



No.F. TU/Dean (Science)/BFS/10/16

Date: 23.03.2020

**Proceedings of the 10<sup>th</sup> Meeting of Board of Faculty of Studies of Science was held on 19.02.2020 at 2.00PM in the Council Hall of Administrative Building, Tripura University.**

**Members Present:**

- |   |           |
|---|-----------|
| 1. Prof. R.K. Nath, Department of Chemistry, T.U.                                     | -Member   |
| 2. Prof. R.K. Sinha, Department of Botany, T.U.                                       | -Member   |
| 3. Prof. B.K. Datta, Department of Botany, T.U.                                       | -Member   |
| 4. Prof. A.K. Saha, Department of Botany, T.U.  | -Member   |
| 5. Prof. D. Bhattacharjee, Department of Physics, T.U.                                | -Member   |
| 6. Prof. S. K. Sil, Department of Human Physiology, T.U.                              | -Member   |
| 7. Prof. P.S. Chaudhuri, Department of Zoology, T.U.                                  | -Member   |
| 8. Prof. B.C. Tripathy, Department of Mathematics, T.U.                               | -Member   |
| 9. Prof. S. Chattopadhyaya, Department of Physics, T.U.                               | -Member   |
| 10. Dr. Y.V. Krishnaiah, Department of Geography & Disaster Management, T.U.          | -Member   |
| 11. Dr. Mousami Debbarna, Department of Geography & D.M, T.U.                         | -Member   |
| 12. Dr. Surajit Bhattacharjee, Department of Molecular Biology & Bioinformatics, T.U. | -Member   |
| 13. Dr. Shaon Ray Chaudhuri, Department of Microbiology, T.U.                         | -Member   |
| 14. Dr. B.K. Sharma, Department of Microbiology, T.U.                                 | -Member   |
| 15. Dr. Dipayan Choudhuri, Department of Human Physiology, T.U.                       | -Member   |
| 16. Dr. Sudipta Pal, Department of Human Physiology, T.U.                             | -Member   |
| 17. Dr. Utpal Ch. De, Department of Chemistry, T.U.                                   | -Member   |
| 18. Dr. Bimal Debnath, Department of Forestry & Biodiversity, T.U.                    | -Member   |
| 19. Dr. Sabyasachi Dasgupta, Department of Forestry & Biodiversity, T.U.              | -Member   |
| 20. Dr. Shyamal Debnath, Department of Mathematics, T.U.                              | -Member   |
| 21. Dr. Surochita Basu, Department of Botany, T.U.                                    | -Member   |
| 22. Dr. Shiv Shankar Singh, Department of Zoology, T.U.                               | -Member   |
| 23. Dr. R.K. Mahapatra, Department of Library & Information Science, T.U.             | -Member   |
| 24. Dr. Mrinal Kanti Bhowmik, Department of Computer Science & Engineering, T.U.      | -Member   |
| 25. Dr. Swanirbhar Majumder, Department of Information Technology, T.U.               | -Member   |
| 26. Dr. Alak Roy, Department of Information Technology, T.U.                          | -Member   |
| 27. Dr. Sachin Bhaladhare, Department of Chemical and Polymer Engineering, T.U.       | -Member   |
| 28. Dr. P. Karuna Purnapa Rupa, Department of Material Science & Engineering, T.U.    | -Member   |
| 29. Dr. Anirban Karmakar, Department of ECE, T.U.                                     | -Member   |
| 30. Dr. Bishanka Bhowmik, Department of ECE, T.U.                                     | -Member   |
| 31. Dr. Ashutosh Kumar, Department of Microbiology, T.U.                              | -Member   |
| 32. Mithu Anjali Gayn, Department of Library & Information Science, T.U.              | -Member   |
| 33. Rajat Ghosh, Department of Pharmacy, T.U.   | -Member   |
| 34. Sangita Das Biswas, Department of Electrical Engineering, T.U.                    | -Member   |
| 35. Prof. S. Banik, Dean, Faculty of Science, T.U.                                    | -Chairman |

**Agendum 1/10/20** To confirm the Proceedings of the 9<sup>th</sup> Meeting of Board of Faculty of Studies for Science held on 03.05.2019.

