



**Department: Pure and Applied Physics**

**List of Programmes having Components of field**

| Sr. No. | Programme Code  | Programme Name        | Academic Year |
|---------|-----------------|-----------------------|---------------|
| 01.     | M.Sc. (Physics) | Project Work (PT-405) | 2020-2021     |



## Minutes of Meetings (MoM) of Board of Studies (BoS)

**Academic Year : 2020-21**

**School : School of Physical Sciences**

**Department : Pure and Applied Physics**

**Date and Time : July 13, 2018 - 11:30 AM; July 18, 2018 - 5:00 PM**

**Venue : Smart Class Room**

The scheduled meetings of member of Board of Studies (BoS) of Department of Pure and Applied Physics, School of Studies of Physical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, were held to design and discuss the M.Sc. (Physics) Third year (V and VI Semesters), scheme and syllabi.

The following members were present in the meeting:

1. Prof. P K. Bajpai
2. Dr. H. S. Tewari
3. Prof. S. B. Kondawar (External Member)
4. Dr. M. N. Tripathi
5. Dr. P. Thakur
6. Dr. R. K. Pandey
7. Dr. T. G. Reddy
8. Dr. R. P. Prajapati
9. Dr. A. K. Gupta
10. Dr. M. P. Sharma
11. Dr. P. Das
12. Dr. T. Trivedi
13. Dr. S. P. Patel
14. Prof. R. Dhar (External member)

**Signature & Seal of HoD**



|  |   |
|--|---|
| <p><b>Semester-I</b></p> <p><b>PT-101</b>-Mathematical Physics<br/><b>PT-102</b>-Classical Mechanics<br/><b>PT-103</b>- Quantum Mechanics-I<br/><b>PT-104</b>-Basic Electronic Devices<br/><b>PT-105</b>- Lab Course</p>                                 | <p><b>Semester-II</b></p> <p><b>PT-201</b>-Atomic and Molecular Physics<br/><b>PT-202</b>- Nuclear and Particle Physics<br/><b>PT-203</b>- Solid State Physics<br/><b>PT-204</b>- Quantum Mechanics-II<br/><b>PT-205</b>- Lab Course</p>                                |
| <p><b>Semester-III</b></p> <p><b>PT-301</b>- Statistical Mechanics<br/><b>PT-302</b>-Introductory to Computational Physics<br/><b>PT-303</b>- Electrodynamics<br/><b>PT-304</b>-Specialization<br/>Material Science –I<br/><b>PT-305</b>- Lab Course</p> | <p><b>Semester-IV</b></p> <p><b>PT-401</b>-Experimental Technique in Physics<br/><b>PT-402</b>- Accelerator Physics<br/><b>PT-403</b>-Molecular Physics and Group Theory<br/><b>PT-404</b>- Specialization<br/>Material Science –II<br/><b>PT-405</b>- Project Work</p> |

विभागाध्यक्ष, F.I.C.D.  
शुद्ध एवं अनुप्रयुक्त भौतिकी विभाग  
Dept. of Pure & Applied Physics  
गुरु घासीदास विश्वविद्यालय  
Guru Ghasidas Vishwavidyalaya  
बिलासपुर (छ.ग.)/Bilaspur

30/4/2019  
30/4/2019  
30/4/2019

Handwritten signatures and dates are present, including 'Treshy', 'Shiv', 'Hem', 'Jain', 'Suresh', 'Sudhakar', and 'Sudhakar'.



## Students Undertaking Field Projects / Research Projects / Internships

Department : **Pure and Applied Physics**

Programme Name : **M.Sc. Electronics**

Academic Year : **2020-21**

### List of students undertaking Field Projects/Projects / Internships

| Sr. No. | Name of the Student | Title of the Project / Internship along with the Name of the Organization (where Project / Internship was carried out)                           | Link of Certificate   |
|---------|---------------------|--|---|
| 01.     | Aanchal Yadav       | Fight against COVID-19: Physical techniques of nano particles for Designing anti-viral mask in post covid regime/<br>GGU Bilaspur                | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070151_Aanchal%20Yadav.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070151_Aanchal%20Yadav.pdf</a>             |
| 02.     | Abha Paranjape      | Exploring gravitational waves and testing GTR/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070306_Abha%20Paranjape.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070306_Abha%20Paranjape.pdf</a>           |
| 03.     | Ajay Kumar Paikra   | Thermo-electric materials/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070339_AJAY%20KUMAR%20PAIKRA.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070339_AJAY%20KUMAR%20PAIKRA.pdf</a> |
| 04.     | Akash Pashyet       | To Display the HR Diagrams of Star Clusters, Determine the Ages of the stars in them and Determine the Distance to the Clusters/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070419_Akash%20Pashyet.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070419_Akash%20Pashyet.pdf</a>             |
| 05.     | Anmol Namdev        | Review of Synthesis and characterization of rare earth Hybrid CNT/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070510_Anmol%20Namdev.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070510_Anmol%20Namdev.pdf</a>               |



