

# University of Kashmir, Srinagar

Minutes of the meeting of Board of Research Studies (BORS) in Physical & Mathematical Sciences held on 07-03-2022 at 11:00 A.M. in the Committee Room of the Administration Block.

# Present

1. Prof. Talat Ahmad Vice-Chancellor (In the Chair)

- 2. Prof. Farooq A. Masoodi Dean Academic Affairs (Represented Dean Research as well)
- 3. Prof. Anwar Hassan Dean, School of Physical & Mathematical Sciences
- 4. Head, Deptt. of Chemistry
- 5. Head, Department of Statistics;
- 6. Head, Department of Mathematics;
- 7. Head, Department of Physics
- 8. Director, South Campus

The Assistant Registrar, (Research) was also present.

At the outset, Dean Academic Affairs welcomed the members and presented the agenda for discussion on behalf of Dean Research with the permission of the Hon'ble Vice-Chancellor. Subsequently agenda was 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 29-06-2019, 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 29-06-2019, 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 29-06-2019, 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 **29-06-2019**, be confirmed.

#### Item

No.03 Ratification of the action taken by the Vice-Chancellor in having authorized recognition of teachers as co-supervisors to guide Ph. D research scholars in the discipline of Statistics.

**Resolved that** the action taken by the Vice-Chancellor in having authorized recognition of following teachers as co-supervisors to guide Ph. D research scholars in the discipline of Statistics, **be ratified:-**

- O1. Prof. J.P. Singh Joorel, Deptt. of Statistics University of Jammu
- O2. Dr. Peer Bilal Ahmad
  Assistant Professor
  Deptt. of Mathematics
  Islamic University of Science & Technology

#### Item

No. 04 Consideration of recognition of teachers/Doctor as co-guides to supervise Ph.D scholars in the discipline of Mathematics.

**Resolved that** recognition of following teachers/Doctor as co-supervisors to guide Ph. D research scholars in the discipline of Mathematics be recognized as co-supervisor in the discipline of Mathematics. However, Dr. Mudasir Ashraf Shah has to produce NOC from his employer:-

S.	Name of Teacher				
No					
01	Dr. Nisar Ahmad Lone				
	Assistant Professor				
	Deptt. of Mathematics				
	JKIMS, Amar Singh College, Sgr.				
02	Dr. Aijaz Ahmad Najar,				
	Deptt. of Mathematics, Govt. Degree College, Kulgam				
03	Dr. Aijaz Ahmad Mir,				
	Assistant Professor				
	Deptt. of Mathematics				
	Govt. Degree College, Killam, Kulgam				
04	Dr. Mudasir Ashraf Shah,				
	Aligarh Muslim University				

# Item

No. 05 Consideration of the request of two (2) Assistant Professors Dr. Muzaffar Qadir Lone and Dr. Feroz Ahmad Bhat for grant of recognition as guides to supervise Ph.D scholars in the disciplines of Physics and Mathematics respectively.

Resolved that M/S Dr. Muzaffar Qadir Lone and Dr. Feroz Ahmad Bhat be recognized as supervisors in the disciplines of Physics and Mathematics respectively.

#### Item

No. 06 Consideration of delay of submission of thesis by Mr. Raja Nisar Ali Ph.D scholar, Deptt. of Physics.

**Resolved that** the candidate be allowed to submit Ph.D thesis.

# **Item**

No. 07 Consideration of the request of Ms. Roheena Jan, Ph.D scholar, Deptt. of Chemistry for curtailment of residency period.

**Resolved that** the candidate be allowed to submit Ph.D thesis within statutory residency period, however keeping in view having considerable period with research the candidate be allowed to submit thesis within six months from the circulation of approved minutes as a special case not to form a precedence.

# **Item**

No.08 Ratification of the action taken by the Vice-Chancellor in having authorized recognition of teachers as co-supervisors in the discipline of Physics.

