

**MAHARSHI DAYANAND UNIVERSITY UNIVERSITY  
DEPARTMENT OF CHEMISTRY**

A meeting of the Department Research Committee was held on 24<sup>th</sup> July, 2019 at 10.00

A.M. in the office of H.O.D. Following members were present:-

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| 1. Dr. S.P. Khatkar, Prof. & Head, Deptt. of Chemistry                | Chairman              |
| 2. Prof. V.B. Taxak, Deptt. of Chemistry                              | Member                |
| 3. Prof. Sapana Garg -do-   | Member                |
| 4. Dr. Devender Singh, Associate. Prof., Deptt. of Chemistry          | Member                |
| 5. Dr. Rajesh Kumar Malik, Asstt. Prof. -do-                          | Member                |
| 6. Prof. Rajesh Malhotra, Deptt. of Chemistry, GJU, Hisar             | <b>Outside Expert</b> |
| 7. Prof. Rajiv Gupta, Deptt. of Chemistry, University of Delhi, Delhi | <b>Outside Expert</b> |

**Following decisions were taken:**

1. Department Research Committee considered and recommended the Ph.D. registration of the following candidates on the topic mentioned below as approved by the Research Advisory Committee in its meeting held on 8<sup>th</sup> July, 2019. Further Ph.D. registration cases be forwarded to the P.G. Board of Studies in Chemistry for consideration.

| Sr. No. | Name of Candidate      | Name & Address of Supervisor  | Topic of research   |
|---------|------------------------|---|---|
| 1.      | Ms. Pooja*             | Dr. Vinod Bala Taxak,<br>Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak<br><b>(Supervisor)</b><br>Dr. Rajesh Kumar,<br>Assistant Professor,<br>Deptt. of Chemistry,<br>UIET, MDU Rohtak<br><b>(Co-Supervisor)</b>             | “SYNTHESIS AND INVESTIGATION OF OPTICAL AND BIOLOGICAL PROPERTIES OF SOME RARE EARTH METAL COMPLEXES” |
| 2.      | Ms. Priyanka Sehrawat* | Dr. Vinod Bala Taxak,<br>Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak<br><b>(Supervisor)</b><br>Dr. Rajesh Kumar Malik,<br>Assistant Professor,<br>Deptt. of Chemistry,<br>M.D.University, Rohtak<br><b>(Co-Supervisor)</b> | “INVESTIGATION INTO STRUCTURAL AND PHOTOPHYSICAL PROPERTIES OF SOME RARE-EARTH NANOPHOSPHORS”         |
| 3.      | Ms. Priya Phogat*      | Dr. Vinod Bala Taxak,<br>Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak<br><b>(Supervisor)</b>  | “STRUCTURAL AND PHOTOPHYSICAL PROPERTIES OF SOME LUMINESCENT NANOMATERIALS”                           |

