

**FRIDAY, DECEMBER 14, 2018**

08:30-09:30 : Registration

09:30-11:00 **INAUGURAL SESSION**

Invocation and Lighting of Lamps :  
Welcome address : H S Gupta  
About the NGC : T Mohapatra  
Address by Guest of Honour : R B Singh  
Address by Chief Guest : V L Chopra  
Address by Chairman : R S Paroda  
Vote of thanks : N K Singh

11:00-11:25 **Tea Break**

**TECHNICAL SESSION-I**

**11:30-13:00 Genetic resource management and use**

Chair : R S Paroda  
Co-chair : B S Dhillon  
Convener : C Bharadwaj  
Rapporteur : G P Mishra

11:30-12:00 Plant genetic resources management and pre-breeding in genomics era

**Kuldeep Singh**

*NBPGR*

12:00-12:15 Strategies for conservation and characterization of domestic animals

**Ajrava Sharma**

*NBAGR*

12:15-12:30 Strategies for conservation and characterization of domestic fishes

**Kuldeep K Lal**

*NBFGR*

12:30-12:40 Development, evaluation and characterization of browning resistant hybrids of white button mushroom

**Shwet Kamal**

*Dte. Mushroom*

12:40-12:50 Effect of isogenic-alloplasmic cytoplasmic male sterility system on grain yield traits in pearl millet

**M Govindaraj**

*ICRISAT*

12:50-13:00 Discussion

**13:00-14:00 Lunch Break**

**Poster Presentation : Sessions I and III**

**TECHNICAL SESSION-II**

**14:00-15:30 Genetics and breeding for climate resilience**

Chair : R B Singh  
Co-chair : S A Patil  
Convener : C Viswanathan  
Rapporteur : Gopalakrishnan S

14:00-14:30 Genomics-assisted backcross breeding for infusing climate resilience in the high yielding varieties of rice

**N K Singh**

*NRCPB*

14:30-14:45 Induction and suppression of rice innate immunity during bacterial infection

**Ramesh Sonti**

*NIPGR*

14:45-15:00 Scope of genetic improvement in animals for climate resilience

**Satish Kumar, CCMB**

15:00-15:15 A decade long journey of molecular breeding for improvement of rice: Plant breeders' tryst with genomic tools

**Ashok K Singh**

*IARI*

15:15-15:25 Diverse sources of resistance to *S. litura* (F.) in groundnut

**G K Naidu, UAS-Dh.**

15:25-15:35 Discussion

15:35-15:45 **Tea Break**

**TECHNICAL SESSION-III**

**15:45- 17:15 Breeding for input use efficiency and nutritional enhancement**

Chair : H S Gupta  
Co-chair : A K Srivastava  
Convener : C Tara Satyavathi  
Rapporteur : H K Dikshit

15:45-16:15 Plant organelle proteomics: Translation of knowledge into Application

**Niranjan Chakraborty**

*NIPGR*

16:15-16:30 Breeding poultry for improved input use efficiency and nutrient quality of products

**R N Chatterjee**

*Dte. Poultry*

16:30-16:45 Breeding animals for improved nutritional quality

**Soumen Naskar, IIAB**

16:45-17:00 Breeding rice for nitrogen use efficiency

**CN Neeraja, IIRR**

17:00-17:15 Breeding vegetable crops for higher nutrients & nutraceuticals

**T K Behera, IARI**

17:15-17:25 Discussion

17:25-18:30 **Poster evaluation**

18:30-19:30 Meeting of the General Body, ISGPB

20:00-21:00 **Dinner**

**SATURDAY, DECEMBER 15, 2018**

**TECHNICAL SESSION-IV**

**09:30-11:00 Advanced genetic tools for enhancing breeding efficiency**

Chair : G Kalloo  
Co-chair : R P Sharma  
Convener : A K Singh  
Rapporteur : Akshay Talukdar

09:30-10:00 Translational genomics and molecular breeding for enhancing precision and efficiency in crop improvement programs: Some examples in legumes **Rajeev K Varshney**  
*ICRISAT*

10:00-10:15 Targeted genome editing of tomato for improved traits **R P Sharma, Univ. Hyderabad**

10:15-10:30 Genetic tools and techniques for enhancing the reproductive efficiency in livestock **Manmohan Singh Chauhan**  
*CIRG*

10:30-10:45 Genetic tools for fish improvement **Gopikrishna, CIBA**

10:45-10:55 Mechanism of interaction between *Puccinia graminis* f. sp. *tritici* and its non-host rice **Aundy Kumar**  
*IARI*

10:55-11:05 New frontiers in chromosome elimination-mediated doubled haploidy breeding: Focus on speed breeding in bread and durum wheat **H K Chaudhury**  
*CSKHPAU*

11:05-11:15 Discussion

11:15-11:30 **Tea Break**

**Poster Presentation : Sessions-II, IV, V, VI and VII**

**TECHNICAL SESSION-V**

**11:30-13:00 Application of bioinformatics and statistical tools in genetics**

Chair : J P Khurana  
Co-chair : P C Sharma  
Convener : A R Rao  
Rapporteur : Kishor Gaikwad

