



# University of Kashmir, Srinagar

## **Minutes of the meeting of Board of Research Studies (BORS) in Physical & Mathematical Sciences held on 25-08-2023 at 11:00 A.M. in the Committee Room of the Administration Block.**

### Present

1. *Prof. Nelofer Khan* (In the Chair)  
*Vice-Chancellor*
2. *Prof. Farooq A. Masoodi*  
*Dean Academic Affairs*
3. *Prof. Irshad A. Nawchoo*  
*Dean Research*
4. *Prof. Anwar Hassan*  
*Dean, School of Physical & Mathematical Sciences*
5. *Head, Deptt. of Chemistry*
6. *Head, Department of Statistics;*
7. *Head, Department of Mathematics;*
8. *Head, Department of Physics*
9. *Director, South Campus*

The Assistant Registrar, (Research) was also present.

At the outset, Dean Research welcomed the members and requested Hon'ble Vice-Chancellor for his introductory remarks. Hon'ble Vice-Chancellor desired that the quality of research should improve and efforts should be made to pursue such research themes that have direct relevance to society. She also desired that the topics of research to be assigned to the scholars should be discussed thoroughly in pre-BORS meetings and inputs from the experts in the area of research should be sought in whatever manner possible

After the remarks of the Hon'ble Vice-Chancellor agenda items were taken up for discussion.

### **Item**

**No.01 Perusal of the action taken report of the last meeting of the Board of Research Studies in Physical and Mathematical Sciences held on 07-03-2022, pertaining to the matters relating to the Deptts. falling under School of Physical & Mathematical Sciences.**

**Resolved that the action taken report on the minutes of the last meeting of BORS in Physical and Mathematical Sciences held on 07-03-2022, be placed on record.**

### **Item**

**No. 02 Confirmation of minutes of the last meeting of the Board of Research Studies in Physical and Mathematical Sciences held on 07-03-2022, pertaining to the matters relating to the Deptts. falling under School of Physical & Mathematical Sciences.**

**Resolved that the minutes of the last meeting of the Board of Research Studies in Physical and Mathematical Sciences held on 07-03-2022, be confirmed.**

**Item****No. 03 Consideration of recognition of teachers/Doctor as co-guides to supervise Ph.D scholars in the discipline of Chemistry and Physics.**

**Resolved that** recognition of following teachers/Doctor as co-supervisors to guide Ph. D research scholars be recognized as co-supervisor in the discipline of Chemistry and Physics:-

<i>S. No</i>	<i>Name of Teacher</i>	<i>Name of the Discipline</i>
01	Dr. Ravi Kumar Assistant Professor, NIT, Srinagar	Chemistry
02	Dr. Javid Ahmad Sofi Associate Professor, SKUAST, Shalimar	Chemistry
03	Dr. Hinna Hamid Associate Professor, Jamia Hamdard, New Delhi	Chemistry
04	Dr. Mushtaq Ahmad Tantray Assistant Professor, GDC, Baramulla	Chemistry
05	Dr. Saleem Farooq Assistant Professor, GDC, Baramulla	Chemistry
06	Dr. Niyaz Ahmad Mir Assistant Professor, GDC, Pattan	Chemistry
07	Dr. Nasrul Islam Assistant Professor GDC, Bandipora	Chemistry
08	Dr. Syed Raashid Maqsood Assistant Professor S.P. College, Srinagar	Chemistry
09.	Dr. Parvaiz Ahmad Assistant Professor GDC, Pulwama	Chemistry
10.	Dr. Oyais Ahmad Chat Assistant Professor GDC, Pulwama	Chemistry
11.	Dr. Biplab Sarkar Chief Medical Radiation Oncology , Apollo Gleneagels Hospitals, Kolkata	Physics
12.	Dr. Ruta Prabhakar Kale Instt. of Fundamental Research (TIFR), Pune	Physics
13.	Dr. Aijaz Ahmad Dar Assistant Professor Islamia College of Science and Commerce	Physics

Item

**No.04 Consideration of the grant of registration in favour of the candidates listed in Annexure A to D for pursuit of Ph.D/I-Ph.D programme on whole-time/part-time basis as detailed in the respective annexures to the main agenda against each candidate, in the following disciplines of the School of Physical & Mathematical Sciences:**

**A. Chemistry      B. Mathematics      C. Statistics      D Physics**

**Resolved that** the candidates enlisted in annexures A to D of the Departments falling in the School of Physical & Mathematical Sciences be registered for pursuit of Ph.D/I-Ph. D programmes on whole-time/part-time basis subject to the fulfillment of conditions (if any) indicated against each in the remarks column of the respective annexure.

