BIODATA (Dr. R. S. SINGH)

Name: Dr. Rama Shankar Singh

D.o.B.: 09/07/1963

Educational Qualification: M.Sc (Physics), Ph.D.

Designation: Prof. in Physics

Father's Name: Late Shri Ram Ekbal Singh

Employee Code: 10380080011

Awards: United Group Research Paper Award by United Group of Bangla Desh on 17/04/2019.

Member of Board of Studies at Pt. R. S. University, Raipur: from 01/06/2002 to 31/05/2005 (order no. 2559-6/Acad./2002, Raipur, dated 01/06/2002.

Member of Board of Studies at Durg University, Durg: from August 2016 till date.

Member of Academic Council at Durg University, Durg: from 06/01/2018 till date.

Member of Board of Studies at BIT, Durg: from 2020 till date.

Organizing Secretary in the webinar series on "World wide effect of COVID on research and development" during June 24-26, 2020 organized by Govt. V.Y.T. PG Autonomous College, Durg and B.I.T. Durg in association with Luminescence Society of India.

Chairing the Session in BITCON-2020 on 20/11/2020.

Subject Expert in Mock Interview for Asst. Prof. (Physics) at Govt Digvijay PG College, Rajnandgaon on Feb, 2021.

Research Project/s completed:

| Sl. | Major or | Funding | Principal | Title of the Project | Amount | Tenure |
|-----|--|---------|---------------------------|--|-----------|-----------|
| No. | Minor | Agency | Investigator/Co- | | (in Rs.) | (from/to) |
| | Project | | Investigator | | | |
| 1. | Minor Project F. MS - 56/202024/09- 10/CRO | UGC | Principal Investigator | "Structural and luminescence studies of chemically deposited rare-earth doped CdS- Se films" | 100000/= | 2010-12 |
| 2. | Major Project F. No. : 40- | UGC | Co-Investigator | "Studies on some chemically deposited nanocrystalline films doped with transition and rareearth metallic ions" | 1000000/= | 2011-14 |

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| 00/2011(SR) | | | | | |
| 1 99/2011(3K) | | | | | |
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Ph.D. (awarded) Students:

| Sl. | Name of Student | Title of Thesis | Name of | Date of Ph.D. |
|-----|----------------------|--|-------------|---------------|
| No. | | | University | Notification |
| | | | | |
| 1. | Smt. Ritu Shriastava | Investigations on nanocrystalline and | Pt. R. S. | 07/07/2016 |
| | | bbulk properties of some chemically | University, | |
| | | deposited lanthanide doped (Cd-Zn)S | Raipur | |
| | | films | | |
| | D' 1' T ' 1 | | D. D. C | 11/10/0017 |
| 2. | Rishi Jaiswal | Studies on the effect of interfacial | Pt. R. S. | 11/12/2017 |
| | | barriers on the characteristics of bilayer | University, | |
| | | organic light emitting diodes | Raipur | |
| 3. | Kanchana Shahi | Synthesis and characterization of zinc | Pt. R. S. | 03/09/2019 |
| | | oxide nano wires for heterojunction | University, | 03/07/2017 |
| | | v v | · · | |
| | | LEDs | Raipur | |
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Service Details:

| Details | Post held | Date of joining | Order No. | Other Remarks |
|--|------------------------|-----------------|--|--|
| Service joining at Govt. College Gadarwara, Narsinghpur (M.P.) | Asstt. Prof. (Physics) | 29/09/1993 | Posting Order No. F-1/115/93/A-1/38, Bhopal, dt:20/09/1993. | |
| Govt. D.T. College Utai, Durg (C.G.) | Asstt. Prof. (Physics) | 09/05/1994 | Transfer Order No. F-1/55/94/A-1/38, Bhopal, dt:03/04/94. | Relieved from Govt. College Gadarwara on 07/05/1994 & joined Govt. College Utai on 09/05/1994. |
| Govt. L.C.S.College, Ambagarh Chowki, Rajnandgaon (C.G.) | Prof. (Physics) | 01/09/2016 | Promoted from Asstt. Prof. to Prof. vide Order No. F 1-20/2013/38-1, C.G.Govt., Naya Raipur, dt: 19/08/2016 | Relieved from Got. D.T. College, Utai, Dist- Durg on 31/08/2016 & joined Govt. L.C.S. College, Ambagarh Chowki, Dist: Rajnandgaon on 01/09/2016. |
| Govt. V.Y.T.P.G. Aut. College, | Prof. | 03/10/2018 | Transfer Order No. | Relieved from Govt. L.C.S. College, |