11:30-12:00 Statistical challenges in genetic association studies: Caveats and implications **Saurabh Ghosh**  
*ISI*

12:00-12:15 Bioinformatics tools for genome analysis and identification of novel metabolic pathways **Debasisa Mohanty**  
*NII*

12:15-12:30 Computational tools and high-throughput data analyses for crop genomics **Mukesh Jain**  
*JNU*

12:30-12:45 Leaping forward towards a blend of population genetics and modern day genomics **A R Rao**  
*IASRI*

12:45-12:55 Expressed rice gene homologues in diverse eukaryotic species and development of a eukaryotic tree of life based on conserved genes **P Jayaswal**  
*NRCPB*

12:55-13:05 Discussion

13:05-14:00 **Lunch Break**

**TECHNICAL SESSION-VI**

**14:00-15:30 Genetic engineering**

Chair : Manju Sharma  
Co-chair : S K Datta  
Convener : R C Bhattacharyya  
Rapporteur : T K Mandal

14:00-14:30 Transgenic crops in India: The way forward **Deepak Pental, DU**

14:30-14:45 Editing of genome in crops for trait development: New directions and challenges **Ajay Kumar Pandey**  
*NABI*

14:45-15:00 Status and prospects of gene editing and transgenic in fishes **H K Barman**  
*CIFA*

15:00-15:10 Development of CRISPR vector for a polycomb gene **Laishram Sundari Devi**  
*DU*

15:10-15:20 Genomic characterization of Mithun (*Bos frontalis*) populations using high density SNP array **Anupama Mukherjee**  
*NDRI*

15:20-15:30 Discussion

**Poster Evaluation**

### TECHNICAL SESSION-VII

<b>15:30-17:00</b>	<b>Ethics, IPR and regulations for use of genes/genetic resources</b>	
	Chair :	S R Rao
	Co-chair :	Sanjeev Saxena
	Convener :	Sunil Archak
	Rapporteur :	T K Nagarathna
15:30-16:00	Creating harmony and balance among diverse regulatory bodies for efficient use and management of genetic resources in India	<b>K V Prabhu/R C Agrawal</b> <i>PPVFRA</i>
16:00-16:15	Policy interventions for facilitating use of GMOs in agriculture and medicine	<b>S R Rao</b> <i>DBT</i>
16:15-16:30	Writing successful patents and overcoming patent barriers to create products	<b>M Padmawathi</b> <i>IIT-K</i>
16:30-16:45	Intellectual Property Rights (IPR) issues related to use of genetic resources	<b>Pratibha Brahmi</b> <i>NBPGR</i>
16:45-16:55	DUS testing for plant variety protection: Researchable issues	<b>S K Chakraborty</b> <i>IARI</i>
16:55-17:05	Discussion	
17:05-17:20	<b>Tea Break</b>	
	<b>Evening Lecture</b>	
17:20-18:20	Genetics of tooth agenesis in light of recent advances in mapping, identification and characterization of human disease genes	<b>Parimal Das</b> <i>BHU</i>
18:20-20:00	<b>Poster Evaluation</b>	
20:00-21:00	<b>Dinner</b>	

### SUNDAY, DECEMBER 16, 2018

### TECHNICAL SESSION-VIII

<b>09:30-11:00</b>	<b>Genetics Education</b>	
	Chair :	V L Chopra
	Co-chair :	M L Madan
	Convener :	S R Bhat
	Rapporteur :	Neelu Jain
09:30-10:00	Teaching genetics in India: Shortcomings and possible solutions	<b>P K Gupta</b> <i>CCSU</i>
10:00-10:15	Science communication to college students and the Public	<b>R Geeta</b> <i>DU</i>
10:15-10:30	Need for improved tools and resources for teaching genetics in fishery sciences	<b>A Gopalakrishna</b> <i>CIFE</i>
10:30-10:45	Tools and resources for teaching genetics in veterinary sciences in India: A critical analysis of deficiencies and possible solutions	<b>G K Gaur</b> <i>IVRI</i>
10:45-11:00	Developing resources and approaches for teaching genetics at school level	<b>Firoz Hossain</b> <i>IARI</i>
11:00-11:15	<b>Tea Break</b>	
	<b>PLENARY SESSION</b>	
11:15-13:15	Chair :	V L Chopra
	Co-chair :	R B Singh
	Panelists :	H S Gupta, Anand K Singh, J K Jena, J S Sandhu, K P Viswanatha
	Convener :	Sanjay Kumar
11:15-11:45	<b>Plenary Lecture:</b> Designer gene and reproductive technologies for health and production in livestock	<b>M L Madan</b>
11:45-12:15	<b>Panel Discussion :</b> Genetic Application : Policy Perspectives	<b>Panelists</b> <b>N K Singh</b>
12:15-12:25	Presentation of the summary recommendations	
12:25-12:35	Presentation of Best Poster Award	
12:35-12:50	Remarks from the Chairman Organizing Committee	<b>R B Singh</b>
12:50-13:10	Chairman's Observations	<b>V L Chopra</b>
13:10-13:20	Vote of thanks	<b>Akshay Talukdar</b>
13:20-14:20	<b>Farewell Lunch</b>	