Meetings concluded with thanks to the chair.

Approved.

Sd/-  
Vice-Chancellor

Sd/-  
Dean Research



**UNIVERSITY OF KASHMIR, SRINAGAR**  
**OFFICE OF THE DEAN RESEARCH**

*No: F (BORS-Phy & Mathematical Scs)KU/23*  
*Dated: November , 2023*

- Copy of the approved minutes alongwith statement of particulars of the candidates forwarded to the HOD, \_\_\_\_\_ for necessary action. Conditions if any contained in the remarks column of the statements may be fulfilled. After verification of the certificates/required documents/submission of registration forms/deposition of admission fee and submission of joining reports, the documents may please be forwarded for reckoning of the registration of the scholars. Before joining eligibility of the candidates for part-time registration is to be checked and concerned allowed to join only after production of permission and leave sanction order from the parent Department.

Assistant Registrar  
(Research)

<i>S. No.</i>	<i>Name of the Scholar</i>	<i>Name of the Supervisor</i>	<i>Proposed Topic of Research</i>	<i>Approved Topic of Research</i>	<i>Remarks</i>
01.	Firdous Ahmad Ganaie <b>Ph.D</b> Whole-time Reg. No.42983-S-2009	Dr. Mohsin Ahmad Bhat Associate Professor  Prof. Wajahat Amin Shah <b>(Co-Supervisor)</b>	Design and Synthesis of Bio-based Composite Materials for Sensing and Detoxification of Water Contaminants	Design and Synthesis of Bio-based Composite Materials for Sensing and Detoxification of Water Contaminants	Redraft objectives in light of topic.
02.	Kaniz Fatima <b>Integrated Ph.D</b> Whole-time Reg. No. Nil	Dr. Aijaz Ahmad Dar Assistant Professor  Prof. Wajahat Amin Shah <b>(Co-Supervisor)</b>	Studies on Metal Oxide Decorated Graphene Composite Materials for Solar Energy Conversion Applications Using Density Functional Theory	Studies on Metal Oxide Decorated Graphene Composite Materials for Solar Energy Conversion Applications Using Density Functional Theory	Registration number is required from the Registration Section.
03.	Irfan Nazir <b>Ph.D</b> Whole-time Reg. No.44730-S-2011	Dr. Ghulam Nabi Dar Assistant Professor Deptt. of Physics  Prof. Wajahat Amin Shah <b>(Co-Supervisor)</b>	Synthesis and Characterization of Metal Chalcogenide Based Nanomaterials for Environmental Remediation Applications	Synthesis and Characterization of Metal Chalcogenide Based Nanomaterials for Environmental Applications	Topic modified.

04.	Gousia <b>Integrated Ph.D</b> Whole-time Reg. No. 61678-W-2012	Dr. Aijaz Ahmad Dar, Associate Professor  Dr. Nighat Nazir, Associate Professor, Islamia College <b>(Co-supervisor)</b>	Synthesis of Smart Hydrogels using Bioactive Molecules as Crosslinkers for their Prospective Biomedical and Industrial Applications	Synthesis of Smart Hydrogels using Bioactive Molecules as Crosslinkers for their Prospective Biomedical and Industrial Applications	
05.	Enaitullah Rather <b>Ph.D</b> Whole-time Reg. No. required from the registration section	Prof. Wajahat Amin Shah  Dr. Hinna Hamid, Jamia Hamdard University <b>(Co-Supervisor)</b>	Bioprospection of Essential Oils from Genus Pinus and Designing of Novel Methodologies for the Synthesis of Bio-active Scaffolds	Bioprospection of Essential Oils from <i>Pinus</i> and Designing of Novel Methodologies for the Synthesis of Bio-active Scaffolds	Topic modified.
06.	Ayaz Ahmad Manhas <b>Integrated Ph.D</b> Whole-time Reg. No.47480-S-2013	Dr. Aijaz Ahmad Dar, Associate Professor  Dr. Adil Gani, Asstt. Professor, Deptt. of Food Science & Technology, KU <b>(Co-Supervisor)</b>	Development of Interfacial Engineering Guided Strategy for the Formulation of Antioxidant Loaded Food Emulsions for Enhanced Oxidative Stability of Long Chain Polyunsaturated Fatty Acids	Development of Interfacial Engineering Guided Strategy for the Formulation of Antioxidant Loaded Food Emulsions for Enhanced Oxidative Stability of Long Chain Polyunsaturated Fatty Acids	