**Resolved that the** action taken by the Vice-Chancellor in having authorized recognition of following teachers as co-supervisors in the discipline of Physics, **be ratified.** 

O1. Dr. T. K. Ramkumar,
Scientist/Engineer-SF, NARL
Gadanki, Trupati
Deptt. of Space, ISRO, Govt. of India

02. Dr. Kanak Sahia
Associate Professor
Inter-University Centre for Astronomy and Astrophysics
S.P. Pune University Campus

**Item** 

No.09 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. Physics C. Mathematics D Statistics

**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/-

Dean Research

Sd/-Vice-Chancellor



# UNIVERSITY OF KASHMIR, SRINAGAR OFFICE OF THE DEAN RESEARCH

No: F (BORS-Phy & Mathematical Scs)KU/22 Dated: July , 2022

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)

Annexure A Discipline: Chemistry

S. No.	Name of the Scholar	Name of the Supervisor	Proposed Topic of research	Approved topic of research	Remarks
1	Pawandeep Kour Integrated M.Phil & Ph.D Whole-time Reg.No.131-Ph.D-2019	Dr. Ajaz Ahmad Dar Asstt. Professor Dr. Adil Gani Asstt. Professor Deptt. of Food Sc.& Tec (Co-supervisor)	Microemulsion-based composite hydrogels: A novel strategy for stabilization and delivery of bioactive molecules in sustainable food system	Designing of novel micro and nanoemulsion based composite hydrogels for encapsulation, stabilization and delivery of bioactive molecules in sustainable food system	Topic modified on the recommendations of DRC dated 11-04-2022.
2.	Ishtiyaq Ahmad Integrated M.Phil & Ph.D, Whole-time Reg.No.58777-Ang-2009	Dr. Aijaz Ahmad Dar Asstt. Professor	Rational Utilization of Less Explored of Novel Supramolecular Synthons to Design Bespoke Molecular Complexes	Rational Utilization of Less Explored and Novel Supramolecular Synthons to Design Bespoke Molecular Complexes	
3.	Parvaiz Ahmad Dar Integrated M.Phil & Ph.D, Whole-time Reg.No.43660-S-2010	Dr. Syed Wajahat Amin Shah Professor	Phytochemical investigation of bioactive molecules of some important medicinal plants of Himalayan region and their Synthetic modification using novel synthetic methodologies	Phytochemical investigation of bioactive molecules of some important medicinal plants of Himalayan region and their Synthetic modification using novel synthetic methodologies	
4	Arjumund Shaheen Integrated M.Phil & Ph.D, Whole-time Reg.No.28449-IC-2010	Dr. Aijaz Ahmed Dar Asstt. Professor	Development of stimuli-responsive metal- based composite hydrogels for their prospective applications in transport and catalysis	Development of stimuli-responsive metal- based composite hydrogels for their prospective applications in transport and catalysis	

5.	Tabee Jan Integrated M.Phil & Ph.D, Whole-time Reg.No.24936-AW-2011	Dr. Masood Ahmad Rizvi Assistant Professor Dr. G.M.Peerzada Ex-Professor (Co-supervisor)	Design, Physicochemical analysis and application of hybrid materials	Design, Physicochemical analysis and application of hybrid materials	
6.	Aadil Yaseen Integrated M.Phil & Ph.D, Whole-time Reg.No.2713-DRA-2012	Dr. Syed Wajahat Amin Shah  Dr. Mohammad Iqbal Zargar Assistant Professor Deptt. of Pharmacy (Co-supervisor)	Novel Synthesis of Bioactive Molecules <i>via</i> Green Pathways: Microwave/Ultra sonication, Bio-prospection of Natural Isolates from Medicinally Potent Plants of Kashmir and Ladakh Region	Novel Synthesis of Bioactive Molecules via Green Pathways: Microwave/Ultra sonication, Bio-prospection of Natural Isolates from Medicinally Potent Plants of Kashmir and Ladakh Region	
7.	Shabnam Raheem Integrated M.Phil & Ph.D, Whole-time Reg.No.8168-BW-2010	Dr. Masood Ahmad Rizvi Supervisor Dr. G.M.Peerzada (Co-supervisor)	Synthesis, Physicochemical behaviour and Biological activity of carbon hetero atom {CX;X=P, S, Se} systems	Synthesis, Physicochemical behavior and Biological activity of carbon hetero atom {CX;X=P, S, Se} systems	

