# Ankur Shrivastava



2016-2022

## **Current Work Interests**

Optoelectronics and Laser Technology

Pt. Ravishankar Shukla University, Raipur

Solar and Energy Design, Photovoltaic System Optimization, Installation/Commissioning and Maintenance, Design and Characterization of Dye Sensitized Solar Cell.

## **Current Appointment**

<b>Guest Lecturer</b> at Institute of Renewable Energy Technology and Management Pt. Ravishankar Shukla University, Raipur, Chattishgarh, India	2021-present
Previous Appointments	
Engineer and Trainer	2016 – 2022
S R Corporate Consultant Private Limited, Raipur, India	
Sub-Station Engineer	7 months
SKS Power Generation, Raigarh, Chhattisgarh, India	
Research Assistant at Electronics and Photonics Department	2013 – 2014
Pt. Ravishankar Shukla University, Raipur, Chattishgarh, India	
Intern	$4 \ weeks$
Doordarshan Kendra, Raipur, India	
Intern	$2 \ weeks$
Bharat Sanchar Nigam Limited, Raipur, India	
GSM and CDMA system for mobile communication, switching mechanism of CDOT, and broadband system.	
Education	
Master of Technology in Optoelectronics and Laser Technology	2015
advised by Prof. Sanjay Tiwari, Pt. Ravishankar Shukla University, Raipur, Chattishgarh, India	
Thesis: Design, fabrication and characterization of dye-sensitised solar cell.	
Bachelor of Engineering in Electronics and Telecommunication Engineering	2010
Chhattisgarh Swami Vivekanand Technical University, Bhilai, India	
Thesis: Design and simulation analysis of RFID based-proximity security system.	
Awards and Honors	

## Awards and Honors

- 1. Key Employee Award at SR Corporate Consultant Ltd., Raipur (2019)
- 2. Appreciation Award at Bosch India Ltd., Bangalore (2021)
- 3. Successfully cleared the Graduate Aptitude Test in Engr (top 8.33%) conducted by M.H.R.D. Govt. of India (2009)
- 4. National Cadet Core (NCC) A-certificate holder (2001)

## Work Experience

### at S R Corporate Consultant Private Limited, Raipur, India

### Project(s):

- 1. Performed quality inspection work for ground mounted megawatt (MW) scale on-grid solar power plant.
- 2. Performed site feasibility and site survey work for designing of solar power plant.
- 3. Successfully executed the installation of on-grid solar roof-top plant.
- 4. Performed the site survey of on-grid solar power plant project of The Energy and Resources Institute (TERI) for gariaband district in chhattisgarh.
- 5. Worked as quality inspector for the off-grid solar power plant installed under **Dindyal Upadhyay Gram Jyoti Yojna** in inaccessible village location of chhattisgarh state.
- 6. Trained the assistant and junior engineers of Chhattisgarh State Power Distribution Company Limited under The World Bank–SBI Grid Connected Rooftop Solar PV TA Program.

- 7. Tutored the entrepreneurs under The World Bank–SBI Grid Connected Rooftop Solar PV TA Program.
- 8. Instructed and trained the business persons and candidates under solar entrepreneur training program essential for registering as system integrator in Chhattisgarh State Renewable Energy Development Agency (CREDA).
- 9. Trained the diploma and ITI candidates under Suryamitra Training Program.
- 10. Examiner and trainer for B.Voc. educational program in renewable energy technology run by **Tata Institute of Social** Science, Mumbai (TISS).
- 11. Certified Trainer for BRIDGE training program run by **BOSCH India Limited, Bangalore**.

#### at SKS Power Generation Chhattisgarh Limited Raipur, India

#### **Project**(s):

- 1. Performed the protection and control design on 33/11 KV sub-station project.
- 2. Create and modify technical specifications for major equipment, such power transformers, power circuit breakers, control house, and other high-voltage substation related materials.
- 3. Coordinate with and provide technical assistance to engineers and substation technicians in order to fully develop system integration of protection, control, and monitoring systems.

## Publication

1. Ankur Shrivastava, and Sanjay Tiwari. Dye-sensitized solar cell. National Conference on Recent Trends in Photonics (NCRTP), Raipur, Mar. 2014.

## Workshop and Short Term Course

- 1. Participated in short term course on Recent Trends in Material Science at National Institute of Technology, Raipur, 2013.
- 2. Participated in Annual Photonics Workshop at International School of Photonics, Cochin University of Science and Technology, Cochin, 2013.

## **Research Project and M.Tech Dissertation**

Title: Design, Fabrication and Characterization of Dye-Sensitised Solar Cell

**Description**: The thesis reports the three dimensional nano-structure design of dye-sensitized solar cells that could overcome the high recombination loss problem by providing shorter pathways for photo-generated electrons to reach the contact. The design and development of dye-sensitized solar cells is currently often realized on an empirical basis. In view of assisting the optimization process, we fabricated a model of the dye-sensitized solar cell and experimentally validated based on a ray tracing algorithm, which allows as accurate determination of the efficiency and fill-factor of solar devices. **Place: Bhabha Atomic Research Center (BARC) Mumbai.** 

## **B.Tech.** Dissertation

Title: Design and Simulation Analysis of RFID based-Proximity Security System.

**Description**: The thesis reports the simulation studies of an RFID-based proximity security system for identification cards, which have been embedded with RFID tags.

### Skills

Software Skills: C, C++, 8085 micro-controller programming and OS - Windows 10 and Linux.

Deposition techniques: Chemical Vapor Deposition (CVD).

Materials characterization tools: UV/Vis Spectrophotometer, Photoluminescence Spectroscopy (PL).

**Cleanroom fabrication**: Photolithography, Dielectric/Metal Reactive Ion Etching (RIE), Surface Profiler, Wet Bench, Mask Aligner, Ellipsometer.

Other skills: Spray Coating, Dip Coating, Spin Coating, Sputter Coating.

## Extra-curricular Activities and Languages

- 1.  $3^{rd}$  rank in playing flute at regional school level cultural meet.
- 2.  $2^{nd}$  rank in playing flute at cluster school level cultural meet.
- 3. Participation certificate in national level and cluster level science talent competition.
- 4. Regional level hockey player.

Languages: English (Native), Hindi (Native), Chhattisgarhi (Native).

7 months

## References

Dr. Kavita Thakur Head and Professor Deaprtment of Electronics and Photonics Pt. Ravishankar Shukla University, Raipur, India email : kavithakur67@gmail.com mobile : +91-99268 01119 **Dr. Ramesh Patel** Antenna System Architect R&D Technology System Architecture Ericsson Antenna Technology Germany GmbH, Rosenheim email : ramesh.a.patel@ericsson.com mobile : +49-17 4196 1220