

ARRW DIAMOND JUBILEE NATIONAL SYMPOSIUM on

GenNext Technologies for Enhancing Productivity, Profitability and Resilience of Rice Farming

> December 16-17, 2021 Cuttack, Odisha, India

> > Organized by



Association of Rice Research Workers
Cuttack, Odisha, India

In Collaboration with

Indian Council of Agricultural Research, New Delhi ICAR -National Rice Research Institute, Cuttack ICAR -Indian Institute of Rice Research, Hyderabad







Key Dates

Submission of abstract : November 20, 2021
Acceptance of abstract : November 25, 2021
Registration fee : November 25, 2021
Symposium : December 16–17, 2021

Mode: Hybrid

Symposium Venue: ICAR-NRRI, Cuttack, Odisha, India

Contacts

Dr. H Pathak

President, ARRW, ICAR-NRRI, Cuttack 753 006, Odisha, India and Director, ICAR-National Institute of Abiotic Stress Management, Baramati, Pune, Maharashtra 413115

Mob. No.: +919437579257 Email: hpathak.iari@gmail.com

Dr. Dipankar Maiti

Director, ICAR-NRRI, Cuttack 753 006, Odisha, India

Mob. No.: +919431782544 Email: dipankar maiti@live.in

Dr. RM Sundaram

Vice-President, ARRW, ICAR-NRRI, Cuttack 753 006, Odisha, India and Director, ICAR-Indian Institute of Rice Research, Hyderabad, 500030

Mobile: 919440488043; 7286835684 e-mail: rmsundaram34@gmail.com

Dr. AK Nayak

Convener, National Symposium 2021 and

Head, Crop Production Division, ICAR-NRRI, Cuttack 753 006, Odisha, India

Mob. No: +917978139451 Email: aknayak20@yahoo.com

Dr. MJ Baig

Co-convener and Organizing Secretary, National Symposium 2021 & Secretary, ARRW Principal Scientist, ICAR NRRI Cuttack 753,006, Odisha India

Principal Scientist, ICAR-NRRI, Cuttack 753 006, Odisha, India

Mob. No +919437947925 Email: mjbaigcrri@gmail.com

Dr. Totan Adak

Organizing Secretary, National Symposium 2021, Scientist, ICAR-NRRI, Cuttack 753 006, Odisha, India Mob. No: +918847871352 Email: totanadak@gmail.com

Dr. K Ali Molla

Organizing Secretary, National Symposium 2021, Scientist, ICAR-NRRI, Cuttack 753 006, Odisha, India Mob. No: +919437947925/8018378878, Email: kutubuddin.molla@icar.gov.in

For details of National Symposium, please visit our websites:

www.arrworyza.com & https://icar-nrri.in/

E-mail ID of the National Symposium 2021: arrw2021@gmail.com



Diamond Jubilee National Symposium

on

GenNext Technologies for Enhancing Productivity, Profitability and Resilience of Rice Farming

SCOPE AND OBJECTIVE

Association of Rice Research Workers at ICAR-National Rice Research Institute, India is one of oldest society under Society Act. It was established in 1961. The society is working effortlessly to foster rice research for widening the horizons of rice science and to increase rice productivity and profitability. Laureates of rice science shared their views in different activities of the society. The society organizes regularly international and national events like symposium, conferences as well as organized annual rice group meeting in 2019. Society also organized first Indian Rice Congress in December 8–9, 2020 at ICAR-NRRI, Cuttack.

Rice is produced in a wide range of locations and under a variety of climatic conditions, from the wettest areas in the world to the driest deserts which is produced in 111 countries in the world and grown on 144 million farms worldwide -more than for any other crop. The developing countries, especially the Asian countries - the regions with high population density and the most rapid population growth produce and consume the most rice. Rice production is an important source of livelihood for around 140 million rice-farming households and for millions of poor people working on rice farms as hired labour.

Agriculture has seen many revolutions, whether the domestication of animals and plants a few thousand years ago, or the "green revolution" with systematic breeding and the widespread use of man-made fertilizers and pesticides a few decades ago. At present, agriculture is undergoing a revolution triggered by the exponentially increasing use of information and communication technology (ICT) in agriculture. Recent breakthroughs in genome editing, robotic vehicles, unmanned aerial vehicles with the powerful hyperspectral snapshot cameras opens the field for sophisticated farm management advice. Moreover, decision-tree models, remote-sensing signals and sensors or actuators are playing crucial role in smart farming.