8.	Aadil Ayoub Ahangar Integrated M.Phil & Ph.D, Whole-time Reg.No.43947-S-2010	Dr. Aijaz Ahmad Dar	Halogen bonded molecular assemblies: An approach to convert molecules into the functional materials	Halogen bonded molecular assemblies: An approach to convert molecules into the functional materials	
9.	Qounsar Jan Integrated M.Phil & Ph.D, Whole-time Reg.No.60666-W-2011	Dr. Mohsin Ahmed Bhat Associate Professor  Dr. M. A. Khuroo Ex-Professor (Co-supervisor)	Design and Synthesis of Metal doped and Metal Nano particle coupled Perovskites for Photochemical and Photoelectrochemical Applications	Design and Synthesis of Metal doped and Metal Nano particle coupled Perovskites for Photochemical and Photoelectrochemical Applications	
10	Iram Amin Integrated M.Phil & Ph.D, Whole-time Reg.No.24852-AW-2011	Dr. Mohsin Ahmad Bhat Associate Professor  Dr. M.A. Khuroo Ex-Professor (Co-supervisor)	Graphene immobilized transition metal nanoassemblies for electrocatalytic and electroanalytical applications	Graphene immobilized transition metal nanoassemblies for electrocatalytic and electroanalytical applications	

11.	Shaima Hameed Integrated M.Phil & Ph.D, Whole-time Reg.No.26687-NW-2011	Dr. Mohsin Ahmad Bhat Associate Professor  Dr. M. A. Khuroo Ex-Professor (Co-supervisor)	Exploring Nanoimpact Methodology for electrochemical sensing and electrochemical characterization of Noble-Metal based nanodimensional aggregates	Exploring Nanoimpact Methodology for electrochemical sensing and electrochemical characterization of Noble-Metal based nanodimensional aggregates	
12.	Adil Amin Wani Integrated M.Phil & Ph.D, Whole-time Reg.No.64201-ANG-2010	Dr. Mohsin Ahmad Bhat Associate Professor	Design & Synthesis of metal/metal phosphide loaded Heteroatom doped graphene nanocomposites as Electrocatalysts for Fuel Cell Reactions.	Design & Synthesis of metal-metal phosphide loaded Heteroatom doped graphene nanocomposites as Electrocatalysts for Fuel Cell Reactions.	
13.	Aaliya Qureashi Integrated M.Phil & Ph.D, Whole-time Reg.No.55991-W-2009	Dr. Altaf Hussain Pandith Professor  Dr. Faheem Arjamend Sheikh Asstt. Professor Nanaotechnology (Co-supervisor)	Synthesis, characterisation, sensing and removal applications of various magnetic composites for the abatement of environmental toxicants	Synthesis, characterisation, sensing and removal applications of various magnetic composites for the abatement of environmental toxicants	

14.	Murtaza Manzoor Bhat Integrated M.Phil & Ph.D, Whole-time Reg.No.21126-PC-2010	Dr. Mohsin Ahmad Bhat Associate Professor  Dr. M.A. Khuroo Ex-Professor (Co-supervisor)	Design and Synthesis of Semiconductor anchored Metal-Organic Frameworks for photo, electro and Photoelectrochemical Applications	Design and Synthesis of Semiconductor anchored Metal-Organic Frameworks for photo, electro and Photoelectrochemical Applications	
15.	Nadia Hassan Integrated M.Phil & Ph.D, Whole-time Reg.No.25085-AW-2011	Dr. Mohsin Ahmad Bhat Associate Professor  Prof. M. A. Khuroo (Co-supervisor)	Exploring Unconventional Micro- Heterogeneous Media for Chemical and Electrochemical Transformations	Exploring Unconventional Micro- Heterogeneous Media for Chemical and Electrochemical Transformations	

