Name of the Faculty Member

Campus (Tura/Shillong)

Dr. Diamond Kharkongor.

Shillong.

Designation

Assistant Professor in Mathematics and Statistics.

Department

Management.

Qualification/s

Ph.D in Mathematics.

Discipline

Mathematics

#### **Academic Experience in Years**

# Outside ICFAI University In ICFAI University Meghalaya

Meghalaya

1 year

**Courses Taught Specializations** 

**Statistics and Mathematics** 

Pure mathematics

Research Interests

Graph theory, Ring theory, topological indices.

**Achievements** 

- 1. Rector's Gold medal 2019.
- 2. S. S. Khare most promising mathematician of the year
- 3. 9<sup>th</sup> position in B.Sc NEHU examination 2017.

**Publications:** 

## **Journal Publications:**

- 1. Diamond Kharkongor, Laithun Boro, M. M. Singh & Sanghita Dutta, Topological indices of total graph of the ring  $Z_m \times Z_n$ , TWMS J. App. Eng. Math., Vol. 13, No. 04, (2023), pp. 1434 - 1445.
- 2. Diamond Kharkongor, Laithun Boro, M. M. Singh & Sanghita Dutta, Some properties of Von Neumann regular graphs of rings, Journal of Indosesian Mathematical Society, Vol. 28, No. 02 (2022), pp. 185-193.

#### **Seminar Paper Presentations**

- 1. "Domination numbers of Von-Neumann regular graphs of rings", in the two-day international conference on "Recent Trends in Modern Mathematics" organized by the PG & Research Department of Mathematics, St. John's College Palayamkottai on the 23<sup>rd</sup> and 24<sup>th</sup> of September 2021.
- 2. "Spectrum and Laplacian Spectrum of the total graph *of the ring*  $Z_m \times Z_n$ ", in the international conference on "Mathematical Sciences" (ICMS-2021) organized by the Department of Mathematics and Humanities (DoMH), SVNIT Surat on the 7th - 9th of October 2021.
- **3.** "Clean graphs of finite commutative rings", in the 27<sup>th</sup>International Conference of International Academy of Physical Sciences (CONIAPS XVII) on "Recent

- Advances in Pure & Applied Algebra (RAPAA)" organized by Department of Mathematics National Institute of Technology Jamshedpur, India, on the 26<sup>th</sup>-28<sup>th</sup> of October 2021.
- **4.** "On the Eccentricity-based topological indices of the total graph of the ring Zm \* Zn", in the International Webinar on "Foundations for Contemporary Mathematical Research" organised by the Department of Mathematics, Manipur University, Cachinpur, Imphal India, on the 8<sup>th</sup>-10<sup>th</sup> of November 2021.
- 5. "Degree-based topological indices of the total graph of the ring Zm \* Zn", in the International Conference on "Applied Mathematics" organised by the Department of Applied Mathematics with Oceanology and Computer Programming, West Bengal, India, on the 8th-9th of June 2022.

#### **Seminars Attended**

- 1. DST & ACS Workshop organized by the North-Eastern Hill University, held on the 30<sup>th</sup> of May, 2022.
- Two-day National Seminar on "Recent Trends in Topology and Its Applications", organized by the Department of Mathematics, North-Eastern Hill University, Shillong, Meghalaya, India held on the 4th and 5th August, 2022.
- 3. DST-SERB sponsored two days International Workshop on "*Mathematical Foundations and Applications of Gravity (MFAG-2022)*", organised by the Department of Basic Sciences & Social Sciences, North-Eastern Hill University, Shillong, Meghalaya, India during the 25<sup>th</sup> and 26<sup>th</sup> of August, 2022.

#### **Webinars Attended**

- 4. GUJCOST(DST, Govt. of Gujarat) sponsored International Symposium on "Recent Advances in Fractional Calculus", organized by Department of Mathematical Sciences, P. D. Patel Institute of Applied Sciences (PDPIAS), Charotar University of Science and Technology(CHARUSAT), Changa (388 421), Gujarat, India held on the 30th September and 1st October, 2021.
- 2<sup>nd</sup> International Webinar on "Recent
  *Developments in Number Theory 2021"*, organized

- by KIIT Deemed University, Bhubaneshwar, Odisha, India during the 1st to 4th October, 2021.
- 6. International Conference on "*Class Groups on Number Fields and Related Topics-2021*", organized by the Kerala School of Mathematics, held during the 21st-24th of October, 2021
- 7. One day National Webinar on "*Research Methodology*" organized by the Department of Mathematics, St. Joseph University, Chumoukedima, Nagaland in collaboration with Assam Don Bosco University, Assam and AMET University, Chennai held on the 20th of September 2022.
- **8.** Two days national online workshop on "AI Tools for Mastery in Modern teaching" organised by Indian Mathematics Professors Association and Infinity Research and Development Institue, Coimbatore held on the 02<sup>nd</sup> to 03<sup>rd</sup> of September 2023.
- 9. A Two Day Online Hands On Workshop to "Mastering Graph Theory Concepts with Python Programming", organised by Arjun College of Technology Coimbatore & Indian Mathematics Professors Association held from 13<sup>th</sup> to 14<sup>th</sup> October 2023.

**Guest Lectures Delivered** 

Guest faculty at the department of mathematics, NEHU, Shillong from 17. April. 2023 to 18. 08. 2023.

Other Details in relation to academics, if any

### **NATIONAL EXAMINATIONS:**

- 1. CSIR NET in Mathematical Sciences.
- 2. GATE in Mathematics.