07.	Saima Sidiq <b>Integrated Ph.D</b> Whole-time Reg. No. 26881-AW-2012	Dr. Aijaz Ahmad Dar, Associate Professor  Dr. Nighat Nazir, Associate Prof., Islamia College <b>(Co-supervisor)</b>	Designing Stimuli-responsive Supramolecular Hydrogels based on Low Molecular Weight Natural Products for their Prospective Biomedical and Industrial Applications	Designing Stimuli-responsive Supramolecular Hydrogels based on Low Molecular Weight Natural Products for their Prospective Biomedical and Industrial Applications	
08.	Shabeela Aziz Ph.D Part-time Reg. No.11072-SP-1993	Prof. S.M.A Andrabi, IOT, Zakura  Dr. Javaid Ahmad Sofi Associate Professor, SKUAST, Shalimar <b>(Co-Supervisor)</b>	Synthesis and Characterization of Nano Bio-char for the Adsorption of Heavy Metal ions	Synthesis and Characterization of Nano Bio-char for the Adsorption of Heavy Metal ions	
09.	Firdaus Ahmad Ahanger Integrated Ph.D Whole-time Reg. No.31145-BC-2012	Dr. Aijaz Ahmad Dar, Associate Professor	Design and Development of Soft System based Smart Photoluminescent Materials	Design and Development of Soft System based Smart Photoluminescent Materials	

10.	<p>Showkat Rashid  <b>Integrated Ph.D</b>  Whole-time  Reg. No.14569-PC-2008</p>	<p>Dr. Aijaz Ahmad Dar,  Associate Professor</p>	<p>Design, Fabrication and Characterization of Self-assemblies of Surfactants, Polymers and their Mixtures for their Prospective Transport Applications</p>	<p>Design, Fabrication and Characterization of Self-assemblies of Surfactants, Polymers and their Mixtures for their Prospective Transport Applications</p>	
11.	<p>Umar Nabi Tak  <b>Integrated Ph.D</b>  Whole-time  Reg. No. 72969-ANG-2013</p>	<p>Dr. Aijaz Ahmad Dar,  Associate Professor</p>	<p>Development of Plant Extract Loaded Polymeric Hydrogels for Prospective Biomedical and Industrial Applications</p>	<p>Development of Plant Extract Loaded Polymeric Hydrogels for Prospective Biomedical and Industrial Applications</p>	
12.	<p>Mohd Mustafa  <b>Integrated Ph.D</b>  Whole-time  Reg. No. 2291-KR-2009</p>	<p>Dr. Masood Ahmad Rizvi,  Assistant Professor</p> <p>Prof. M. H. Masoodi  Deptt. of Pharmaceutical Sciences  (Co-supervisor)</p>	<p>Complexation Modulated Physicochemical Behavior of Middle to late Transition Metals for Analytical, Biological and Environmental Applications.</p>	<p>Complexation Modulated Physicochemical Behavior of Middle to late Transition Metals for Analytical, Biological and Environmental Applications.</p>	

13.	Zia ul Haq <b>Ph.D</b> Whole-time Reg. No.21197-PC-2010	Dr. Masood Ahmad Rizvi, Assistant Professor Prof. Wajahat Amin Shah <b>(Co-Supervisor)</b>	Synthesis Characterization and Environmental Applications of Novel 2D Layered Based Composite Materials for the Abatement of Water Contaminants	Synthesis, Characterization and Environmental Applications of Novel 2D Layered Based Composite Materials for the Abatement of Water Contaminants	
14.	Asif Ahmad Malik <b>Ph.D</b> Whole-time Reg. No.	Dr. Aijaz Ahmad Dar, Assistant Professor  Dr. Peer Abdul Haseeb Shah, Deptt. of Bioresources <b>(Co-Supervisor)</b>	Crystal Engineering of the Pharmaceuticals for Biomedical and Material Applications	Crystal Engineering of the Pharmaceuticals for Biomedical and Material Applications	Registration No. required from the Registration Section.
15.	Naseer Ahmad Dar <b>Ph.D</b> Whole-time Reg. No. 12749-PC-2007	Prof. Wajahat Amin Shah  Dr. Tabasum Ismail, Asstt. Professor, SP College <b>(Co-Supervisor)</b>	Designing Strategies for Synthesis of Bioactive Heterocyclic Compounds and Bioprospection of Different Phytoconstituents of Medicinal Plants of Kashmir Region	Designing Strategies for Synthesis of Bioactive Heterocyclic Compounds and Bioprospection of Different Phytoconstituents of some Medicinal Plants of Kashmir Region	Topic modified.