Annexure - B

Discipline: Physics

S. No	Name of the Scholar	Name of the Supervisor	Proposed Topic of research	Approved topic of research	Remarks
01	Suhail Ahmad Dar Ph.D Whole-time Reg.No.56156-ANG-2008	Prof. Basharat Ahmad Want	Structural, Electronic and Magnetic properties of some double perovskites-A First-Principle Study	Structural, Electronic and Magnetic properties of some double perovskites-A First- Principle Study	
02	Aaqib Manzoor Ph.D Whole-time Reg.No.34582-SP-2010	Prof. Naseer Iqbal	Understanding Blazar Energetics through Multiwavelength Studies	Understanding on Blazar Energetics through Multi- wavelength Studies	I. Topic modified.  II. Deptt. of Physics is required to submit a separate proposal regarding co-supervision of Dr. Sunder Sahayanathan, Baba Atomic Research Centre alongwith following documents for consideration by competent authorities:  i. C.V of the Teacher  ii. Copies of appointment/ confirmation orders  iii. NOC from Employer.  iv. DRC recommendations
03.	Muhammad Shunaid Parvaiz Integrated M.Phil & Ph.D Whole-time Reg.No.59584-ANG-2009	Dr. Ghulam Nabi Dar Assistant Professor Dr. Khursheed Ahmad Shah Assistant Professor S.P. College, Sgr (Co-supervisor)	Modelling and Simulation of Single Walled Carbon Nanotube Based Two-Probe Electronic Devices	Modelling and Simulation of Single Walled Carbon Nanotube Based Two-Probe Electronic Devices	

04	Junaid Yousuf Integrated M.Phil & Ph.D Whole-time Reg.No.1373-PGD-2016	Prof. Manzoor Ahmad Malik	Search for the Stochastic Gravitational Wave Background in advanced LIGO Data	Investigate the Stochastic Gravitational Wave Background in advanced LIGO Data	Topic modified.
05	Towseef Ahmad Bhat Integrated M.Phil & Ph.D Whole-time Reg.No.Nil	Prof. M. Farooq Mir	Study of multi-strange particles at FAIR energies, using UrQMD and HSD model	Study of multi-strange particles at FAIR energies, using UrQMD and HSD model	Registration number is required.
06	Waseem Ahmad Bhat Integrated M.Phil & Ph.D Whole-time Reg.No.64449-ANG-2010	Prof. M. Farooq Mir	Probing de-confinement phase transition with low mass vector mesons at FAIR energies, using UrQMD and HSD model	Probing de-confinement phase transition with low mass vector mesons at FAIR energies, using UrQMD and HSD model	
07	Zahoor Ahmad Malik Integrated M.Phil & Ph.D Whole-time Reg.No.23709-PC-2011	Prof. Naseer Iqbal	Study on Extragalactic Background Light using Multi-wave length Observation of Blazars	Study on Extragalactic Background Light using Multi- wavelength Observation of Blazars	Deptt. of Physics is required to submit a separate proposal regarding cosupervision of Dr. Sunder Sahayanathan, Baba Atomic Research alongwith following documents for consideration by competent authorities:  i. C.V of the Teacher ii. Copies of appointment/confirmation orders iii. NOC from Employer.  DRC recommendations