Precision technologies is required to address the interlinked challenges of food security and accelerating climate change. This deals with i. **increased productivity:** Produce more and better food to improve nutrition security and boost incomes, ii. **enhanced resilience:** Reduce vulnerability to drought, pests, diseases and other climate-related risks and shocks; and improve capacity to adapt and grow in the face of longer-term stresses like shortened seasons and erratic weather patterns.

THEMES

1. GenNext technologies for rice improvement

- a. Genomics and precision breeding tools for stress tolerance and higher resource use efficiency
- b. Designer and nutritional rice

2. Precision technologies for rice production

- a. Precision agriculture, mechanization and customization in rice farming
- b. Greenhouse gas emission and mitigation

3. GenNext technologies for pest management

- a. Decision support systems, forewarning techniques/models
- b. Sensors, drones, bio-rational and next generation pest management techniques

4. Livelihood security, equity and profitability

- a. Agribusiness and entrepreneurship development
- b. Big data management, E-agriculture, IoT, Robotics

SYMPOSIUM PRESENTATION FORMAT

Plenary Lectures: Globally recognized scientists, policy makers and administrators will be invited to deliver special lectures on the topics related to rice production and policy, farming systems research, climate change, resource conservation technologies, resource use efficiency etc. They will be requested to provides 2-3 pages' write-up of their presentation along with brief biodata for inclusion in the Pre-Symposium Proceedings. Plenary lectures will be of 30 minutes duration.

Panel Discussion: Globally recognized scientist/policy makers and industrialists will be invited to discuss on the present status of "Gen-Next" rice technologies in India and its future. Panel discussion will have 5-6 panelists and it will be of one hour thirty minutes.

Evening Lecture: Globally recognized scientists, policy makers and administrators will be invited to deliver a special lecture on "Gen-Next" rice science.

Invited Lead Lectures: These would offer an insight into the various sessions of Symposium. Technical Committees constituted for symposium will identify 4 speakers. Each lecture will be of 15-20 minutes followed by discussion. Lead speakers of the symposium will be requested to provide 350 words abstract of their presentation and brief biodata for inclusion in the Pre-Symposium Proceedings. Full length papers will be published in the Post-Symposium Proceedings or Oryza.

Lightning talk: All the delegates will get an opportunity to present their research findings through **Lightning talk** in digital platform. **Lightning talk** will be arranged themewise. This would provide an opportunity to the participants to present their work in a more informal manner with personalized interaction with other participants. You can add audio or video, web pages, images, forms, links, documents, transcripts, and social media feeds into a single interactive presentation viewer. **Lightning talk** will be of 2 minutes. Best talk in each scientific theme will be awarded with digital certificate.

ABSTRACT

The abstract of all the contributory papers will be published and provided to the delegates as soft copy during the Symposium. These must reach the Organizing Secretary in the prescribed format latest by November 20, 2021. Abstract prepared without following the style and format and guidelines will not be accepted for publication. Abstracts need to be submitted through the same google form link given below for registration. You will find a row to upload your abstract in the google form. Please do not email us your abstract. Abstract sent through email will not be entertained.

Guidelines for Preparation of Abstract

- Abstract should not exceed 350 words. The title should be short, specific and phrased to identify the content of the article. Abstract should be of one paragraph.
- Abstract should be typed in MS-Word, Times New Roman with normal fonts. Font's size for different parts of the abstracts are Title 14 points bold, Authors 12 point, Institute name 11 points italic, Content 11 points. It should include the author(s) name(s), email id and place of work including the name of the university / organization, State, PIN code and the country. In case, the present address of any of the author is different, it should be given with complete address as footnote.
- The Abstract of all the contributory papers will be published and provided to the delegates as soft copy during the Symposium. These must reach the Organizing Secretary in the prescribed format latest by **November 20, 2021**. Abstract prepared without following the style and format and guidelines will not be accepted for publication. A soft copy of the abstract prepared in Microsoft word doc may be submitted by the time of registration by google form.

REGISTRATION

Google form link: https://bit.ly/2Xhw1LJ

During registration you need to upload a copy of the proof of your payment confirmation.