**Annexure–B**

**Department: MATHEMATICS**

<i>S. No.</i>	<i>Name of the Scholar</i>	<i>Name of the Supervisor</i>	<i>Proposed Topic of Research</i>	<i>Approved Topic of Research</i>	<i>Remarks</i>
01.	Naied Ahmad Nayied <b>Integrated Ph.D</b> Whole-time Reg. No.26171-PC-2012	Dr. M.A Khanday Associate Professor  Dr. F.A Shah Assistant Professor (Co-Supervisor)	A Wavelet-based Numerical Study of Epidemic Models with Special reference to SIR and SEIR Models.	A Wavelet-based Numerical Study of Epidemic Models with Special reference to SIR and SEIR Models.	
02.	Tahir Fayaz <b>Integrated Ph.D</b> Whole-time Reg. No.36657-SP-2012	Dr. M.A. Mir Asstt. Professor	On the Erdős-Lax Type Inequalities and Bounds for Zeros of Polynomials with Restricted Coefficients	On the Erdős-Lax Type Inequalities and Bounds for Zeros of Polynomials with Restricted Coefficients	
03.	Ummer Mushtaq <b>Integrated Ph.D</b> Whole-time Reg. No.36659-SP-2012	Prof. Shariefuddin Pirzada	On the Spectral Properties of the Distance Laplacian Matrix of Graphs	On the Spectral Properties of the Distance Laplacian Matrix of Graphs	

04.	Mohd Abrar Ul Haq <b>Integrated Ph.D</b> Whole-time Reg. No.143-PHD-2020	Prof. Shariefuddin Pirzada	On the Distance and the Distance Signless Laplacian Eigenvalues of Graphs	On the Distance and the Distance Signless Laplacian Eigenvalues of Graphs	
05.	Mansoor Ali <b>Integrated Ph.D</b> Whole-time Reg. No.	Dr. B.A. Zargar Ex-Professor  Prof. M.H Gulzar (Co-Supervisor)	On the Moduli of the Zeros with restricted Coefficients and Turan Type Inequalities for Polynomials	On the Moduli of the Zeros with restricted Coefficients and Turan Type Inequalities for Polynomials	I. Check the amount of research work done by the scholar under the superannuated supervisors. II. Registration number required from the Registration Section.
06.	Mr. Mudasir Ahmad Malik Ph.D Whole-time Reg. No.19201-SJ-2006  <b>South Campus</b>	Dr. Mohd Iqbal Bhat	Existence and iterative approximation of solutions of variational inclusions problems	Existence and iterative approximation of solutions of variational inclusions problems	

*Annexure – C**Department: STATISTICS*

<i>S. No.</i>	<i>Name of the Scholar</i>	<i>Name of the Supervisor</i>	<i>Proposed Topic of Research</i>	<i>Approved Topic of Research</i>	<i>Remarks</i>
01.	Fayaz Ahmed <b>Integrated Ph.D</b> Whole-time Reg. No.140-PH.D-2020	Prof. M.A.K Baigh	New Weighted Generalized Divergence Measures and their Applications	On new Weighted Generalized Divergence Measures and their Applications	I. Topic modified. II. Objective 2 <sup>nd</sup> & 3 <sup>rd</sup> be clubbed.
02.	Shamshad Ur Rasool <b>Ph.D</b> Whole-time Reg. No.1230-PGD-2015	Dr. Sheikh Parvaiz Ahmad Associate Prof.	Generalization and Characterization of Lomax and Inverse Lomax Distributions	On Generalization and Characterization of Lomax and Inverse Lomax Distributions	Topic modified.