|     |                       |   |   |
|-----|-----------------------|---|---|
| 06. | Anshu Dewangan        | MEASURE SIZE OF NANOPARTICLES BY DYNAMIC LIGHT SCATTERING (DLS)/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070542_Anshu%20Dewangan.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070542_Anshu%20Dewangan.pdf</a>                       |
| 07. | Anubhav Singh Banafer | APPLICATION OF QUANTUM DOTS IN DRUG DELIVERY/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070632_Anubhav%20Singh%20Banafer-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070632_Anubhav%20Singh%20Banafer-2.pdf</a> |
| 08. | Avinash Mahapatra     | A Review on ZnO based Perovskite Solar Cells/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070803_Avinash%20Mahapatra.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070803_Avinash%20Mahapatra.pdf</a>                 |
| 09. | Bhakta Bandhu Behera  | STRUCTURAL AND MAGNETIC PROPERTIES OF MG DOPED COBALT FERRITE NANOPARTICLES PREPARED BY SOL-GEL METHOD/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070844_BHAKTA%20Bandhu%20behra.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070844_BHAKTA%20Bandhu%20behra.pdf</a>         |
| 10. | Bhumika Patel         | FERROELECTRIC MATERIALS AND ITS APPLICATIONS/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070926_Bhumika%20Patel.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070926_Bhumika%20Patel.pdf</a>                         |
| 11. | Bimlesh Meher         | DENSITY FUNCTIONAL THEORY & SPINTRONICS TECHNOLOGY A REVIEW/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071010_Bimlesh%20Meher.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071010_Bimlesh%20Meher.pdf</a>                         |
| 12. | Chandrika             | Multiferroic Compound/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071116_Chandrika.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071116_Chandrika.pdf</a>                                     |
| 13. | Chandrama Barik       | STUDY OF SHELL MODEL OF NUCLEUS/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071043_chandrama.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071043_chandrama.pdf</a>                                     |



|     |                   |   |   |
|-----|-------------------|---|---|
|     |                   |   | f   |
| 14. | Devendra Kashyap  | ISING MODEL/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071150_Devendra%20Kashyap.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071150_Devendra%20Kashyap.pdf</a>           |
| 15. | Gourav Sahu       | QUANTUM DOTS LASER AND CHARACTERISTICS<br>PROPERTIES OF GaAs based QDL/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071216_Gaurav%20Sahu-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071216_Gaurav%20Sahu-2.pdf</a>                 |
| 16. | Kalyan Sagar Sahu | Brief Review on Photoluminescence and Persistent<br>Luminescence of Rare Earth Activated Sr4Al14O25<br>Phosphor/<br>GGU Bilaspur                    | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071323_Kalyan%20Sagar%20Sahu-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071323_Kalyan%20Sagar%20Sahu-2.pdf</a> |
| 17. | L Shubham Kumar   | A brief review on mechanoluminescence in rare earth<br>doped Ca2MgSi2O7/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071356_L%20Shubham%20kumar-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071356_L%20Shubham%20kumar-2.pdf</a>     |
| 18. | Latika Behuria    | SYNTHESIS<br>OF Cu <sup>2+</sup> DOPED CoFe <sub>2</sub> O <sub>4</sub> NANOPARTICLES BY CITRATE<br>AUTO-GEL COMPOSITION<br>METHOD/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071436_Latika%20Behuriya.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071436_Latika%20Behuriya.pdf</a>             |
| 19. | Maheshwari        | Perovskite Based Gas Sensor/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071539_Maheshwari%20Sahu.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071539_Maheshwari%20Sahu.pdf</a>             |
| 20. | Manish Das        | Gas Sensors Based of oxide<br>Nanoparticles/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071635_Manish%20Das-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071635_Manish%20Das-4.pdf</a>                   |
| 21. | Mukesh Patel      | SOLAR PHOTOVOLTAIC CELL/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/">https://www.ggu.ac.in/</a>   |



|     |                         |  |   |
|-----|-------------------------|--|---|
|     |                         |  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071712_MUKESH%20ATEL.pdf">Admin/Files/DepartmentDocument/06292022071712_MUKESH%20ATEL.pdf</a>   |
| 22. | Prakash Kumar Bera      | Revolutions of moons of Jupiter and calculating Mass of Jupiter/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071742_Prakash%20Kumar%20Bera.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071742_Prakash%20Kumar%20Bera.pdf</a>               |
| 23. | Priyanka Singh          | Studies of structural property of rare earth doped nanophosphors/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071811_Priyanka%20Singh-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071811_Priyanka%20Singh-2.pdf</a>                       |
| 24. | R Suchita Singh Mongare | TWO DIMENSIONAL NANOMATERIAL-BASED POLYMER COMPOSITES : ENERGY STORAGE AND FABRICATION/<br>GGU Bilaspur                    | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071837_R%20SUCHITA%20SINGH%20MONGARE.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071837_R%20SUCHITA%20SINGH%20MONGARE.pdf</a> |
| 25. | Rahul Kumar             | CONFOCAL MICROSCOPE AND ITS APPLICATION/<br>GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071911_Rahul%20Kumar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071911_Rahul%20Kumar.pdf</a>                                 |
| 26. | Ravindra Chandra        | A Review on ZnO/ZnTe based Micropillar Solar Cells/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072013_Ravindra%20Chandra-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072013_Ravindra%20Chandra-3.pdf</a>                   |
| 27. | Reshmi Nayak            | ENHANCED TRANSPORT PROPERTIES OF CERIUM DOPED COBALT FERRITE NANOPARTICLES FOR RESISTIVE RAM APPLICATIONS/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072045_Reshmi%20Nayak%20project-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072045_Reshmi%20Nayak%20project-3.pdf</a>       |
| 28. | Rudrakant Ghritlahre    | GRAPHENE OXIDE AND ITS PROPERTIES AND APPLICATIONS/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022</a>   |