REGISTRATION FEE

Delegates	Registration Fee (Rs.)		
Online participants			
Scientists/Researchers	1000/-		
Students / Research Scholars	500/-		
Physical participants			
Scientist/Professor			
ARRW members	3000/-		
Others	4000/-		
Participation with ARRW membership (Membership fee Rs. 6000/-)	9000/-		

Delegates	Registration Fee (Rs.)	
Student		
ARRW members	2000/-	
Others	3000/-	
Participation with ARRW membership (Membership fee Rs. 5000/-) 7000/-		

The registration fee can be deposited in the account of the Association (Account No. 40058354535, Bank Name: State Bank of India, Branch Name: Nayabazar, Cuttack, Code-2094, IFSC Code-SBIN0002094, MICR No.- 753002016) and a copy of successful transaction status (screenshot/pdf/photo etc.) need to be uploaded through google form during registration.

- Symposium will be open to registered participants only.
- The registration fee for the participant will cover participation in all scientific sessions, the proceedings and other soft copy material of the meeting. Welcome reception, lunches and dinner, tea/coffee during lecture breaks will be available to physical participants only.
- A digital certificate will be given to all the participants.
- Delegates are required to fill up the google form https://bit.ly/2Xhw1LJ
- All delegates should go through the **second circular** available in our official website (www.arrworyza.com) for registration fees and account details for online transfer. After successful payment of registration fee, the applicant must upload snapshot/proof of payment while registering in google form and put UTR/reference number.

EXHIBITION

An exhibition will be organized at the Symposium venue during the Symposium. The exhibition area will be the focal point of the Symposium and the programme is structured to maximize the opportunity for delegates to visit this area. It has limited access to non-delegates also. Space for exhibition can be reserved by contacting the organizers. Exhibitors will get 10 ft x 10 ft space within the Exhibition area, having three sidewalls, carpet, 1 table, 2 chairs, one standard electric power point, two spotlights and dustbin.

Facilities and Fees for Sponsors and Exhibitors

Advertisement

In Souvenir of the Congress, which will contain message from VIP and articles from renowned scientists, policy makers and administrator, there is a provision for giving advertisement by the companies. Souvenir is a very important publication of the Congress and kept by the delegates for a long period and used as reference book. Interested companies may contact the organizers for giving their advertisements. The rates for the advertisement are as follows.

Facilities and Fees for Sponsors Diamond Sponsor (Rs. 2,00,000)

- Name/logo of sponsor to be displayed at prominent places including backdrop of the dais/website
- Presentation opportunity during the workshop.
- Advertisement in souvenir (full page color, cover/special insertion)

Platinum Sponsor (Rs. 1,00,000)

- Name/logo of sponsor to be displayed at prominent places including backdrop of the dais/website
- Presentation opportunity during the workshop.
- Advertisement in souvenir (full page color)

Gold Sponsor (Rs. 50,000)

- Name/logo of sponsor to be displayed at prominent places including backdrop of the dais/website
- Advertisement in souvenir (full page color)

Silver Sponsor (Rs. 25,000)

- Name/logo of sponsor to be displayed at backdrop of the dais
- Advertisement in souvenir (full page color)

ACCOMMODATION

Accommodation is available at various hotels, especially for the conference delegates at discounted rates. The registration fee does not include accommodation charges. The participants are encouraged to make their own arrangements for stay.

Name of Hotel	Distance from Venue	Rates*(Rs) + GST
Trident Hotel, Bhubaneswar	$28\mathrm{kms}$	13,000-14,000
Mayfair Lagoon, Bhubaneswar	29 kms.	12,800-13,800
Mayfair Convention, Bhubaneswar	$30\mathrm{kms}$.	6,500-7,500
Swosti Premium, Bhubaneswar	$29\mathrm{kms}$	4,800-14,200
Hotel Hindusthan International	$28\mathrm{kms}$	4,950-8,899
Ginger, Bhubaneswar	30 kms.	3,200-3,400
Pramod Convention & Club Resort, Cuttack	12 kms.	5,000-6,500
Grand Residency, Cuttack	08 kms.	2,000-4,000
Hotel Bombay Inn, Cuttack	$05~\mathrm{kms}.$	2,000-4,000
Mahabir Galaxy, Cuttack	$06\mathrm{kms}$	1,500-2,500
Benson & Blue, Cuttack	$05~\mathrm{kms}.$	1,600-1,800
Ambika Residency, Cuttack	5 kms.	1,200-2,000

^{*}Please check with respective hotel website or by communicating them over telephone.