## Annexure– D

Department: PHYSICS

<i>S. No.</i>	<i>Name of the Scholar</i>	<i>Name of the Supervisor</i>	<i>Proposed Topic of Research</i>	<i>Approved Topic of Research</i>	<i>Remarks</i>
01.	Ainain Yousuf Baba <b>Ph.D</b> Whole-time Reg. No.54268-W-2009	Dr. Waseem Baari Associate Professor  Dr. Biplab Sarkar Chief Medical Physicist, Apollo Hospital, Kolkata (Co-Supervisor)	Imperative Assessment of Divergent Aspects of Advanced X-ray Based Radiotherapy Techniques	Imperative Assessment of Divergent Aspects of Advanced X-ray Based Radiotherapy Techniques	
02.	Sheikh Irfan <b>Integrated Ph.D</b> Whole-time Reg. No.64569-ANG-2010	Dr. Ghulam Nabi Dar, Asst. Professor (Supervisor)	Studies on Graphene Based Nanocomposite Materials and their Applications	Studies on Graphene Based Nanocomposite Materials and their Applications	
03.	Athar Ahmad Dar <b>Integrated Ph.D</b> Whole-time Reg. No. required from the registration section	Prof. Naseer Iqbal (Supervisor)  Dr. Sunder Sahayanathen, BARC Mumbai (Co-Supervisor)	Broadband Spectral Study of Very High Energy Blazars	Broadband Spectral Study of Very High Energy Blazars	

04.	Asma Tahir <b>Integrated Ph.D</b> Whole-time Reg. No.18505-AW-2008	Prof. Basharat Ahmad Want	Investigations on the Optical Properties of Rare-earth Doped Zinc- Oxide Nanostructures	Investigations on the Optical Properties of Rare-earth Doped Zinc-Oxide Nanostructures	
05.	Asif Nazir Ganie <b>Integrated Ph.D</b> Whole-time Reg. No.66816-ANG-2011	Prof. Basharat Ahmad Want	Investigations on Magnetic, Dielectric and Magneto-Electric Properties of Pure and Doped Bismuth Ferrite	Investigations on Magnetic, Dielectric and Magneto-Electric Properties of Pure and Doped Bismuth Ferrite	
06.	Humaira Bashir <b>Integrated Ph.D</b> Whole-time Reg. No.65186-W-2013	Prof. Manzoor Ahmad Malik  Dr. Ruta Kale, Tata Instt. of Fundamental Research (TIFR), Pune	Radio and X-ray Studies of Non- Thermal Processes in Galaxy Clusters and Galaxy Groups	Radio and X-ray Studies of Non- Thermal Processes in Galaxy Clusters and Galaxy Groups	

07.	Faheem Ahmad Dar <b>Integrated Ph.D</b> Whole-time Reg. No. 49455-A-2012	Prof. Basharat Ahmad Want	Dielectric and Optical Studies of Rare-Earth Based Metal-Organic Frameworks	Dielectric and Optical Studies of Rare-Earth Based Metal-Organic Frameworks	
08.	Nazrat Ali <b>Integrated Ph.D</b> Whole-time Reg. No. 6480-BW-2009	Dr. Ghulam Nabi Dar (Supervisor)  Dr. Khurshed Ahmad Shah S.P. College, Sgr. (Co-Supervisor)	Modelling and Performance Analysis of Molybdenum and Disulphide Based Phototransistor	Modelling and Performance Analysis of Molybdenum and Disulphide Based Phototransistor	
09.	Sikander Akbar Dar <b>Integrated Ph.D</b> Whole-time Reg. No. 23870-SJ-2010	Prof. Naseer Iqbal (Supervisor)  Prof. Ranjeev Misra, IUCAA, Pune (Co-Supervisor)	Multiwavelength Study of Jet- Dominated Active Galactic Nuclei	Multiwavelength Study of Jet- Dominated Active Galactic Nuclei	

10.	Iqra Irshad <b>Integrated Ph.D</b> Whole-time Reg. No.60382-W-2011	Prof. Basharat Ahmad Want	Investigations on Magnetic, Dielectric and Optical Properties of Pure and Doped Alpha-Hematite	Investigations on Magnetic, Dielectric and Optical Properties of Pure and Doped Alpha-Hematite	
11.	Javaid Ahmad Tantry <b>Integrated Ph.D</b> Whole-time Reg. No.23720-PC-2011	Prof. Naseer Iqbal (Supervisor)  Prof. Ranjeev Misra, IUCAA, Pune (Co-Supervisor)	Unveiling the High Energy Emission Properties of Blazars	To Study the High Energy Emission Properties of Blazars	Topic modified.
12.	Irfan Ahmad Dar <b>Integrated Ph.D</b> Whole-time Reg. No.66748-ANG-2011	Dr. Muzaffar Qadir Lone	On Competing Hamiltonian and Lindblad Dynamics in Open Quantum Systems	On Competing Hamiltonian and Lindblad Dynamics in Open Quantum Systems	