



**INTERNATIONAL WORKSHOP ON OPTIMIZATION
ALGORITHMS, GRAPH THEORY AND GEOMETRICAL
FLOWS IN MODERN COMPUTING**

*A Component of International Conference on
Mathematical Computer Engineering (ICMCE2018)*

23-24 November 2018



Co-conveners

**Dr. C. Vijayalakshmi
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VIT - A place to learn; A chance to grow

Workshop Theme

Optimization is booming at both the industrial and academic levels, stimulated by the new challenges posed by strategic applications with high societal impact. This workshop will deal with fundamental aspects of optimization such as complexity in convex and non-convex optimization, relaxation hierarchies, algorithm convergence study. Particular attention will be paid to the resolution of large-scale problems by exploiting various structures including hidden convexity, partial separability or any other form of structure resulting from particular applications

Graph theory is an important field of Mathematics and Computer Science. Graphs are useful Mathematical tools for modeling the relationships among objects, which are represented by vertices. In this context, graph theory receives considerable attention, not only from the mathematical community, but also from the whole scientific community. Coloring and Labeling find applications in scheduling problems. Embedding problems play a vital role in modifying algorithms. Over the years, there have been a large number of significant and authoritative graph contributions in Biochemistry, Computer Science, Genetics, Cheminformatics and in Sociology. Recently, graph theoretical concepts are being widely used to study and model various computer applications such as image segmentation, information retrieval, networking, clustering, etc.

Various geometric evolution equations and function theory have the common goal of understanding the relations between the geometry, analysis, and topology of manifolds, sub-manifolds, vector bundles, maps, and other geometric structures. The fields of geometry, analysis, and topology are synthesized through the study of geometric and topological invariants via a priori estimates. The goal of the this workshop is to survey current and recent developments in geometric evolution equations and function theory in real and complex geometry.

Resource Persons

**Dr. Bruce Watson
Stellenbosch University
South Africa.**

**Dr. Saeid Alikhani
Yazd University**

**Dr. Sanjit Das
Vellore Institute of Technology
Chennai**

BRAINSTORMING RESEARCH INTERACTION



To facilitate research interaction, the conference and the workshop plan for brainstorming sessions on both days for all participants. The delegates are requested to forward questions related to their research work well in advance to icmce2018@gmail.com Questions will be accommodated on a first cum first served basis. These sessions will be addressed by the keynote speakers and eminent professors in the respective fields of research. The questions can be on any research topic.