**Resolution:** Confirmed.

**Agendum 2/10/20** To report the action taken on the Proceedings of the 9<sup>th</sup> Meeting of Board of Faculty of Studies for Science held on 03.05.2019.

**Resolution:** Reported.

**Agendum 3/10/20** To consider the following names of Students to be enrolled for Ph.D. Registration under the Faculty of Science.

| Sl. No | Name of the Scholar | Department   | Title of Ph. D. Thesis   | Supervisor                    | Date of Registration | Ph.D. Mode | Category | Male/Female | Ph.D. Rules |
|--------|---------------------|--------------|--|-------------------------------|----------------------|------------|----------|-------------|-------------|
| 1.     | Tethi Biswas        | Microbiology | Development of tailor-made consortia for efficient effluent treatment.   | Dr. Shaon Ray Chaudhuri, T.U. | 18.12.2018           | Full time  | UR       | Female      | 2016        |
| 2.     | Mandakini Gogoi     | Microbiology | Development of Microbial Prototype for Effluent Treatment and Reuse in Dairy and Aquaculture Industry.                           | Dr. Shaon Ray Chaudhuri, T.U. | 05.11.2019           | Full time  | OBC      | Female      | 2016        |
| 3.     | Ankurita Bhowmik    | Microbiology | Understanding Biofilm Mechanisms and Development of Antibiofilm Strategies.  | Dr. Ashwini Chauhan, T.U.     | 11.12.2019           | Full time  | SC       | Female      | 2016        |
| 4.     | Alpana Baidya       | Chemistry    | Photo-Physical Characteristics of Different Liquid Crystals and other Organic Compounds in the Restricted Geometry of Thin Film. | Prof. R.K. Nath, T.U.         | 10.05.2019           | Full time  | UR       | Female      | 2016        |
| 5.     | Abhijit Rudra Paul  | Chemistry    | Studies on the Synthesis and Characterization of Novel Coumarin and Some other Heterocycle Derived                               | Prof. S. Majumdar, T.U.       | 15.07.2019           | Full time  | OBC      | Male        | 2016        |



|     |                              |                  |   |                                    |             |           |     |        |      |
|-----|------------------------------|------------------|---|------------------------------------|-------------|-----------|-----|--------|------|
|     |                              |                  | Compounds.  |                                    |             |           |     |        |      |
| 6.  | Kshetrimayum Renubebeta Devi | Mathematics      | On Relative Uniform Convergence of Double Sequences of Positive Linear Functions.   | Prof. B.C. Tripathy, T.U.          | 23.12. 2019 | Full time | UR  | Female | 2016 |
| 7.  | Anjalu Albis Basumatar y     | Mathematics      | Studies on Preopen Sets in Bimiminal Structure Spaces.  | Prof. B.C. Tripathy, T.U.          | 23.12. 2019 | Part time | ST  | Male   | 2016 |
| 8.  | Amaresh Debnath              | Mathematics      | Study of some Convergence concepts on multiset of real numbers.   | Dr. Shyamal Debnath, T.U.          | 23.12. 2019 | Part time | OBC | Male   | 2016 |
| 9.  | Tandra Sarkar                | Mathematics      | A Study on Intuitionistic Fuzzy Set Based Hybrid Approach on Image Processing.  | Dr. S. Bhattacharya (Halder), T.U. | 23.12. 2019 | Part time | OBC | Female | 2016 |
| 10. | Ajoy Barman                  | Geography & D.M. | A Geographical Perspective on the School Dropouts among the Scheduled Castes and Scheduled Tribes in the Dooar Region of West Bengal. | Dr. Mousami Debbarm a, T.U.        | 20.12. 2019 | Full time | SC  | Male   | 2016 |
| 11. | Sajal Ghosh                  | Geography & D.M. | Road Infrastructure and Traffic Characteristics of Kolkata Municipal Corporation Area: A Geospatial Analysis.                         | Dr. Eshita Boral, T.U.             | 20.12. 2019 | Full time | OBC | Male   | 2016 |
| 12. | James Dev Verma              | Geography & D.M. | Socio-Economic Status of Cycle Rickshaw Pullers in Agartala Municipal Corporation   | Dr. Mousami Debbarm a, T.U.        | 20.12. 2019 | Part time | ST  | Male   | 2016 |

