakash Sahu, Swati Sahu, **Anil Kumar Verma**, Pooja Agnihotri, and Sanjay Tiwari. *International Conference on Fibre Optics and Photonics*, pp. W3A-37. *Optical Society of America*, 2016.
- [10] "Fabrication and characterization of nanoporous TiO₂ layer on photoanode by using doctor blade method for dye-sensitized solar cells." Swati Sahu, Rajesh Awasthy, Mohan Patel, **Anil Verma**, Pooja Agnihotri and Sanjay Tiwari. *International Conference on Fibre Optics and Photonics*, pp. Th3A-9. *Optical Society of America*, 2016.
- [11] "Investigating the influence of porosity on performance of dye-sensitized solar cells." Swati Sahu, **Anil Verma**, Mohan Patel, Rajesh Awasthy and Sanjay Tiwari. *International Conference on Fibre Optics and Photonics*, pp. T3A-73. *Optical Society of America*, 2014.

BOOK CHAPTERS:

- [1] "Recent advances in polymer solar cells." **Anil Kumar Verma**, Pooja Agnihotri, Mohan Patel, Swati Sahu and Sanjay Tiwari. In Special Volume on "Recent Advances in Photovoltaic" under 'Materials Research Foundation Series', Material Science Research Forum LCC, Millersville PA 17551.
- [2] "Quantum Dot as Light Harvester Nanocrystals for Solar Cell Applications." Mohan Patel, Swati Sahu, **Anil Kumar Verma**, Pooja Agnihotri, Surya Prakash Singh, Ramanuj Narayan and Sanjay Tiwari. In Special Volume on "Recent Advances in Photovoltaic" under 'Materials Research Foundation Series', Material Science Research Forum LCC, Millersville PA 17551.
- [3] "Advancement in Simulation & Modeling of Organic Solar Cells." Pooja Agnihotri, Mohan Patel, **Anil Kumar Verma**, Swati Sahu, Sandeep Pathak and Sanjay Tiwari. In Special

Volume on *“Recent Advances in Photovoltaic”* under *‘Materials Research Foundation Series’*, Material Science Research Forum LCC, Millersville PA 17551.

CONFERENCE, SEMINAR, WORKSHOP, SYMPOSIUM Presented:

1. **Anil Kumar Verma**, Mohan Patel, Sanjay Tiwari, "Recent Advances in Polymer Solar Cells (PSCs)." In India International Science Festival, Dec 8-11, 2016, CSIR- NPL Delhi.
2. **Anil Kumar Verma**, Mohan Patel, Sanjay Tiwari: Modeling and Simulation of high power Semiconductor Devices, National Conference on Recent Trends in Photonics (NCRTP-2014), Pt. Ravishankar Shukla University, Raipur (C.G.).
3. Mohan Patel, **Anil Kumar Verma**, Rajesh Awasthay and Sanjay Tiwari: Light Trapping in Solar Cell, National Conference on Recent Trends in Photonics (NCRTP-2014), Pt. Ravishankar Shukla University, Raipur (C.G.).
4. Kundan Lal Verma, Naman Shukla, **Anil Kumar Verma**, Sanjay Tiwari: A Survey of Biophotonics Applications in Neuroscience Practices, National Conference on Recent Trends in Photonics(NCRTP-2014) , Pt. Ravishankar Shukla University, Raipur (C.G.).
5. **Anil Kumar Verma** “Three dimensional integrated circuit technology: 3D-IC” Workshop organized by Maharana Pratap Post Graduate College, Gorakhpur (Uttar Pradesh).
6. **Anil Kumar Verma**, Nishant Tripathi “Analysis & Design of Frame Grabber for Image Processing” for Recent Advances in Digital & Analog Signal Processing (RADASP-2012), DDU Gorakhpur University, Gorakhpur (UP.).