Annexure - C Discipline: Mathematics

S. No	Name of the Scholar	Name of the Supervisor	Proposed topic of research	Approved topic of research	Remarks
1	Roohi Jan Integrated M.Phil & Ph.D, Whole-time Reg.No.45595-S-2011	Dr. M. A. Khanday Associate Professor  Dr. Fouzia Rashid Asstt. Professor Deptt. of Clinical Biochemistry (co-supervisor)	Mathematical Analysis of Enzyme- Substrate Complex and its Binding Properties	Mathematical Analysis of Enzyme- Substrate Complex and its Binding Properties	
02	Firdose Ahmad Wagay Integrated M.Phil & Ph.D, Whole-time Reg.No.18756-PC-2009	Dr. Mohammad Abdullah Mir Asstt. Professor	Bernstein-type inequalities and zero free regions of a polynomial	On the Bernstein-type inequalities and zero free regions of a polynomial	
03	Nusrat Ahmed Dar M.Phil Opt out Whole-time Reg.No.49841-ANG-2006 South Campus	Dr. Mohd. Iqbal Bhat Assistant Professor South Campus	Existence of solution and iterative method for solving classes of variational inclusions	Existence of solution and iterative methods for solving some classes of variational inclusions	Topic modified.

04	Tahir Shamsher Integrated M.Phil & Ph.D Whole-time Reg.No.12945-KC-2011	Prof. S. Pirzada Supervisor  Dr. Mushtaq Ahmad Bhat NIT, Sgr (co-supervisor)	On Spectral properties and energy of signed graphs	On Spectral properties and energy of signed graphs	Co-supervisor is required to produce NOC from his Employer.
05	Ashish Kumar Integrated M.Phil & Ph.D Whole-time Reg.No. Nil	Prof. B.A. Zargar	Estimates for the Zeros and the Hausdorff Geometry of Polynomials	On the estimates for the zeros and the Hausdorff geometry of polynomials	Registration number required.
06.	Waseem Zahoor Lone Integrated M.Phil & Ph.D Whole-time Reg.No.25071-SJ-2011 South Campus	Dr. Firdous A. Shah Assistant Professor South Campus	Construction and Characterization of Special Affine Wavelets	Construction and Characterization of Special Affine Wavelets	

07	Irfan Ahmad Wani Integrated M.Phil & Ph.D Whole-time Reg.No.21819-PC-2011 South Campus	Dr. Mohammad Ibrahim Mir Assistant Professor South Campus	Extremal problems in $L^P$ - Norm and zeros of Polynomials with restricted coefficients	Extremal problems in $L^P$ - Norm and zeros of Polynomials with restricted coefficients	
08	Aajaz Ahmad Teali Integrated M.Phil & Ph.D Whole-time Reg.No.64612-ANG-2010 South Campus	Dr. Firdous A. Shah Assistant Professor South Campus	Investigation of Geometric Wavelet transforms in Clifford Algebras	Investigation of Geometric Wavelet transforms in Clifford Algebras	
09	Mohmmad Shafi Wani Integrated M.Phil & Ph.D Whole-time Reg.No.24890-IC-2009	Dr. Nisar Ahmad Rather	Distribution of zeros and Bernstein-type inequalities of polynomials	On the distribution of zeros and Bernstein-type inequalities for the polynomials	

10	Ishfaq Nazir Integrated M.Phil & Ph.D Whole-time Reg.No.5751-KUL-2010 South Campus	Dr. Mohammad Ibrahim Mir South Campus	On Critical points of Polynomials and Apolar Polynomials	On Critical points of Polynomials and Apolar Polynomials	
11	Aijaz Ahmad Bhat Integrated M.Phil & Ph.D Whole-time Reg.No.28089-BC-2011	Prof. Nisar Ahmad Rather	Estimates of zero-bounds and extremal properties for polynomials	On the estimates of zero-bounds and extremal properties for polynomials	
12.	Liyaqat Ali Wani Integrated M.Phil & Ph.D Whole-time Reg.No.21915-PC-2011	Prof. Nisar Ahmad Rather Dr. Suhail Gulzar Mattoo (Co-supervisor)	Operators preserving polynomial inequalities and location of zeros of a polynomial	On an operator preserving polynomial inequalities and the location of the zeros of a polynomial	