| Durg | (Physics) | F 1-15/18/38-1, Bhopal, dt:01/10/18 | . Ambagarh Chowki, |
|------|-----------|-------------------------------------|--------------------|
| | | | Dist : Rajnandgaon |
| | | | on 01/10/2018. |
| | | | |

Published Research Papers:

| Name of Journals, etc. | F. No. of Project / Title of Paper | Volume & Page Nos. |
|---|---|---|
| Chalcogenide Letters Romania (ISSN 1584- 8663 & IF = 0.688) | Photoconductivity and photoluminescence studies of chemically deposited Cd(S-e):CdCl ₂ ,Dy films | Vol. 5, No. 12, December 2008, p. 377 – 388. |
| Bulletin of Material Science, Springer-India (ISSN 0250-4707 & IF = 0.852) | Structural and optical properties of chemically deposited Cd(S–Se) : CdCl2, Sm films | Vol. 32, No. 2, April 2009, p. 125–133. |
| Journal of opto- electronics and advanced materials | Photoluminescence and photoconductivity in lanthanide doped chemically deposited CdS-Se films | Vol. 11, No. 12, 2009, p. 2115-2119. |
| Chalcogenide Letters Romania (ISSN 1584- 8663 & IF = 0.688) | Studies on nano-crystalline properties of chemically deposited CdSe films | Vol. 7, No. 6, June 2010, p. 375-381. |
| Journal of Ovonic Research Romania (ISSN 2605-6874) | Characterization and optical studies of Sm ³⁺ and Dy ³⁺ doped chemically deposited CdS-Se films | Vol. 6, No. 6, September 2010, p. 211 – 219. |
| Journal of Non-Oxide Glasses Romania (ISSN 1584-8663) | Structural and optical studies of chemically deposited CdS-Se films | Vol. 2, No 3, 2010, p. 135 – 141. |
| Journal of Optoelectronics and Advanced Materials | Structural and optical studies on Pr ³⁺ doped chemically deposited Cd(Se-S) fims | Vol. 12, No 11, Nov 2011, p.2221 – 2225. |
| Digest Journal of Nanomaterials and Biostructures (ISSN 1842- 3582 & IF = 1.75) | Characterization and optical properties of CdSe nano- crystalline thin films | Vol. 6, No 2, April-June 2011, p. 433 – 442. |
| Synthesis and Reactivity in Inorganic, Metal- Organic, and Nano-Metal Chemistry (Taylor & Francis) (ISSN: 1553- 3174 print / 1553-3182 | Synthesis and characterization of chemically deposited nano-crystalline CdSe thin film | Vol. 41, Dec 2011, p. 1346–1350. |