|     |                   |                         |  |                                  |                |              |    |            |      |
|-----|-------------------|-------------------------|--|----------------------------------|----------------|--------------|----|------------|------|
|     |                   |                         | Area: A<br>Geographical<br>Appraisal.  |                                  |                |              |    |            |      |
| 13. | Atoshi<br>Chakma  | Geograp<br>hy &<br>D.M. | Impact of<br>Urbanisation on<br>Water quality of<br>Agartala City,<br>Tripura.                           | Dr. Y.V.<br>Krishnaia<br>h, T.U. | 20.12.<br>2019 | Part<br>time | ST | Femal<br>e | 2016 |
| 14. | Kausik<br>Panja   | Geograp<br>hy &<br>D.M. | Land Use<br>Change,<br>Cropping<br>Pattern and<br>Food Security in<br>West Tripura<br>District, Tripura. | Dr. Y.V.<br>Krishnaia<br>h, T.U. | 20.12.<br>2019 | Full<br>time | UR | Male       | 2016 |
| 15. | Debasish<br>Kundu | Geograp<br>hy &<br>D.M. | Role of Metro<br>Railway in Mass<br>Transportation<br>Scenario of<br>Kolkata<br>Metropolitan<br>Area.    | Dr.<br>Eshita<br>Boral,<br>T.U.  | 20.12.<br>2019 | Part<br>time | UR | Male       | 2016 |

**Resolution: Approved.**

**Agendum 4/10/20** To consider and recommend the following names of research scholars outside expert, E-expert, List of Adjudicators under the Faculty of Science.

| Sl.<br>No | Name of the<br>Scholar  | Department | Title of Ph. D. Thesis   | Supervisor               | Names of<br>outside expert,<br>E-expert, List of<br>Adjudicators |
|-----------|-------------------------|------------|--|--------------------------|--|
| 1.        | Kripamoy<br>Chakraborty | Botany     | Study of arbuscular<br>mycorrhizal fungi and<br>phosphate solubilizing<br>bacteria associated with<br>Hevea brasiliensis (Wild. ex<br>A. Juss.) Mull. Arg. In<br>Tripura, Northeast India. | Dr. Panna Das,<br>T.U.   | Details in the<br>file.  |
| 2.        | Sanjit<br>Debnath       | Botany     | Studies on nutritional status,<br>antioxidant and antibacterial<br>properties of some wild<br>edible mushrooms of<br>Tripura along with protocol<br>development for cultivation.           | Prof. A.K. Saha,<br>T.U. | Do   |
| 3.        | Gopal<br>Debnath        | Botany     | Production of extracellular<br>enzymes by some wild<br>edible mushrooms of<br>Tripura and evaluation of<br>their antibacterial activity<br>through synthesis of silver<br>nanoparticles    | Prof. A.K. Saha,<br>T.U. | Do   |
| 4.        | Pintu<br>Karmakar       | Botany     | Diversity, allergenicity and<br>biochemistry of airborne   | Prof. A.K. Saha,<br>T.U. | Do   |



