Affiliation: ASSISTANT PROFESSOR

Name: ROHIT SANDAL

Date of Birth: 01/09/1982

Department Name : Department of Physics, GC Hamirpur

Subject Name: Physics

Field of Specialization -Experimental Nuclear Physics

Email ID: rohit1sept@gmail.com

### **Educational Qualifications:**

| S.N | Examination               | Univ/Boar<br>d    | Main Subject       | Year of<br>Passing | Marks<br>/CGPA<br>Obtained | Max<br>Mark<br>s | % Of<br>Mark<br>s | Roll<br>No | Class/<br>Divisi<br>o<br>n/Gra<br>de | Merit/Pr<br>i<br>zes/Med<br>als won<br>if any |
|-----|---------------------------|-------------------|--------------------|--------------------|----------------------------|------------------|-------------------|------------|--------------------------------------|-----------------------------------------------|
| 1   | Matric                    | HPBSE             | Sci,Math,Eng,Hindi | 1997               | 592                        | 700              | 85.00             | 365248     | First                                | 22th<br>in<br>HP<br>Board                     |
| 2   | 10+2/Inter/HS<br>C        | HPBSE             | Physics,Math, Chem | 1999               | 303                        | 400              | 76.00             | 735243     | First                                | 49th<br>in<br>HP<br>Board                     |
| 3   | Graduation<br>BSc         | HPU               | Physics,Math,Chem  | 2002               | 1265                       | 1700             | 74.00             | 30570      | First                                |                                               |
| 4   | Post<br>Graduation<br>Msc | PU,Chandigar<br>h | Physics            | 2004               | 1426                       | 2000             | 71.00             | 9986       | First                                |                                               |

| Othe | Others, if any |                |              |                    |                                |                  |                   |                |                                      |                                               |
|------|----------------|----------------|--------------|--------------------|--------------------------------|------------------|-------------------|----------------|--------------------------------------|-----------------------------------------------|
| S.N  | Examination    | Univ/Boar<br>d | Main Subject | Year of<br>Passing | Marks<br>/CGPA<br>Obtaine<br>d | Max<br>Mark<br>s | % Of<br>Mark<br>s | Rol<br>l<br>No | Class/<br>Divisi<br>o<br>n/Gra<br>de | Merit/Pr<br>i<br>zes/Med<br>als won<br>if any |
| 1    | BEd            | HPU            | Edu,ET,Env   | 2005               | 714                            | 1100             | 65                | 12143          | First                                |                                               |



## Research Degrees:

| S.N | Degree | Title of<br>Dissertation /<br>Thesis                                                                                | Subject                                | % of Marks<br>Awarded/CGPA/<br>Grade | Date of Registration | Date of Award | Name of University              |
|-----|--------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|----------------------|---------------|---------------------------------|
| 1   | Ph.D   | Neutron<br>Multiplicity<br>Measuremen<br>ts as a probe<br>of nuclear<br>viscosity and<br>fusion-fission<br>dynamics | Experim<br>ental<br>Nuclear<br>Physics |                                      | 20/01/2009           | 21/10/2013    | Panjab University<br>Chandigarh |

| Others | , if any           |       |                    |                      |               |            |
|--------|--------------------|-------|--------------------|----------------------|---------------|------------|
| S.N    | Name of the Degree | Title | Name of Supervisor | Date of Registration | Date of Award | University |

#### Details of JRF / NET / SLET / SET / GATE:

| S.N | Details of<br>JRF/NET/SLET/SET/GATE | State | Qualifying<br>Year | Subject | Certificate Number     |
|-----|-------------------------------------|-------|--------------------|---------|------------------------|
| 1   | NET                                 |       | 2006               | Physics | 10-2(5(/2006(i)-E.U.II |

| S.N | Title of Paper                                                                                                                                                      | Journal Type  | ISSN No.  | Volume No. | Year Of Publications | Page No. |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------|------------|----------------------|----------|
| 1   | Probing nuclear<br>dissipation via<br>evaporation residue<br>excitation functions<br>for the 16;18O + 198Pt<br>reactions                                            | Peer-reviewed | 2469-9993 | 91         | 2015                 | 044621   |
| 2   | Effect of N/Z in pre-<br>scission neutron<br>multiplicity for 16,180<br>+ 194;198Pt systems                                                                         | Peer-reviewed | 2469-9993 | 87         | 2013                 | 014604   |
| 3   | Measurements and coupled reaction channels analysis of one- and two-proton transfer reactions for the 28Si + 90;94Zr systems                                        | Peer-reviewed | 2469-9993 | 85         | 2012                 | 034606   |
| 4   | Multinucleon transfer<br>reactions for the 28Si<br>+90;94Zr systems in<br>the region below and<br>near the Coulomb<br>barrier                                       | Peer-reviewed | 2469-9993 | 83         | 2011                 | 054607   |
| 5   | Channel coupling<br>effects on the fusion<br>excitation functions for<br>28Si+90;94Zr in sub-<br>and near-barrier<br>regions                                        | Peer-reviewed | 2469-9993 | 81         | 2010                 | 044610   |
| 6   | Conclusive evidence of<br>quasifssion in<br>reactions forming the<br>210Rn compound<br>Nucleus                                                                      | Peer-reviewed | 2469-9993 | 81         | 2010                 | 054608   |
| 7   | Role of nuclear<br>dissipation and<br>entrance channel mass<br>asymmetry in pre-<br>scission neutron<br>multiplicity<br>enhancement in fusion-<br>fission reactions | Peer-reviewed | 2469-9993 | 78         | 2008                 | 024609   |
| 8   | Anomalous deviations<br>from statistical<br>evaporation spectra for<br>the decay of the 73 Br<br>and 77Rb compound<br>systems                                       | Peer-reviewed | 2469-9993 | 89         | 2014                 | 034621   |
| 9   | Determination of shell<br>correction energies at<br>saddle point using pre-<br>scission neutron<br>multiplicities                                                   | Peer-reviewed | 0375-9474 | 913        | 2013                 | 157      |
| 10  | Study of fission<br>fragment mass<br>distribution for 16O +<br>194Pt reaction                                                                                       | Peer-reviewed | 0375-9474 | 834        | 2010                 | 208      |
| 11  | Fusion measurements<br>for the 18O+194 Pt<br>reaction and search for<br>neutron shell closure<br>effects                                                            | Peer-reviewed | 0954-3899 | 42         | 2015                 | 095105   |