|     |                       |  |   |
|-----|-----------------------|--|---|
|     |                       |  | <a href="#">072113 Rudrakant%20Ghritlahare-3.pdf</a>  |
| 29. | Sanju Suryvanshi      | Vibrational Properties and DFT Calculations/<br>GGU Bilaspur                   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072153_Sanjoo%20Suryavanshi-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072153_Sanjoo%20Suryavanshi-2.pdf</a> |
| 30. | Satyanarayan          | Superconductivity and it's applications/<br>GGU Bilaspur                       | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072225_Satyanarayan-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072225_Satyanarayan-2.pdf</a>                 |
| 31. | Saurabh Shadangi      | BINDING ENERGY/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072301_Saurabh%20Shadangi-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072301_Saurabh%20Shadangi-4.pdf</a>     |
| 32. | Shikha                | solar cell/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072332_Shikha-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072332_Shikha-3.pdf</a>                             |
| 33. | Somya Dewangan        | Nanocomposites for remediation of environmental issues/<br>GGU Bilaspur        | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072448_Somya%20Dewangan-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072448_Somya%20Dewangan-3.pdf</a>         |
| 34. | Srishti Rai           | comprehensive study on synthesis method of graphene and its application        | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072406_Shristi%20rai-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072406_Shristi%20rai-2.pdf</a>               |
| 35. | Sudha Kahar           | Brief review on photoluminescence of zinc oxide nanoparticles/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072528_sudha%20kaha-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072528_sudha%20kaha-3.pdf</a>                 |
| 36. | Suruchi Namita Pandey | Glass/   | <a href="https://www.ggu.ac.in/">https://www.ggu.ac.in/</a>   |





|     |                      |  |   |
|-----|----------------------|--|---|
|     |                      | GGU Bilaspur   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072609_Suruchi%20Naimita%20Pandey-3.pdf">Admin/Files/DepartmentDocument/06292022072609_Suruchi%20Naimita%20Pandey-3.pdf</a>                   |
| 37. | Trivendra Sahu       | Multiferroic materials and its application/<br>GGU Bilaspur                            | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072642_Trivendra%20Sahu-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072642_Trivendra%20Sahu-4.pdf</a>                 |
| 38. | Yashwant             | REVIEW ON FERMI SURFACE USING DENSITY FUNCTION THEORY/<br>GGU Bilaspur                 | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072718_Yashwant%20-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072718_Yashwant%20-2.pdf</a>                           |
| 39. | Yogesh Patel         | Synthesis of Artificial Diamond and its optical characterization/<br>GGU Bilaspur      | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072905_Yogesh%20Patel-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072905_Yogesh%20Patel-4.pdf</a>                     |
| 40. | Yushmi Sahu          | GAMMA RAY SPECTROSCOPY/<br>GGU Bilaspur  | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072934_Yushmi%20Sahu-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072934_Yushmi%20Sahu-4.pdf</a>                       |
| 41. | Rajesh Kumar Patel   | RIVIEWS ON TIN TELLURIDE(SnTe) THERMOELECTRIC MATERIALS/<br>GGU Bilaspur               | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071938_Rajesh%20Patel-3.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071938_Rajesh%20Patel-3.pdf</a>                     |
| 42. | Yogendra Kumar Ratre | SOLAR CELL   | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072834_Yogendra%20Kumar%20Ratre-4.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022072834_Yogendra%20Kumar%20Ratre-4.pdf</a> |
| 43. | Litesh Kumar         | REVIEW OF Luminescence studies of Dy <sup>3+</sup> doped borate glass/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022</a>   |



|     |                      |  |   |
|-----|----------------------|--|---|
|     |                      |  | <a href="#">071506 Litesh-2.pdf</a>   |
| 44. | Arvind Sarthi        | PROPERTIES and APPLICATIONS OF PHOTOVOLTIC DEVICE BASED ON PEROVSKITE MATERIALS/<br>GGU Bilaspur | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070711_Arvind%20sarthi.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022070711_Arvind%20sarthi.pdf</a> |
| 45. | Himanshulata Rajwade | A brief review on Thermoluminescence of ZrO <sub>2</sub> phosphors/<br>GGU Bilaspur              | <a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071249_HIMANSHULATA-2.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022071249_HIMANSHULATA-2.pdf</a>   |