|     |                     |                                |   |  |    |
|-----|---------------------|--------------------------------|---|--|----|
|     |                     |                                | mould spores in outdoor and indoor environments of Agartala, Tripura.   |  |    |
| 5.  | Bandana Das         | Chemistry                      | Adsorption of Dye and Bio-molecules on to Polyelectrolyte/ Surfactant complex Fabricated by Layer by Layer sequential technique.        | Prof. R.K. Nath, T.U.  | Do |
| 6.  | Kartick Lal Bhowmik | Chemistry                      | Synthesis Characterization and application of Conducting Polymer Based Films and Metal Oxide Nanocomposite.                             | Prof. R.K. Nath, T.U. (Supervisor) & Dr. Biswajit Saha, NIT, Agartala (Co-Supervisor)  | Do |
| 7.  | Usha Rani Gogoi     | Computer Science & Engineering | Analysis of Infrared Breast Thermograms for Abnormality Detection.  | Dr. M.K. Bhowmik, T.U. (Supervisor) & Prof. A.K. Ghosh, Ex. V.C, T.U. (Co-Supervisor). | Do |
| 8.  | Tamal Majumder      | Forestry & Biodiversity        | Structural diversity and functional aspects of Agartala's Urban Forest Ecosystem, Tripura.  | Dr. Thiru Selvan, T.U.   | Do |
| 9.  | Somprakash Dhar     | Geography & D/M                | Geopolitical Scenario of Tripura: An Analytical Study on State, People and Developmental Policies.                                      | Dr. S. Mitra, T.U.   | Do |
| 10. | Dhirendra Nath Das  | Geography & D/M                | Livelihood of Rural Poor Under the Swarnajayanti Gram Swarozgar Yojana in West Tripura District, Tripura: A Case Study.                 | Dr. S. Mitra, T.U.   | Do |
| 11. | Susmita Saha        | Human Physiology               | Molecular and cellular studies on in-Vitro wound Healing Activities of Parkia Javanica, A Medicinal Plant of Tripura, North-East India. | Prof. S. K. Sil, T.U.  | Do |
| 12. | Rahul Debnath       | Human Physiology               | Studies on the Effect of Pineapple Extract (Bromelain and Peroxidase) on Leukemia and Lymphoma: An In vitro and in vivo Approach.       | Dr. Debasish Maiti (Supervisor) and Prof. Durgadas Ghosh (Co-Supervisor)               | Do |
| 13. | Kumarjit Saha       | Physics                        | VLF probing of the lower ionosphere, tropospheric circulation and lightning climatology.  | Dr. Anirban Guha, T.U.   | Do |

**Resolution:**      **Recommended and Approved.**

**Agendum 5/10/20****To report the following names of Ph.D. Students who have been awarded Ph.D. Degree Provisionally in different subjects under the Faculty of Science.**

| Sl. No | Name of the Scholar | Department                     | Title of Ph. D. Thesis  | Supervisor  | Date of Award |
|--------|---------------------|--------------------------------|---|---|---------------|
| 1.     | Sukla Bhattacharjee | Botany                         | Fungal endophytes in some medicinal plants of Tripura and evaluation of their antimicrobial properties.   | Prof. A.K. Saha, T.U.   | 09.05.2019    |
| 2.     | Amitava Sharma      | Chemistry                      | AB-Initio Computational Study of Potential Energy Surfaces of Ionized States of Simple Molecules Applying EIP-VUMRCC Method with and without Full Connected Triple Excitation CC Operators. | Prof. Dhiman Sinha, T.U.  | 09.05.2019    |
| 3.     | Rita Roy            | Zoology                        | Biology of Chitala Chitala (Hamilton, 1822) with special reference to its Ex-situ conservation in Tripura, India.   | Prof. S. Banik, T.U.  | 22.05.2019    |
| 4.     | Priya Saha          | Computer Science & Engineering | Studies on some Facial Expression Recognition Techniques based on Visual and Infrared Thermal Face Images.  | Prof. B.K. De, T.U, (Supervisor) & Prof. Mita Nasipuri, Department of CSE, Jadavpur University (Co-Supervisor)        | 12.07.2019    |
| 5.     | Bapi Dey            | Physics                        | Electrical and Optical Characterizations of Some Organic Molecules Assembled Onto Ultra Thin Films.   | Dr. S.A. Hussain, T.U.  | 08.08.2019    |
| 6.     | Istak Ahmed         | Geography & D/M                | Sedimentation Problem of Regulated Rivers and its Impact on Geographical environment: A Case Study of the Gumti River, Tripura.   | Dr. Nibedita Das (Pan), T.U.  | 23.08.2019    |
| 7.     | Jatan Debnath       | Geography & D/M                | A Geo-Environmental Study on Land Use/ Land Cover Change in The Muhuri River Basin, Tripura, North-East India.  | Dr. Nibedita Das (Pan), T.U.  | 23.08.2019    |
| 8.     | Shilpi Saha         | Human Physiology               | Studies on physical growth, nutritional status and maturation of the Chakma and the Bengali girls (age 6-18 years) of Tripura and their comparative analysis.                               | Dr. S. K Sil, T.U. (Supervisor) & Dr. Parasmani Dasgupta, Biological Anthropology Unit, ISI, Kolkata, (Co-Supervisor) | 23.08.2019    |
| 9.     | Purnajita Sen       | Human Physiology               | Studies on Cardiovascular and metabolic Risk Profile in Post  | Dr. Dipayan Choudhuri,  | 23.08.2019    |



