

First Circular

1st National Genetics Congress (NGC)

Title: Genetics for Sustainable Food Security, Health and Nutrition

It is a matter of great pleasure that the **Indian Society of Genetics and Plant Breeding (ISGPB)** is going to organize a series of Genetics Congress for the geneticists and breeders of India. The basic and prime purpose of the congress would be to offer a platform for the geneticists and breeders to interact and ponder over the spectacular achievements made so far and to aptly design future research outlines to meet the impending challenges. After rediscovery of Mendelian principles (1900 AD), genetics has been applied to manipulate different organisms to perform in desired and targeted direction of higher production and enhanced quality. With the improvement of economic condition of the people and awareness of good health, the quality, taste and nutritional status of the harvests have taken the fore front. The success of genetics in these spheres is remarkable. Although its application in human welfare and breeding has manifested in terms of “Green Revolution” and “Blue Revolution” etc. which have saved millions of people from starving and eventual deaths, yet it is a daunting task for the geneticists to enhance agriculture output quantitatively and qualitatively with limited land, water and other resources by causing the least damage to the fragile environment so as to feed billions of people across the globe. Therefore, it is the need of the hour to chalk out a well-designed strategic plan and execute expeditiously to achieve the desired goal of sustainable crop, animal and fish production and balanced nutrition.

Although, the basic principles of genetics are the same, yet their applications and achievements are different in various fields of biology where genetics is applied. It is therefore desirable for the geneticists dealing in plant, animal, microbes as well as human being to share experiences, deliberate and to prepare a frame work document on intelligent application of genetics for making agriculture not only economical but also profitable and friendlier to the nature.

Focusing on emerging challenges and new frontiers in genetics, the Indian Society of Genetics and Plant Breeding has decided to organize a National Genetics Congress on the theme “**Genetics for Sustainable Food Security, Health and Nutrition**” to address the current and

future problems and formulate a scientific plan covering major areas of research to harness the scientific benefits in the interest of the larger masses of the entire nation.

Date & Venue: The Congress will be held during December 14-16, 2018 at the Indian Agricultural Research Institute, New Delhi

Scientific Programme: The scientific programme will consist of Lead lectures, Invited talks and oral/poster presentations on recent advances and highlighting new challenges. The three-day programme will be organized under the following sessions in keeping with the theme of the Congress

Tentative themes and sub-themes of the Congress are as follows:

Session I: Comprehending and harnessing biological diversity

- Genetics and evolution
- Population genetics
- Developmental genetics
- Behavioural genetics

Session II: Breeding climate resilient crops: Approaches and challenges

- Abiotic stress tolerance, genetics and physiology
- Epigenetics
- Ecology and adaptation

Session III: Genetics and health:

- Immunogenetics- autoimmune systems
- Vaccines and Diagnostics
- Genetics of biotic stresses and plant-microbe interaction
- Genetic medicines

Session IV: Genetics of nutrition:

- Biofortification
- Bioavailability
- Nutrigenomics

Session V: Methods and techniques in genetics:

- Statistical and biometrical techniques
- New computational tools and bioinformatics

Session VI: Advances in genomics

- Structural genomics: the lessons learnt
- Genome editing

- Gene discoveries and functional validations
- Mutagenesis and functional genomics

Session V II: New Frontiers in Accelerating Plant Breeding

- Speed and precision Breeding
- Doubled Haploid Breeding: New perspectives
- Genomics assisted breeding
- Transgenics: New developments
- Heterosis breeding: new approaches

Session VIII: Genetics and Society

- Patenting of genes and ethical issues
- Protection of elite genetic resources, plant varieties and transgenic plants
- Imparting genetics skills in schools
- Creating Public awareness and popularizing genetics

Pre-registration and abstract submission

The Programme Committee invites the submission of abstracts of the paper for oral or poster presentation. The deadline for abstract submission is October 15, 2018. Abstract may be submitted as a MS Word file attached to an e-mail to Organizing Secretary at ngc2018.isgpb@gmail.com. Final placement of the abstracts under oral or poster will be decided by the Programme Committee.

Guidelines for Abstract:

- Abstract should include title, name, affiliation and address of all authors, email address of—corresponding author and main text.
- Type text using single space in Times New Roman font; Title – 14 point bold font; names of authors – 12 point bold font; affiliation (name of Institute/university)- 11 point font, address – 10 point font and Main text – 10 point font.
- Name of presenter should be underlined and name of corresponding author to be starred with an asterisk(*)
- Abstract should not exceed 250 words.
- Figure, tables and references must be included at appropriate space in main text.

Registration Fees

	Early Registration (Before 2018)	Late Registration (After 2018)
	₹	₹
ISGPB Member	5000/-	6000/-
Non ISGPB Member	6000/-	7000/-
Student /RA / SRF	3000/-	4000/-
Accompanying person	3000/-	4000/-
Corporate Delegates	10000/-	12000/-

Key Dates

Registration

Early Registration Opens	August 1, 2018
Early Registration Closes	August 30, 2018
Late Registration Closes	October 30, 2018

Abstract

Abstract Submission Opens	July 15, 2018
Abstract Submission Closes	October 15, 2018
Notification regarding Oral / Poster Presentation	October 30, 2018

Congress Announcements

This is the first circular with important information and instructions. For more information, please visit the society's website at www.isgpb.com.