

Brief Theme of the Program

Signed graphs have several applications in Circuit design, Coding theory, Fault diagnosis, Physics and Social psychology, etc. and some of the problems in these areas can be better studied using the concept of signed graphs. Since then, mathematicians have written numerous papers on the topic of signed graphs.

The purpose of this workshop is to bring together experts and young researchers to provide a platform for discussion of recent advances in Signed graphs and their applications. The workshop will be of instructional in nature and basic concepts with directions for further research will be discussed. Apart from lectures, in-depth discussion on the front-line challenging problems on various topics will be done. It is hoped that these in-depth discussions and lectures by the invited speakers will motivate the young researchers to enter into some of the highly fertile research areas in the theory of signed graphs.

Semi graphs is a novel generalization of graph, originally introduced and studied by Prof. E. Sampathkumar in his DST project during 1996-2000. It is a new emerging topic with a vast potential to become an independent theory for research within the broad framework of discrete mathematics. More than half a dozen students have taken Ph.D. in this area recently.

A semigraph $G=(V,E)$ consists of a non-empty set V together with a set E whose elements (called edges) are ordered n -tuples for various $n \geq 2$ satisfying the following conditions:

An edge (a_1, a_2, \dots, a_n) in E is same as the edge $(a_n, a_{n-1}, \dots, a_2, a_1)$ and any two edges in E have at most one vertex in common.

Participants will be exposed to concepts like degree sequences of semigraphs, connectivity in semigraphs and line semigraph of a semigraph, domination in semigraphs, bipartite semigraphs and topologies on semigraphs. Some interlinking with design theory and hypergraph theory will prove to be very useful for new and young researchers. There will be about 25 lectures given by experts who are working actively in this area and the participants will be exposed to many open problems in semigraphs.

Accommodation

The participants are requested to book their accommodation. In case delegates wish, details of hotels will be made available to them.

No TA/DA will be paid to the participants.

The City of Durgapur

Durgapur is a city in the state of West Bengal, India, located about 180 KMs west of Kolkata, in the district of Burdwan. The National Institute of Technology Durgapur, (formally known as Durgapur Regional Engineering College [REC]) is an Institute of National Importance, and it is one of the most prominent seats of higher education, under the Ministry of Human Resource Development, Government of India.

How to reach

The Institute is located about 180 KMs north-west of Kolkata on the Howrah-Delhi Railway-Route. The nearest railway station is [IR Code- DGR]. NH 2 and SH 9 pass through the city.

About the Institute

National Institute of Technology (NIT) Durgapur is leading technical Institute offering undergraduate, post graduate and doctoral programs in various disciplines of engineering, technology, science, social science and management. The education system is holistic with equal important being attached to all-round development the students. NIT Durgapur established as a Regional Engineering College (REC) in 1960 as joined venture of the government of India and government of West Bengal. REC Durgapur was converted to NIT Durgapur under the full administrative and financial control of the Ministry of Human Resource Development of Government of India with a deemed university status on 3rd July 2003. Subsequently NIT Durgapur has been given the status of a university by the UGC Act. The Institute was declared as an Institute of National Importance by the government of India on August 15, 2007.

REGISTRATION FORM Self-Sponsored Workshop On Signed Graphs and Semi Graphs (WSGSG-2016) 03-07 October, 2016

Name:

Designation:

Address for correspondence:

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Mob. No:

E-mail:

Sex: Age :

Accommodation needed: YES / NO

Veg / Non-Veg:

Date of Arrival:

Date of Departure:

.....

Tick whichever is applicable

Academic / R & D Institute

Industry

Research Scholar / Student

Amount paid: RS

Signature of Participants



Organizing Committee

Patron:

Prof. Asok De, Director, NIT Durgapur

Coordinator:

Dr. Anita Pal
Dept. of Mathematics
NIT Durgapur

Convener:

Dr. Sajal Mukhopadhyay
Dept. of Information Technology
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List of Invited Speakers

- Dr. E. Sampathkumar, University of Mysore, Mysore.
- Dr. Tarkeshwar Singh, BITS Pilani, Goa.
- Dr. Deepa Sinha, South Asian University, New Delhi. and More.



Course

The course would consist of lecture sessions, instruction sessions, discussion on problem and recent trend in signed graphs and semi graphs.

Eligibility:

Students/ Faculty Members/ Professionals with background of any branch in science and engineering.

Important Dates:

Deadline of Application:

September 1st, 2016

Notification of acceptance of Application:

September 3rd, 2016

Course Dates:

October 03-07, 2016

Registration Fee:

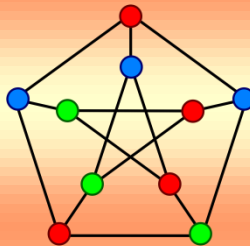
For Research Scholar

& Students: Rs 2000

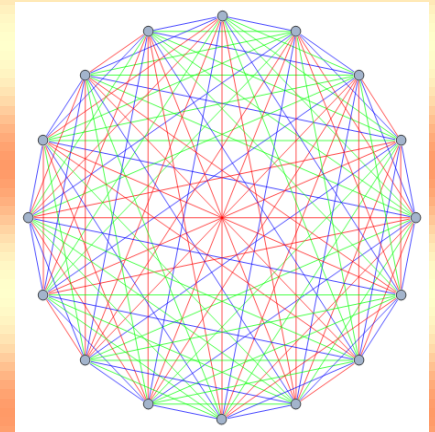
For Faculty members: Rs 2500

For Participants from

Industries: Rs 4000



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Organized By:

Department of Mathematics

&

Department of Information
Technology

**National Institute of Technology
Durgapur**

Mahatma Gandhi Avenue

Durgapur 713209

West Bengal, India

