CURRICULAM-VITAE

Title	DR	First Name	SIDDHARTHA	Last Name		Photograph
Designation		ASSISTANT PROFESSOR				
Address		**Department of Physics, Acharya Narendra Dev College,(University of Delhi) Govindpuri, Kalkaji, New Delhi 110019**				
Phone No Office		Fax: +91-(0)11-26294540				
Residence						
Mobile		8750291790				
Email/ Web-Page		siddharthasingh1@gmail.com, siddhartha@andc.du.ac.in				

Educational Qualifications

Degree	Institution	Year
B.Sc. (ELECTROINCS)	Delhi University, New Delhi	**2003**
M.Sc. (PHYSICS)	JMI, Jamia Millia Islamia, New Delhi	**2005**
Ph.D. (PHYSICS)	JMI, Jamia Millia Islamia, New Delhi	**2011 September**

Career Profile

* **Assistant Professor (PHYSICS) since 24 July 2018 to till date**

Department of Physics, Acharya Narendra Dev College,(University of Delhi) Govindpuri, Kalkaji, New Delhi 110019

* **Post PhD. Research Experience: 5 YEARS**
  Post-Doctoral FELLOW (UGC) - December, 2012 to December 2017
  Department of Physics and Astrophysics, University of Delh,
  MENTOR: PROF VINAY GUPTA
  Pay Scale: 46,500/-
  Post Doctoral Research on Synthesis of metal–polymer nanocomposite for electrical, optical and biomedical applications
* **Post PhD. Research Experience: 1 YEARS**
  Post-Doctoral FELLOW (UGC) - September, 2011 to December 2012
  Department of Physics Jamia Millia Islamia, New Delhi 110025
  MENTOR: PROF M.A.WAHAB
  Pay Scale: 46,500/-
  Post Doctoral Research on Synthesis of metal–polymer nanocomposite for electrical, optical and biomedical applications

Administrative Assignments

Areas of Interest / Specialization

Solid State Physics

* Materials Characterization
* Thin Films
* Polymer Science
* Composites

Expertise in Synthesis / Characterization Techniques

I. Synthesis of nanoparticles /nanocomposites

1. Sol-gel process
2. In-situ Polymerization
3. Solution Intercalation
4. Melt Intercalation:
5. Thin film deposition by thermal evaporation technique
6. Thin film deposition by Spin coating technique
7. Thin film deposition by Dip coating technique
8. Synthesis of materials by chemical reaction
9. Synthesis of material by using melts method

II. Characterization Techniques

1. Powder X-ray diffractometry analysis.
2. UV-Vis-NIR spectrophotometer analysis.
3. Inverted Microscope
4. Photoluminescence (PL) analysis.
5. FT-Raman spectroscopy analysis.
6. FT-IR spectroscopy analysis.
7. Scanning electron microscopy (SEM) analysis only.
8. Impedance analysis.
9. I-V characteristic analysis.
10. Spin coating

Subjects Taught

Communication Electronics
Thermal Physics

Research Guidance

Publications Profile**(SIDDHARTHA et.all)**

1. Effect of gamma radiation on the structural and optical properties of Polyethyleneterephthalate (PET) **Polymer Radiation Physics and Chemistry** 81 (2012) 458–462/ ISSN: 0969-806X

2. Effect of Gamma Radiation on the Optical properties of UHMWPE polymer Nuclear **Instruments and Methods in Physics Research**, 271,(2012) 44-47 ISSN: 0168-9002

3. Formation of blisters in Kapton polymer by the effect of 1.25MeV Gamma Irradiation **Journal of applied polymer science**, 120, 5, (2011) 2928–2937,/ ISSN: 1097-4628

4. Effect of Co60 Gamma-radiation on Physical and Chemical properties in Polyethyleneterephthalate (PET) Polymer **Journal of applied polymer science,** 125, 3575–3581,(2012)/ ISSN: 1097-4628

5. Effect of 1.25 MeV gamma irradiation in a-phased PVDF **Nuclear Instruments and Methods in Physics Research B** 267 (2009) 3545–3548/ ISSN: 0168-9002

6. Effect of γ-irradiation on optical and chemical properties of CR-39 polymer **Radiation Effects & Defects in Solids,** iFirst, 2012, 1–8 ISSN 1042-0150 (Print), 1029-4953

7. Influence of thickness on structural, Optical and electrical properties of thermally evapor ted PbI2 thin films: **Journal of Physics and Chemistry of Solids** 73 (2012) 1309–1313, ISSN: 0022-3697

8. Nd: YAG Laser –Induced Effects on the Structural and Optical Properties of Nanostructure Cds Thin Film: **Chalcogenide Letters** Vol. 7, No. 5, May 2010, p. 361 – 367/ ISSN 1584-8663

9. Structural, optical and electrical properties of ZnSe semiconductor nanoparticles **Chalcogenide Letters**, 7, 2011, 435 – 44, ISSN 1584-8663

10. Allotropic modification induced by Co60 radiation on the structural and optical properties of aromatic polymers **Advanced Materials Research** 383-390 (2012) 3264-3271, ISSN: 1022-6680

11. Morphological, Electrical, Structural and Optical Properties of Co60 Gamma rays irradiated Polyethersulfone (PES) polymer **International journal of physics and applications** 0974-3103 3, Number 1 (2011), 7—22,/ ISSN: 0975-1041

12. Optical and structural study of aromatic polymers irradiated by gamma radiation Indian Journal of Pure & Applied Physics,Vol. 50, 2012/ ISSN: 0975-1041