| online) | | |
|---|---|---|
| Research on Chemical Intermediates (Springer) (ISSN 0922-6168) | Synthesis and effect of post deposition thermal annealing on morphological and optical properties of ZnO thin film | Res Chem Intermed 38 (8), 2012, p. 2041-2049. |
| International Journal of Advancements in Research & Technology (IISN) | Optical Characterization of the (Cd-Zn)S:CdCl ₂ Thin Film Deposited by CBD Method | IJART 2 (9), 2013, p. 152-158. |
| Research on Chemical Intermediates (Springer) (ISSN 0922-6168) | Growth and characterization of nano-crystalline CdSe thin solid films | Res Chem Intermed 41, 2013, p. 535-548. |
| Journal of Saudi Chemical Society (ISSN) | Structural, morphological and optical studies on chemically deposited nano-crystalline CdZnSe thin films | Journal of Saudi Chemical Society 18(4), 2014, p. 327- 339. |
| Journal of Saudi Chemical Society (ISSN) | Facile synthesis of flat crystal ZnO thin films by solution-grown method : A micro-structural investigation | Journal of Saudi Chemical Society 18(5), 2014, p. 712- 721. |
| Journal of Alloys & Compounds | Cu-implanted ZnO nano-rods array film : An aqueous synthetic approach | Journal of Alloys & Compounds 618, 2015, p. 421-427 |
| Material Research Express (iop science) | Characterization of CdZnS thin film grown by using different capping agents | Mater. Res. Express 2,3,2015. |
| Optik - International Journal for Light and Electron Optics - Elsevier | Studies on structural, morphological and optical behavior of chemically deposited Cd _{0.5} Pb _{0.5} S thin films | Optik - International Journal for Light and Electron Optics – Elsevier, 126,20, 2015, 2311-2317. |
| Indian Journal of Physics-Springer | Synthesis and characterization of cerium-doped CdZnS nanoparticles | Indian Journal of Physics, 89, 11,2015,1153-1159. |
| International Journal of Advanced Engineering Research and Studies (E- ISSN2249–8974) | Studies on some chemically deposited Cd(Se-S) nano-crystalline thin films | Int. J. Adv. Engg. Res. Studies,IV,II,2015, 275-277. |
| International Science Journal- DAMA International | Electroluminescence efficiency of bilayer organic light emitting diodes Electroluminescence efficiency of bilayer organic light emitting diodes Electroluminescence efficiency of bilayer organic light emitting diodes | International Science Journal,2,2015,29-32. |

| International Journal | Organic Solar Cells : Principles, Mechanism & | IJARSE,4,2015,171-175. |
|--------------------------------|---|---------------------------|
| of Advanced Research | Recent Developments | 1011102, 1,2013,171 173. |
| in Science & | | |
| Engineering- IJARSE | | |
| | | |
| International Journal | Effect of interfacial barrier on the transient response | International Journal of |
| of Luminescence and | of bilayer organic light emitting diodes | Luminescence and |
| Applications- Elsevier | | Applications,5,2015,451- |
| | | 453. |
| International Journal | Electron-Hole Recombination Near the Interface of | International Journal for |
| for Research in Applied | Bilayer OLEDs | Research in Applied |
| Science & Engineering | | Science & Engineering |
| Technology (IJRASET) | | Technology |
| | | (IJRASET),5,XII,2017,71- |
| | | 75. |
| International Journal | An Innovative Approach For Recombination | International Journal for |
| for Research in Applied | Efficiency In Bilayer OLEDs | Research in Applied |
| Science & Engineering | | Science & Engineering |
| Technology (IJRASET) | | Technology |
| | | (IJRASET),5,XI,4027,4031. |
| | | (,,,,,,, |
| International Journal | Optical and Structural Properties of Zinc Oxide | International Journal for |
| for Research in Applied | Nanowires Fabricated by Hydrothermal Method | Research in Applied |
| Science & Engineering | | Science & Engineering |
| Technology (IJRASET) | | Technology |
| | | (IJRASET),4,5,2017,715- |
| | | 719. |
| Applied Physics A | CdTe quantum-dot-modified ZnO nanowire | Applied Physics A |
| Materials Science & | heterostructure | Materials Science & |
| Processing- Springer- | | Processing,124,2018,277- |
| Verlagg GmbH | | 281. |
| Germany, part of | | |
| Springer Nature 2018 | | |
| CCET Journal of Science | A Review on Fabrication of Polymer/ZnO Nanowires | |
| and Engineering Education | Hetero-junction Based Light Emitting Diode by Wet | |
| | Chemistry Method | |
| Journal of Electronic | Synthesis of Ag nanoparticle-decorated ZnO nanorods | Journal of Electronic |
| Materials | adopting the low-temperature hydrothermal method | Materials, 49, 637– |
| | | 642(2020). |
| | | |