SEMINAR, WORKSHOP, CONFERENCE, SYMPOSIUM Participated:

1. Participated Workshop on “Entrepreneurships in Renewable Energy technologies for Chhattisgarh Tribal” (19-24 September, 2016) organized by Renewable Energy Technology & Management, Pt. Ravishankar Shukla University, Raipur (C.G.).
2. Participated in ”Chhattisgarh Young Scientist Congress-2016, Jointly Organized by Chhattisgarh Council of Science and Technology & Bilaspur University, Bilaspur (C.G.)
3. Participated Workshop-cum-training on “SYSTAT’13 Software” (27 August, 2015) organized by IQAC, Pt. Ravishankar Shukla University, Raipur (C.G.).
4. Participated Capacity Building Workshop for “Energy Auditors & Energy Managers (08-10 Sept., 2015)” jointly organized by SHAKTI and FICCI, Raipur (C.G.)

5. Participated Familiarization Workshop on “Nanofabrication Technologies (18-20 May, 2015)” organized by Indian Nanoelectronics User Programme (INUP), CeNSE, Indian Institute of Science-Bangalore.
6. Participated National Workshop on “Operation and maintenance of Laboratory Equipments 19-23 Jan., 2015 (NWOMOLE-2015)” Jointly organized by SOS in Electronics & Photonics, Pt. R.S.U., Raipur (C.G.) and WRIC-Mumbai.
7. Participated in Inspire Internship Camp (December 26-30, 2014), An Initiative of Department of Science & Technology, New Delhi held at Pt. Ravishankar Shukla University, Raipur (C.G.)
8. Participated Familiarization Workshop on “Fabrication on Nanotechnology (28-30 November, 2014)” organized by Indian Nanoelectronics User Programme (INUP), IIT-Bombay, Mumbai.
9. Participated Entrepreneurial program 9 Nov., 2014 jointly organized by IDEONN 2014 and Entrepreneurship Cell IIT Kharagpur.
10. Participated “Workshop on X-ray Diffraction and its application to Material science (1-3 August, 2014)” organized by National Institute of Technology (NIT), Raipur (C.G.).
11. Participated “Workshop on Photovoltaic Devices Molecule to Device (9-10 June, 2014)” organized by CSIR-National Chemical Laboratory, Pune.
12. Participated National Seminar on “VLSI: Design and Fabrication Aspects (23-25 October, 2013)” Sponsored by AICTE, New Delhi, Organized by CIET, Raipur (C.G.).
13. Participated National Workshop on “Research Methodology in Basic Science, Engineering & Technology (29 August to 02 September, 2013)” organized by Association of Indian University & Pt. Ravishankar Shukla University, Raipur (C.G.).
14. Participated Workshop on “Timing Analysis of Digital VLSI Circuit (3-4 November, 2012)” organized by Indian Institute of Information Technology (IIIT), Allahabad (U.P.).

SHORT TERM COURSE & TRAINING:

1. Hands on Training Workshop on “Nanofabrication Technologies (21-29 May, 2015)” organized by Indian Nanoelectronics User Programme (INUP), Indian Institute of Science-Bangalore.
2. Participated in “Inspire Internship Camp (26-30 December, 2014)” An Initiative of Department of Science & Technology, New Delhi organized Pt. R.S.U., Raipur (C.G.)
3. A short course on “Flexible Electronics (7-12 July, 2014)” Organized by Samtel Center for Display Technology (SCDT)-Indian Institute of Technology, (IIT) Kanpur (U.P.).

4. A short term course on “MatLab Based Design & Implementation of Advanced Control, Signal & Image Processing Algorithms(16-21 August.2013)” organized by Department of Electrical Engineering, National Institute of Technology-Raipur (C.G).
5. Summer Training on “Embedded System (2-31 May, 2006)” from DOEACC Centre-Gorakhpur (U.P.).
6. Two month training on ‘C’ Language from Swami Vivekanand Institute of Information Technology (SVIIT), Gorakhpur (U.P.).

MEMBERSHIP:

1. Regular Fellow (Membership No. 1358) of Optical Society of India.
2. Life Member (Membership No.147) of Chhattisgarh Vigyan Bharati.

PERSONAL PROFILES:

Full Name : Anil Kumar Verma
Father's Name : Ram Prit Verma
Mother's name : Poonam Devi
Spouse : Rinki Verma
Sex : Male
Nationality : Indian
Date of Birth : 20-07-1984

PERMANENT ADDRESS:

House No. - C130/475, Mohalla- Shahpur
Post Office – Geetavatika, Behind Syndicate Bank
Gorakhpur -273006 (Uttar Pradesh)
Mobile: **9305448085** (Father)

