

Research Project Title

Inequalities pertaining to convex functions and applications

Details of Primary Supervisor

1. Name: Dr Sabah Iftikhar
2. Department and University: Department of Mathematics, Xiamen University Malaysia
3. Email address: sabah.iftikhar@xmu.edu.my
4. Research interests: Numerical Analysis and Optimization, Convex Analysis and Integral Inequalities

Details of Co-supervisor 1

1. Name: Dr Muhammad Uzair Awan
2. Department and University: Department of Mathematics, GC University Faisalabad, Pakistan
3. Email address: awan.uzair@gmail.com
4. Research interests: Convex Analysis, Inequalities, Numerical Analysis

Details of Co-supervisor 2

1. Name: Dr Hüseyin Budak
2. Department and University: Department of Mathematics, Faculty of Science and Arts, Düzce University, 81620, Düzce, Turkey
3. Email address: hsyn.budak@gmail.com
4. Research interests: Mathematical inequalities, Fractional Calculus, quantum calculus

Details of Research Project

1. Duration: 1 year
2. Summary:

The aim of this project is to obtain new inequalities involving classical convexity and its generalizations by using different techniques including but not limited to ordinary, fractional and quantum calculus. The candidate is expected to have an excellent command of real and functional analysis. Since all the research activities and the project reporting will be undertaken in English, the candidate is expected to have enough English to report in English.

Job responsibilities include preparing data for publication, developing and troubleshooting new techniques and ideas, and assisting in writing publications.

3. Skills/techniques development: Research techniques for obtaining refinements of integral inequalities
4. Location: Xiamen University Malaysia, Jalan Sunsuria, Bandar Sunsuria 43900 Sepang, Selangor, Malaysia.

GRA Requirements

Number of Master places available: 1

1. The candidate must be enrolled in XMUM Master programme.
2. The candidate must hold a Bachelor's degree in mathematics.
3. The candidate is expected to have excellent skills in Matlab, Maple, Microsoft office and LATEX.