13. 1.25mev Gamma Irradiated Induced Physical and Chemical Changesin Poly Vinylidene Fluoride (PVDF) **Polymer Progress in Nanotechnology and Nanomaterials**, PP.42-46 / ISSN:2306-0026

14. Effect of electron beam exposure on Virgin and Gamma irradiated Polyethersulfone

(PES) Polymer **International Journal of Emerging Trends in Engineering and Development** Issue 3, Vol.5 (September 2013)

15. Gamma rays induced Physical and Chemical Response of Polymethyl methacrylate (PMMA) Polymer **International Journal of Emerging Trends in Engineering and Development** Issue 3, Vol.6 (November 2013)

16. Physico-chemical modifications induced by 70 MeV carbon ions in alpha phased Polyvinylidene fluoride (α–PVDF) Polymer **Indian Journal of Pure & Applied Physics,**Vol 52,2014 131-136, ISSN: 0975-1041

17. Effect of substrates temperature on structural and optical properties of thermally evaporated CdS nanocrystalline thin films **Indian Journal of Pure & Applied Physics**,Vol 52,2014 Oct.,, ISSN: 0975-1041

18. Gamma rays induced Modification in Ultra high molecular weight polyethylene (UHMWPE) **Indian Journal of Chemical Technology** (Accepted) 2019

Under review articles in reputed international journals (2019-20)

- Synthesis and Characterization of Nanocompositethin films with different Concentrationof Silver Nanoparticles on the Poly (vinylidene fluoride) Polymer
- Physico-chemical modifications induced by 70 MeV carbon ions in alpha phasedPolyvinylidene fluoride (α–PVDF) –Ag(NPs) Composites
- Modifications in Surface Properties of Pedot-Pt Nanocomposite thin films Induced by 12C+5 Swift Heavy Ion (SHI) Irradiation"

Conference/ Presentations/Workshops (ORAL PRESENTATION)

* International Conference on Advances in Polymeric Materials & Human Healthcare (**APA-STERMI 2019**) Goa from 16-18 October 2019.
  Titled: *Synthesis and Characterization of Nanocomposite thin films with different Concentration of Silver Nanoparticles on the Poly (vinylidene fluoride) Polymer*
* **International Conference on Manufacturing Science and Technology, 24- 27, November 2010, MALAYSIA**
  Titled "*Allotropic modification induced by Co^{60} radiation on the structural and optical Properties of aromatic polymers"*
  Sponsored by DST, Ministry of Science and Technology, Govt. of India under International Travel Support.
* **National Conference on Recent Trends in Exotic materials (NCRTEM,2010) Shardha University, Greater Noida ,INDIA**

Titled "*Effect of gamma radiation on the structural and optical properties of Polyethyleneterephthalate (PET) Polymer"*

1. Gamma ray Induced Modification of Poplyethersulfone Polymer: **Siddhartha**, Suveda Aarya, A.K. Srivastava, M.A. Wahab: Published in Fifteenth International workshop on

The Physics of Semiconductor Devices **(IWPSD)** at Jamia Millia Islamia, New Delhi during December 15-19, 2009

2. ^{60}Co gamma irradiation effects in UHMWPE polymer; Suveda Aarya, **Siddhartha**, A. K. Srivastava, A. Saha M. A. Wahab ; published in second International conference on Electroactive polymers (**ICEP-2007**) Feb, Goa, India

Research Projects (Major Grants/Research Collaboration)

Awards and Distinctions

- **Post-Doctoral Fellowship, (December, 2012 to December 2017)**

University Grants Commission, Ministry of HRD, Govt. of India

- **S.R.F** (Senior Research Fellow) (**29th July, 2008 to 28th July, 2011)**

Sponsored By University Grants Commission, Ministry of HRD, Govt. of India

- **J.R.F.** (Juniour Research Fellow) (**29th July, 2006 to 28th July, 2008)**

Sponsored By University Grants Commission, Ministry of HRD, Govt. of India

Association With Professional Bodies

Other Activities

Expert Member

Selection Committee for Consultants in Dr.Ambedkar Foundational
Ministry of Social Justice & Empowerment, Govt. of India (2012-2017)

Official position in various voluntary organisation working for Social/Cultural/ Educational development in various parts of the country

Executive Member

Babasaheb Dr. B.R. Ambedkar Research Institute (India)
3. Institutional Area, Sector-IV. R.K. Puram, New Delhi – 110022
(Registered under Society Registration Act XXI of 1860)
Govt. of India. Ministry of Home Affairs (FCRA) act 1976. Govt. of India since 1975 till date
The foundation stone was laid down by Shri B.D. Jatti the then Vice President of India on 01.06.1975.

Secretary

Rastriya Budh Siksha Avam Samajik Sansthan,
Budh Vihar, Buddha Nagar, Gujraula P.O. Bhartiyagram -244233
N.H. No.24 **J.P. Nagar Uttar Pradesh INDIA**
(Registered under Society Registration Act XXI of 1860)
Govt. of India, Ministry of Home Affairs (FCRA) act 1976 Govt. of India National Trust, Act.44 of 1999,

Govt. of Uttar Pradesh disabilities Act 1995/52 organisation offer 100% tax exemption to the donor U/S80G and 12A (a) of the Income Tax Act. 1961

This Sansthan has its own building and infrastructure in 2000 square meters Plot on 24 National Highway and implementing following.

Activities / Programmes

- Buddhist cultural and research Siddhartha public library Vocational training
- Siddhartha junior high school. National Integration Welfare of disable