



DST - SERB School

on

"Photonics Phenomena, Materials and Devices"

02 –21, December, 2019



Organized by

Crystal Growth Centre
Anna University, Chennai
<https://www.annauniv.edu/CGC/index.php>

Sponsored by

Science and Engineering Research Board
(SERB) Department of Science & Technology ,
New Delhi

<http://www.serb.gov.in/home.php>

About SERB School

The growth of single crystals and the theory of crystal growth continue to be an area of importance and increasing activity in materials science. As single crystals based devices are the foundation stones for electronics industry, crystal growth has become the rate-limiting step in the evolution of solid state technology. The crystal growth theory provides an ideal testing ground for the interplay of atomic and classical concepts and the experimental realities. Nonlinear optical (NLO) materials play a major role in photonics and in particular they have a great impact on information technology and industrial applications. Due to the rapid progress in materials science over the two last decades, many important results have been obtained for photonic materials and new photonic devices have been demonstrated. And yet, significant challenges continue to emerge as more advanced devices are envisaged.

The school is designed to provide a systematic overview of new concepts which are emerging in the field of photonics materials and devices. In the first phase of the school, it is planned to concentrate on the phase diagrams, theoretical and experimental aspects of growth, including epitaxy. In the second phase, focus will be on characterization of materials and on photonics and fabrication of devices.

National Programme Planning Committee

Prof. Kailas C Rustagi	IIT-Bombay,
Prof. A.K. Karnal	RRCAT, Indore,
Prof. Reji Philip	RRI, Bengaluru
Prof.C.S. Narayanamurthy	IISST, Trivandrum
Dr. Amitava Roy (SERB)	Programme coordinator
Dr. Nilotpai Ghosh (SERB)	Member Secretary
Prof.D. Arivuoli	Anna University

Course Content

Phase diagrams

Theories of Crystal Growth

Experimental Aspects of Crystal Growth

Characterization Techniques

NLO Fundamentals

Photonics Fundamentals

Photonics Devices and Fabrication

Probable List of Speakers

Dr. Ashok Kaul, IRDE, Dehradun
Prof.D. Arivuoli, Anna University
Prof.K. Baskar, Anna University
Prof H. L. Bhatt, IISc, Bengaluru
Prof.B.K. Das, IIT Madras
Prof P.K. Das, IISc, Bengaluru
Dr.S. Ganesamoorthy, IGCAR, Kalpakkam
Dr. Indranil Bhaumik, RRCAT, Indore
Prof.S. Moorthybabu, Anna University
Dr.S. Muralidharan, IISc, Bengaluru
Prof Somnath Bhattacharya, IIT, Madras
Dr. Rajesh Nayar, IISER, Roper
Prof.G. Ravindrakumar, TIFR, Mumbai
Prof D.N. Rao, Univ. of Hyderabad
Dr. Tapas Ganguli, RRCAT, Indore
Dr. Tarun Kumar Sharma, RRCAT, Indore

Participation and Funding:

Applications are invited from Research Scholars, Post-doctoral Fellows and Young Faculty Members from Institutions, Universities, Colleges, and Young researchers from R & D Centres. A few bright and research motivated final year students of M.Sc./M.Tech. may also be considered. The total number of participants in the school is restricted to about Forty. All the selected participants will be provided travel by train (First class/ III AC), free lodging and boarding.

Self-financed Participants:

Few bright and young participants from Industry are permitted along with regular school attendees. Travel and lodging arrangements are to be made by the participants on their own.

Local Organizing Committee

Prof.S.N. Kalkura, Director, CGC

Prof.D. Arivuoli

Prof.K. Baskar

Prof.J. Kumar

Prof.S. Moorthybabu

Prof.R. Jayavel

Dr.S. Shanthi

Dr.G. Sasikala

Dr. Subra Singh

How to Apply

The application can be sent to the following e-mail: serbaucgc@gmail.com in the following format.

1	Full Name
2	Male/ Female
3	Date of Birth/ Age
4	Educational Qualification
5	Designation
6	Employment Details
7	Email
8	Mobile
9	Address
10	Organisation/ Institution
11	Area of Research
12	Publications
13	Name of Supervisor/ HOD (Recommendation letter from the supervisor/ HOD should be enclosed)
14	Please write briefly In what way this school will be beneficial
15	(For faculty members the application should be forwarded by the Head of the institute /college)
16	signature of the applicant
17	Signature of the supervisor/HOD/Head of Institute

Deadlines

Last date for application : 27 July 2019
Intimation to selected participants : 10 August 2019

For Further Details Contact:

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