${\bf Conference/Seminar/Short\ Term\ Course/Workshop:}$

| Name of Conf./Seminar/Short Term Course/Workshop | Paper/s presented | Proceedings details, if any | Period |
|--|----------------------|---|-----------------------------|
| Indo-US Workshop on "Elliptical Galaxies : Structure & Dynamics" (held at IUCAA Pune, Maharastra) | | | 23/11/1995 to 07/12/1995 |
| Workshop on 'Astronomical Image Processing & Internet" (held at Univ. of Kerala Thiruvananthapuram, Kerala) | | | 20/12/1996 to 24/12/1996 |
| Workshop on "Dynamics at the centre of Galaxies" (held at IUCAA Pune) | | | 03/07/1997 to 05/07/1997 |
| State Level Seminar on "Modern developments in Information Technology" (held at St. Thomas college Bhilai) | | | 21/09/1998 to 22/09/1998 |
| State Level Seminar-cum-Workshop on "Frontiers in Electronics" (held at St. Thomas College Bhilai) | | | 12/12/2003 to 13/12/2003 |
| Short Term Course on "Maintenance of Electronic Instruments" conducted by Western Regional Instrumentation Centre (WRIC) Mumbai (held at Pt. R. S. Univ. Raipur) | | | 04/10/2004 to 09/10/2004 |
| National Workshop on "Scientific & Technological Shabdawali" conducted by MHRD New Delhi (held at Kalyan College Bhilai) | | | 04/11/2008 to 06/11/2008 |
| National Cof. on "Recent Advances in Nanoscience & Nanotechnology" [NCRANT-2009] (held at SSCET Bhilai) | 01 | | 12/01/2009 to 13/01/2009 |
| National conf. on "Luminescence and its Applications" (NCLA-2009) (held at Indian Association for the Cultivation of Science Kolkata, W. Bengal) | 02 | (i) PT 1-7 (ii) p. 49-52 | 19/02/2009 to 21/02/2009 |
| National Workshop on "Physics & Applications of Luminescence to Nanoscience, Radiation Dosimetry & Geology" [NWPAL-2009] (held at SSCET Bhilai) | 01 | | 03/12/2009 to 04/12/2009 |
| International Conf. on "Luminescence and its Applications"- ICLA at PES Uni., Banglore | | (i) 010, p.10 (ii) 122, p. 118 | 09/12/2015 to 12/12/2015 |
| International Conf. on "Recent Trends in Science and Engineering"- ICRTSE at Govt. V.Y.T.P.G. Aut. College, Durg (C.G.) | | (i) 26, OP- 17, p.14 (ii) 47, OP- 38, p.25 | 15/01/2016 to 16/01/2016 |
| | | | |

| Short Course in Organic Electronics (held at IIT Kanpur, U.P.) | 05/07/2010 to 10/07/2010 |
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| UGC sponsored "dfj;j fuekZ.k esa HkkSfrd 'kkL= dh mikns;rk" at Govt. D.T. College Utai, Durg (C.G.) | 29/09/2016 to 01/10/2016 |
| UGC sponsored "Fundamentals of Particle Physics – The Standard Model" at Govt. Digvijay P.G. College, Rajnandgaon (C.G.) | 08/11/2016 |
| National workshop on "Entrepreneurships in renewable energy technologies for Chhattisgarh tribals" at Pt. R. S. Univ., Raipur (C.G.) | 19/09/2016 to 24/09/2016 |
| National Conference - poster presentation on "Effect of interfacial barriers on the recombination efficiency in bilayer OLEDs" at IICT-Hyderabad & MGNIRSA Hyderabad | 09/01/2017 to 11/01/2017 |
| National Conference - paper presentation on "Electron transport in quantum dots" at Bhilai Institute of Technology, Durg (C.G.) | 28/03/2017 |
| National Conference - paper presentation on "Synthesis and characterization of MEHPPV and ZnO Nanowires hetrojunction for Light emitting diodes" at Digvijay P. G. College , Rajnandgaon-NSAAPS | 29/01/2018 |
| National Conference - paper presentation on "Curved phase spaces and Quantum Relativity" at Digvijay P. G. College , Rajnandgaon-NSAAPS | 29/01/2018 |
| National Conference – Proceedings of BITCON 2020 – "Thermal characterization of microcellular silicon elastomer nanocomposites with effect of nano-graphite | 20/11/2020 |