| S.N | Title                                                                                                                                     | ISSN No./ ISBN<br>No. | Volume No/Name of Publisher | Year Of Publications | Page No. |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------|----------------------|----------|
| 1   | Effect of fissility in<br>fission time scales for<br>16;18O+194;198Pt<br>systems                                                          | 978-0-7354-<br>1147   | 1524                        | 2013                 | 167      |
| 2   | Effect of N/Z in pre-<br>scission neutron<br>multiplicity for<br>16;18O + 194;198Pt<br>systems                                            | 978-2-7598-<br>1175-5 | 66                          | 2014                 | 03006    |
| 3   | Fission fragment mass<br>distributions at high<br>excitation energies for<br>16;18O<br>+ 194;198Pt systems                                |                       | 54                          | 2009                 | 350      |
| 4   | Probing dissipation<br>effects via evaporation<br>residue excitation<br>function for the 16;18O<br>+ 198Pt<br>reactions                   |                       | 58                          | 2013                 | 528      |
| 5   | Evaporation residue<br>excitation function<br>measurement for the<br>16;18O + 198Pt<br>Reactions                                          |                       | 57                          | 2012                 | 532      |
| 6   | Measurement of the<br>Fission Cross Sections<br>for the 16;18O +<br>194;198Pt<br>Systems                                                  |                       | 57                          | 2012                 | 534      |
| 7   | Role of N/Z in the<br>pre-scission neutron<br>multiplicity for the<br>16;18O+194;198Pt<br>systems                                         |                       | 55                          | 2010                 | 318      |
| 8   | Neutron Multiplicity<br>and mass distribution<br>measurements to<br>understand the fusion<br>fission dynamics for<br>the system 16O+194Pt |                       | 53                          | 2008                 | 369      |

### Teaching/Post Doctoral Experience(details in chronological order,s tarting with first job)

Total Teaching Experience: 14 Year(s) 1 Month(s)

| S.<br>N | Name &<br>Address<br>Employe<br>r/Instituti<br>on | Address of<br>Employer/<br>Inst.                | Teaching Exp. | Nature Of<br>Appointment | Date of<br>Joining | Date of<br>Leaving | Designatio n      | Basic Pay<br>(p.m) | Grade<br>Pay | Pay<br>Scale    | Reason For<br>Leaving |
|---------|---------------------------------------------------|-------------------------------------------------|---------------|--------------------------|--------------------|--------------------|-------------------|--------------------|--------------|-----------------|-----------------------|
| 1       | GC<br>GHUMA<br>RWIN                               | Principal<br>GC<br>Ghumarwi<br>n Bilaspur<br>HP | UG            | Contract                 | 16/12/20<br>09     | 30/06/20<br>15     | Assistant<br>Prof | 21600              | 6000         | 15600-<br>39100 |                       |
| 2       | GC<br>GHUMA<br>RWIN                               | Principal<br>GC<br>Ghumarwi<br>n Bilaspur<br>HP | UG            | Regular                  | 01/07/20<br>15     | 12/07/20<br>16     | Assistant<br>Prof | 21600              | 6000         | 15600-<br>39100 | Transfer              |
| 3       | GC<br>Bhoranj                                     | Principal<br>GC<br>Bhoranj<br>Hamirpur          |               | Regular                  | 13/07/20<br>16     | 30/01/20<br>20     | Assistant<br>Prof | 24320              | 6000         | 15600-<br>39100 |                       |

# Orientation Programme, Refresher Course, Research Methodology Workshop, Faculty Development Programme, etc attended:-

| S.N | Name                    | Organising Agency            | From       | То         | Sponsoring Agency | Remarks |
|-----|-------------------------|------------------------------|------------|------------|-------------------|---------|
| 1   | Orientation<br>Progamme | HRDC PUNJABI UNI<br>PATIYALA | 03/01/2018 | 31/01/2018 | UGC               |         |
| 2   | Refresher Course        | HRDC JNU Delhi               | 15/07/2019 | 26/07/2019 | UGC               |         |

### Seminars/Conference/Workshop/Symposiums:

| S.N | Select       | Туре              | National | International                         |
|-----|--------------|-------------------|----------|---------------------------------------|
| 1   | Participated | Paper Contributer |          | AIP Conf 1524,109(2013)               |
| 2   | Participated | Paper Contributer |          | J Phy: conf 312,082027<br>(2011)      |
| 3   | Participated | Paper Contributer |          | Int Nuclear Symp 54,84<br>(2009)      |
| 4   | Participated | Paper Contributer |          | Nuclear Phy Symp 54,272 (2009)        |
| 5   | Participated | Paper Contributer |          | Nuclear Phy Symp 54,274 (2009)        |
| 6   | Participated | Paper Contributer |          | Nuclear Physics Symp<br>54,344 (2009) |