|     |                       |                                |  |                                    |            |
|-----|-----------------------|--------------------------------|--|------------------------------------|------------|
|     |                       |                                | Menopausal Ethnic Women of Tripura.  | T.U.                               |            |
| 10. | Jhinuk Basu Mullick   | Human Physiology               | Incidence of Sexually Transmitted Infections (STIs) in Hospital Patients of Tripura and Evaluation of Selected STI Related Antibacterial Activity of <i>Parkia Javanica</i> and <i>Evolvulus Nummularius</i> with Reference to their Role in Cellular Immune Responses in Vitro. | Prof. S.K. Sil, T.U.               | 06.05.2019 |
| 11. | Chandan Debnath       | Physics                        | Characterizations of Hybrid Langmuir-Blodgett (LB) Films Prepared by Electrostatic Interactions.   | Prof. D. Bhattacharjee, T.U.       | 26.09.2019 |
| 12. | Pritha Das            | Human Physiology               | Studies on Metabolic Homeostasis in mice following sub- acute lead.  | Dr. Sudipta Pal, T.U.              | 26.09.2019 |
| 13. | Chiranjit Paul        | Forestry & Biodiversity        | Studies on Genetic Diversity and Some Nutritional Aspects of <i>Dioscorea</i> (Dioscoreaceae) in Tripura.  | Dr. Bimal Debnath, T.U.            | 26.09.2019 |
| 14. | Amal Debnath          | Forestry & Biodiversity        | Impact Assessment of <i>Chromolaena odorata</i> (L.) King & Robinson (Alien Invasive) on Diversity and Composition of Vegetation, Soil Properties and Litter Decomposition Rate in Atharamura Forest Range of Tripura State.   | Dr. Bimal Debnath, T.U.            | 01.10.2019 |
| 15. | Shawli Bardhan        | Computer Science & Engineering | Analysis of IR Images For Detection of Inflammatory Knee Joint Diseases.   | Dr. M.K. Bhowmik, T.U.             | 19.11.2019 |
| 16. | Bapan Paul            | Physics                        | Investigation on different solar and Geophysical Phenomena using GPS derived Total Electron Content (TEC) data over Equatorial Ionization Anomaly (EIA) crest region.  | Dr. Anirban Guha, T.U.             | 11.12.2019 |
| 17. | Amarjit Chanda        | Mathematics                    | A Study on some new Methods of Clustering and Applications.  | Dr. S. Bhattacharya (Halder), T.U. | 14.01.2020 |
| 18. | Sanchita Bhattacharya | Botany                         | Fungal community composition and bioactive potential of selected fungal endophytes isolated from <i>Ananas comosus</i> L. (Bromeliaceae) of Tripura.   | Prof. A.K. Saha, T.U.              | 28.01.2020 |

**Resolution: Reported.**

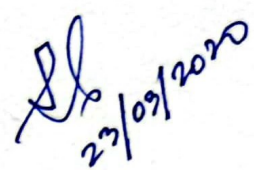
**Agendum 06/10/20** To consider the resignation letter of Jeshima Debbarma, RET qualified Research Scholar, Department of Human Physiology, T.U.

**Resolution: Approved.**

**Agendum 07/10/20** To consider the report of the examiners appointed for adjudication of thesis and Viva-voce reports for the award of Ph.D. Degree of Science.

| Sl. No | Name of the Scholar | Department       | Title of Ph. D. Thesis  | Supervisor           | Date of Viva-voce |
|--------|---------------------|------------------|---|----------------------|-------------------|
| 1.     | Madhusudan Debnath  | Human Physiology | Nutritional values, medicinal properties and molecular characterization of endemic earthworm <i>Eutyphoeus gammiei</i> of Tripura, India. | Prof. S.K. Sil, T.U. | 10.02.2020        |

**Resolution: Recommended and Approved.**

  
(Professor S. Banik)  
Dean,  
Faculty of Science  
Tripura University