

SHUBHAM CHANDEL

M.SC PHOTONICS,
INTERNATIONAL SCHOOL OF PHOTONICS (ISP)
PhD (JRF)
IISER-Kolkata, India

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ACADEMIC RECORD

Name of Exam	Year	Percentage marks
X Standard - Bihar School Examination Board (BSEB)	2005	81
XII Standard - Bihar Intermediate Education Council (BIEC)	2008	70

5 Year Integrated MSc in Photonics

International School of Photonics (ISP),
Cochin University of Science & Technology(CUSAT),
Cochin – 682022, Kerala, India

Year : 2008 – 2013

1st Class with distinction

cgpa=8.1

AREAS OF INTERESTS

Plasmonics, Biophotonics, Light Matter Interaction

Publications

Journal Publication

- ✓ Amal Narayanan, **Shubham Chandel**, Nirmalya Ghosh, and Priyadarsi De, Analytical Chemistry, DOI: 10.1021/acs.analchem.5b01794.
- ✓ Sudipta Saha, Jalpa Soni, **Shubham Chandel**, Uday Kumar, Nirmalya Ghosh, DOI: 10.1117/1.JBO.20.8.085005
- ✓ **S. Chandel**, J. Jagtap, J. Soni, N.Das, S. Chatterjee, A. Pradhan, and N. Ghosh, Vol. 39, Issue 2, pp. 243-246 (2014), Optics Letters, republished VJBO, Volume 9, Issue 3.
- ✓ Jalpa Soni, Harsh Purwar, Harshit Lakhotia, **Shubham Chandel**, Chitram, Banerjee, Uday Kumar, and Nirmalya Ghosh Optics Express Vol. 21, Iss. 13, pp. 15475–15489 (2013), republished (VJBO), Vol-8, Issue-8

Paper under Review/Manuscript under Preparation

- “Tunable Giant Spin Specific Beam Shift using Space varying Geometric and Dynamical phase of light” Mandira Pal, Chitram Banerjee, **Shubham Chandel**, Ankan Bag, Nirmalya Ghosh under submitted to Nature Photonics (reference number: NPHOT-2015-06-00777)
- “Quantitative spectral Mueller polarimetry of single isolated nanostructure,” under preparation.
- Polarization controlled tuning of plasmonic Fano like resonances, under preparation

Conference Publication

- ❖ *Spin specific beam shift* poster presentation in the workshop "Photonics for Imaging and Sensing" in the Centre for Research in Nanoscience & Nanotechnology (CRNN) Kolkata, 2015
- ❖ Poster Presentation entitled *Giant Spin Hall Effect of light in exotic optical system* Photonics Europe 2014
- ❖ *Mueller matrix Polarimetry in fluorescence scattering from biological tissues* J. Soni , S. Chandel, J Jagtap, A.Pradhan, N. ghosh, FIO-LS 2013 OSA Technical Digest (online) (Optical Society of America, 2013), paper FW5A.3.
- ❖ *Development and Eigen value calibration of an automated spectral Mueller matrix system for Biomedical Polarimetry*, Harsh Purwar, **Shubham Chandel**, Nirmalya Ghosh. Proc. SPIE 8230, 823019 (2012);

doi:10.1117/12.906668

- ❖ *A Study of CdS and Ag doped CdS Prepared through CBD Technique*, **S. Chandel**, Ajan, P.R, Vallamattom, A.J, Nampoore, V.P.N, Radhakrishnan, P. International Conference on Fibre Optics and Photonics, OSA Technical Digest (online) (Optical Society of America, 2012), paper M3A.6.
- ❖ *Synthesis and Characterization of Ag doped CdS nanoparticle*, **Shubham Chandel**, Ajan P.R, IONS –IIT Delhi 2011

Research Experience

PhD Supervisor : Dr. Nirmalya Ghosh, IISER-K, India

Ongoing Work:

- **Polarimetric Investigation of Plasmon resonances in various Nano-structures.**
- **Study of spin orbit interaction (SOI) of light from plasmonic structures.**
- **Quantitative study of degradation of Myelin in Multiple Sclerosis (MS).**

AFFILIATIONS/ ACTIVITIES/AWARDS

❖ University:-

- Participated in Two day workshop on Light matter interactions and applications 2015, IISER-K, India.
- 1st Prize Inter batch Badminton tournament, IISER-K, 2014.
- OSA Travel grant for attending FiO/LS 2012, Rochester, USA
- 3rd prize Micro Talk paper presentation at International Conference "IONS- Asia", IIT Delhi, 2011
- 2nd Prize Inter department Badminton Championship, CUSAT, 2012.
- Co-Editor Annual Magazine of PSI "Photonics News" 2011 edition
- "Aspire Scholarship" Year 2011, 2012
- Attended the Summer School and Presented a Poster on "Automated Spectral Mueller Matrix Polarimeter" at SNBNCBS Kolkata, 2011
- Workshop on Scanning Electron Microscopy(SEM) at STIC India
- President ISP-OSA Student Chapter
- Volunteered Indo-UK workshop
- Organizing Member "Optics to School" Program of the SPIE activities and of Laser Fest (celebration on 50 Yrs. of lasers by whole optical society)

❖ Conference attended:-

- FiO-LS 2012, Photonics 2012, IONS Asia1 & 2, AMOP 2012, APW 2011-12, Science Conclave 2010, Indo-UK Workshop 2008
- Apart from studies explored my skills by doing 2 documentary movies in CUSAT

❖ School Level:-

- District Badminton Champion, 2004
- Best student Award, 2004
- 3rd prize Debate Organized by Red Cross Society, on World Health Day, 2003
- 4th Prize Quiz Contest Organized by "Antarrashtriya Gayatri Pariwar" 2003

Experimental Expertise

Various Lasers, Scanning Electron Microscope(SEM), Dark Field Microscope, Fluorescence Microscope, Optical Lithography, Absorption Spectrometer, Photoluminescence Spectrometer, Fluorometer, , Differential Interference Contrast Microscopy(DIC) , CCD Spectrometer, EM CCD, Spatial Light Modulator, Spin Coater, X-Ray Diffraction(XRD), Digital Storage Oscilloscope, Fiber Drawing Machine,

Software Proficiency :- Matlab, Origin, COMSOL

PERSONAL DETAILS

Name -	Shubham Chandel
Mother's name-	Prof. Anita Singh
Father's name-	Adv. Shiv Nandan Singh
Date of birth-	Jan 04, 1991
Gender-	Male
Nationality-	Indian
Passport No-	K1333022
Language known-	English ,Hindi (M), French, Sanskrit, Malayalam, Bengali
Address of correspondences-	J C Bose Building, 1st Floor, Room No 104 IISER Kolkata, Mohanpur Campus BCKV Campus Main Office, Nadia, West Bengal, India, pin- 741252
Permanent Address-	s/o Shri Shiv Nandan Singh Medanimal Pokhra, Hajipur Vaishali, Bihar, India,pin-844101
University/Department website-	http://phys.iiserkol.ac.in/

REFERENCES

- 1. Dr. Nirmalya Ghosh**
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- 2. Prof. A. Pradhan**
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- 3. Prof. P K Panigrahi**
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