13.	Faizan Ahmad Zargar Integrated M.Phil & Ph.D Whole-time Reg.No.46723-S-2012	Dr. Mukhtar Ahmad Khanday  Dr. Mudasir Ashraf Aligarh Muslim University (Co-supervisor)	Mathematical modelling of transmission kinetics of malignant tumors in Kashmir region	Mathematical modelling of transmission kinetics of malignant tumors in Kashmir region	
14.	Aaqib Altaf Integrated M.Phil & Ph.D Whole-time Reg.No.10190-KUL-2012	Prof. S. Pirzada	On zero-divisor and unit graphs associated to rings	On zero-divisor and unit graphs associated to rings	
15.	Tawheeda Akhter Integrated M.Phil & Ph.D Whole-time Reg.No.22308-AW-2009	Prof. B.A. Zargar  Dr. M.H. Gulzar (Co-supervisor)	Markov-Bernstein type inequalities for Polynomials and roots of algebraic equations	On the Markov-Bernstein type inequalities for Polynomials and roots of algebraic equations	HOD will sign the documents of scholar at the time of submission.

16.	Saleem Ahmad Khan Integrated M.Phil & Ph.D Whole-time Reg.No.31626-BC-2012	Prof. S. Pirzada	On eigenvalues of Laplacian and distance Laplacian matrix of graphs	On eigenvalues of Laplacian and distance Laplacian matrix of graphs	
17	Shabir Ahmad Malik Integrated M.Phil & Ph.D Whole-time Reg.No.45752-A-2010	Prof. B.A. Zargar	On some Extremum Problems and Inclusion of Zeros of a Polynomial	On some Extremum Problems and Inclusion of Zeros of a Polynomial	

Annexure - D

S. No	Name of the Scholar	Name of the Supervisor	Proposed topic of research	Approved topic of research	Remarks
1.	Murtiza Ali Lone Integrated M.Phil & Ph.D Whole-time Reg.No.20464-PC-2010	Dr. Tariq Rashid Jan Associate Professor	Extensions of Weibull Distribution, their Estimation and Inference	On Extensions of Weibull Distribution, their Estimation and Inference	I. Topic modified. II. P.G marks card awaited.
2.	Rukaya Jamil Integrated M.Phil & Ph.D Whole-time Reg.No.53545-W-2008	Prof. M.A.K. Baig	Extensions of De Luca and Termini's Fuzzy Measure under Intuitionistic Fuzzy Set Environment	On Extensions of De Luca and Termini's Fuzzy Measure under Intuitionistic Fuzzy Set Environment	<ul> <li>I. Topic modified</li> <li>II. 4<sup>th</sup> objective be redrafted in light of topic.</li> <li>III. P.G marks card awaited.</li> </ul>
3.	Saba Riyaz Ph.D Whole-time Reg.No.465-PGD-2004	Dr. Tariq Rashid Jan  Dr. Showkat Maqbool Associate Professor SKUAST-K (co-supervisor)	Use of Auxiliary Information in Analysis and Estimation of Environmental Data	Use of Auxiliary Information in Analysis and Estimation of Environmental Data	

4.	Mohd Sultan Shah Ph.D Whole-time Reg.No.34912-A-2005	Prof. M.A.K. Baig	Weighted Generalized Kerridge Inaccuracy Measures and their Properties	On Weighted Generalized Kerridge Inaccuracy Measures and their Properties	Topic modified.
5.	Ishfaq Hassain Dar Integrated M.Phil & Ph.D Whole-time Reg.No.6806-SC-2009	Prof. Anwar Hassan  Peer Bilal Ahmad Assistant Professor (co-supervisor)	Framework and Estimation of Generalized Probability Distributions in Engineering Data	Estimation of Generalized Probability Distributions in Engineering and Medical Data	Topic modified.