

# National Seminar on Agrophysics for Smart Agriculture



## Date

22-23 February 2022

## Venue

NASC Complex, Dev  
Prakash Shastri Marg,  
Pusa, New Delhi -  
110012

## Organized by:

INDIAN SOCIETY OF AGROPHYSICS  
NEW DELHI

and

Division of Agricultural Physics  
ICAR- Indian Agricultural Research  
Institute  
New Delhi, India

## About the seminar

The seminar will focus core aspects of Natural Resource Management in Agriculture viz; Soil Physics, Agricultural Meteorology, Remote Sensing, Biophysics, Agricultural Water management, Artificial Intelligence, Big Data Analytics, and applications of drone remote sensing. Improving resource use efficiency is now a great challenge in agriculture to meet the growing demands. Agrophysics is an area that provides a great potential to improve resource use efficiency in various agro-ecologies.

## ABOUT THE SOCIETY

The Indian Society of Agrophysics was established in 1985 under the Societies Registration Act XXI of 1860 at Delhi (No. S-15930). It is a society of professionals working in the field of agricultural physics and allied disciplines with the main objective of promoting research, education and training. The society focuses on different aspects of natural resource management in agriculture including soil physics, agricultural meteorology, remote sensing and biophysics including application of physics in agriculture. The society publishes journal (JAP), organizes annual symposiums, workshops and popular lectures. Currently the society has 192 life-members and 10 annual-member.

## SEMINAR FEATURES

- The Eighth Dr B. P. Ghildyal Lecture to be delivered by Prof. Dr Rattan Lal
- Special Session on Water resource management
- Special Session on Drone Remote Sensing for Smart Agriculture

## RESEARCH THEMES

- Soil Physics-Flow and transport of water, heat, sediment and solutes, soil-water-plant interactions, Impact of soil physical condition on plant growth, characterization of soil hydraulic properties, soil health and quality, 3-D characterization of soil structure
- Remote sensing and GIS- Land use and land cover mapping, LAI estimation, spatial variability analysis, geostatistics, digital soil mapping, RS based crop insurance, microwave and hyperspectral remote sensing, Drone remote sensing
- Biophysics/Plant physics- Stress monitoring through thermal imaging, Biophysical characteristics of crops
- Simulation modelling- Modelling of crop growth and yield, soil water balance, root water uptake
- Agrometeorology- Crop weather interaction, forecasting of disease and pest, crop yield estimation, agroadvisory, drought forecasting and management, weather extreme
- Climate change/ adaptation /mitigation
- Machine learning, artificial intelligence, big data analysis, robotic agriculture, digital agriculture
- Precision farming- SPM, wireless network sensors, VRT, real time crop and soil monitoring
- Conservation agriculture, carbon sequestration and management practices, green house gas emission, soil health under organic farming
- Ecosystem services
- Nanotechnology in agriculture
- Efficient soil and water management strategies
- Soil and water conservation and climate risk management

## REGISTRATION FEE

<b>Member</b>	<b>Rs. 3000/-</b>
<b>Non-member</b>	<b>Rs. 4000/-</b>
<b>Students/RA/SRF</b>	<b>Rs. 1000/-</b>

Registration fee is to be paid in advance by each delegate to the Secretary, Indian Society of Agrophysics, Room No. 102, Division of Agricultural physics, NRL Building, ICAR\_ Indian Agricultural Research Institute, Pusa Campus, New Delhi - 110012 in the form of a bank draft drawn in favour of "Indian Society of Agrophysics" and payable on any bank in New Delhi so as to reach the ISAP headquarters by 15<sup>th</sup> January 2022 or registration fee may also be paid by direct online bank transfer:

Beneficiary Name:	Indian Society of Agrophysics
A/C No.:	90292010026182
IFSC Code:	CNRB0019029
Bank:	Canara bank
Branch:	Pusa Campus, IARI, New Delhi - 110 012

*\*Registration fee once paid will neither be refunded nor transferred to any other purpose or person*



You can pay registration fee using this BHIM QR or using UPI ID 8595897833@upi

## ORGANIZATION

Patron: Dr Trilochan Mohapatra, Secretary (DARE) & DG, ICAR  
President, ISAP: Dr S K Chaudhari, DDG (NRM), ICAR

## NATIONAL ORGANIZING COMMITTEE

Dr. A. K. Singh, IARI  
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Dr. Ananta Vashisth

## IMPORTANT DATES

Last date for submission of abstract:	31 Dec, 2021
Date of issuing acceptance:	15 Jan, 2022
Last date of registration:	15 Feb, 2022

## ACCOMMODATION

Due to limited availability, accommodation in Institute guest houses is only on first come first serve basis. Booking in nearby hotels may be facilitated subject to payment of half tariff in advance along with registration fee.

## ABSTRACT SUBMISSION

Abstracts of original research papers on any above-mentioned topics are invited for ORAL/POSTER presentation in the National Seminar. Each abstract is to be a self-contained one, prepared in not more than 300 words, stating briefly the objective(s), methodology and major findings. Table(s), figure (s) or illustrations will not be accepted. Presentation of an abstract in oral session will be allowed only when the abstract has been accepted for oral presentation and also one of the authors deposits the Registration fee with the Society office at New Delhi on or before due date. Poster sessions will also be arranged. Only those abstracts which are received by due date and presented during the Convention will be post printed electronically.

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