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|     |                    | Dr. Rajesh Kumar Malik,<br>Assistant Professor,<br>Deptt. of Chemistry,<br>M.D.University,<br>Rohtak<br><b>(Co-Supervisor)</b>   |   |
| 4.  | Ms. Mahak          | Dr. Sapana Garg<br>Professor,<br>Deptt. of Chemistry,<br>M.D. University, Rohtak   | “SYNTHESIS CHARACTERIZATION AND BIOLOGICAL STUDIES OF ARYLTELLURIUM(IV) COMPLEXES DERIVED FROM SUBSTITUTED NAPHTHALDEHYDE SCHIFF BASES” |
| 5.  | Ms. Nidhi          | Dr. Sapana Garg,<br>Professor,<br>Deptt. of Chemistry,<br>M.D. University, Rohtak  | “INVESTIGATION ON ORGANYL TELLURIUM(IV) COMPLEXES OF SCHIFF BASES DERIVED FROM 5-SUBSTITUTED FURAN-2-CARBALDEHYDE”                      |
| 6.  | Ms. Poonam**       | Dr. Sapana Garg,<br>Professor,<br>Deptt. of Chemistry,<br>M.D. University, Rohtak<br><b>(Supervisor)</b><br><br>Dr. V.K. Sharma,<br>Emeritus Scientist,CSIR,<br>Deptt. of Chemistry, MD.<br>University, Rohtak<br><b>(Co-Supervisor)</b> | “THERMODYNAMIC INVESTIGATIONS OF MOLECULAR INTERACTIONS IN MULTICOMPONENT LIQUID MIXTURES”  |
| 7.  | Anuj               | Dr. Devender Singh,<br>Associate Professor,<br>Deptt. of Chemistry,<br>M.D. University, Rohtak   | “SYNTHESIS AND OPTOELECTRONIC CHARACTERISTICS OF RARE-EARTH METAL COMPLEXES FOR DISPLAY APPLICATIONS”                                   |
| 8.  | Ms. Kapeesha Nehra | Dr. Devender Singh,<br>Associate Professor,<br>Deptt. of Chemistry,<br>M.D.University, Rohtak  | “PREPARATION AND LUMINESCENT CHARACTERISTICS OF HETEROCYCLIC LIGAND BASED RARE-EARTH METAL COMPLEXES FOR OLEDs APPLICATIONS”            |
| 9.  | Ms. Monika         | Dr. Priti Boora Doon,<br>Assistant Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak  | “STUDY OF STRUCTURAL AND LUMINESCENT CHARACTERISTICS OF SOME RARE EARTH METAL COMPLEXES”  |
| 10. | Ms. Monika         | Dr. Rajesh Kumar Malik,<br>Assistant Professor,<br>Deptt. of Chemistry,<br>M.D.University, Rohtak  | “SYNTHESIS OF SOME RARE EARTH DOPED PHOSPHORS THEIR STRUCTURAL AND LUMINESCENT PROPERTIES”  |
| 11. | Ms. Anuradha       | Dr. Naveen Kumar,<br>Assistant Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak  | “THERMODYNAMIC AND ADSORPTION STUDIES OF CO <sub>2</sub> CAPTURE BY HYBRID MATERIALS”   |

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| 12. | Ms. Renu  | Dr. Komal Jakhar,<br>Assistant Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak | “SYNTHETIC STUDIES ON MEDICINALLY<br>IMPORTANT HETEROCYCLIC COMPOUNDS”                       |
| 13. | Ms. Jyoti | Dr. Komal Jakhar,<br>Assistant Professor,<br>Department of Chemistry,<br>M.D.University, Rohtak | “SYNTHESIS OF PHARMACEUTICALLY<br>SIGNIFICANT ORGANIC COMPOUNDS USING<br>GREENER PROCEDURES” |

**Justification of Co-Supervisor of Ms. Pooja, Ms. Priyanka Sehrawat & Ms. Priya Phogat**


- \* As per Ph.D. Ordinance Co-Supervisors in case of Ms. Pooja, Ms. Priyanka Sehrawat & Ms. Priya Phogat have been taken from the M.D.University, Rohtak as Prof. Vinod Bala Taxak is going to retire in December, 2020.

\*\* **Justification of Co-Supervisor of Ms. Poonam:**

The present study involves the investigations of molecular interactions in mixtures. Prof. Sapana Garg will work on the estimation of molecular interactions in binary mixtures by measuring and analyzing their thermodynamic properties. However, prediction of molecular interactions in ternary mixtures is complicated. Prof. V.K. Sharma (Emeritus Scientist, CSIR) is an expertise in thermodynamics of liquid mixtures and has published 150 research papers. His expertise will be utilized in evaluating the molecular interactions in ternary mixtures. Further, he will help in quantum mechanical calculations to confirm the proposed molecular entities (via IR, NMR and thermodynamic considerations) in pure as well as mixed states.

2. Half yearly progress reports of the following research scholars were placed before the D.R.C. for evaluation. The committee approved the same.

- (i) Mr. Anuj  
(ii) Ms. Sushma  
(iii) Ms. Jyoti D/o Satyawar  
(iv) Ms. Priyanka  
(v) Ms. Suprabha Yadav

  
(S.P. Khatkar)

  
(Vinod Bala Taxak)

  
(Sapana Garg)

  
(Devender Singh)

  
(Rajesh Kumar Malik)

  
(Rajesh Malhotra)

  
(Rajiv Gupta)