FIELD VISIT, EXCURSION AND TOUR

Organizers will arrange visits to experimental fields and Research Institutes at Cuttack, Bhubaneswar, Puri on December 18, 2021.

- Visit to Cuttack and Bhubaneswar based Experimental Fields, Museum and Research Institutes
- Visit to Puri and Konark based Experimental Fields, Monuments and Research Stations

Final programme of these field visits will depend upon the willingness received from the delegates. All these visits will be arranged on payment basis by the delegates.

GENERAL INFORMATION

INSURANCE: The Organizing Committee assumes no liability for participant's personal accidents, sickness, and theft or property damage. Participants are requested to make their own arrangements with respect to health and travel insurance.

LANGUAGE: The official language of the Symposium will be English.

TAXI: Taxis are on call 24 hrs over the telephone. Air-conditioned (AC) taxis are available at the both the international and domestic terminals. In addition, there are prepaid counters at the airport for travel to any part of the city.

ABOUT CUTTACK: The Silver City 'Cuttack is the former capital and one of the oldest cities of Odisha State. The name of the city is an anglicized form of "Kataka" that literally means "The Fort". It is located about 28 km to the north east of Bhubaneswar, the capital city of Odisha. Cuttack is famous for its unique silver filigree work. The city is well connected with all other important cities of India by the network of 'Indian Railway' as well as by air via Biju Patnaik International Airport, Bhubaneswar.

A lot of architectural wonders and heritage sites in Odisha offer breathtaking views and a wholesome experience to the tourists visiting the State. The 'Jagannath Temple', located in the coastal town of Puri, 90 km away from Cuttack, is a famous 'Hindu Temple' dedicated to Lord Jagannath (Krishna). Konark, located at a distance of nearly 80 km from Cuttack, is famous all over the world for its magnificent 'Sun Temple' which is a world heritage monument declared by the UNESCO. The open air zoo 'Nandankanan National Park' is located at a distance of 20 km from Cuttack. It is famous for the rare white tigers, reptiles and snakes. 'Lingaraj Temple', dedicated to lord Shiva is located in the Temple City Bhubaneswar.'Dhauli Hill', one of the most visited Buddhist pilgrim destinations in India, is located at a distance of 8 km from Bhubaneswar. The edicts at Dhauli are a living testimony to Emperor Ashoka's adoption of the doctrine of non-violence. Khandagiri and Udayagiri caves of Bhubaneswar are famous shrines of Jains. Incidentally, Koraput district of Odisha is identified as a place of secondary origin of rice.

ARRW DIMOND JUBILEE NATIONAL SYMPOSIUM- SECOND CIRCULAR













TIMEZONE: Indian Standard Time is $5\frac{1}{2}$ hours ahead of GMT, $10\frac{1}{2}$ hours ahead of American Eastern Standard Time.

WEATHER: At the time of the Symposium the climate in Cuttack will be pleasant with clear skies and plenty of sunshine. The day temperature ranges from 25-27°C.

Organizing committee

Patron: Dr. T. Mohapatra, Secretary (DARE) & Director General, ICAR

Advisory Committee

Name	Designation & Address
Dr. TR Sharma	DDG, ICAR (Crop Science), New Delhi, India
Dr. Suresh Kumar Chaudhari	DDG (NRM), ICAR, New Delhi
Dr. AK Singh	DDG (Agricultural Extension), ICAR, New Delhi
Dr. RC Agrawal	DDG (Agricultural Education), ICAR, New Delhi
Dr. Joykrushna Jena	DDG (Fisheries Science), ICAR, New Delhi
Dr. Ashok Kumar Singh	Director, ICAR-IARI, New Delhi
Dr. PK Agarwal	Vice Chancellor, OUAT, Bhubaneswar, Odisha
Dr. Onkar Nath Singh	Vice Chancellor, BAU-R, Kanke, Ranchi, Jharkhand
Dr. Praveen Rao Velchala	Vice Chancellor, PJTSAU, Hyderabad, Telangana
Prof. BS Mahapatra	Vice Chancellor, BCKV, Mohanpur, Nadia, West Bengal
Dr. A Vishnuvardhan Reddy	Vice Chancellor, ANGRAU, Guntur, Andhra Pradesh
Dr. EA Siddiq	Ex-DDG (CS), ICAR & Hon. ProfessorInstitute of Biotechnology, PJTSAU, Hyderabad
Dr. SK Datta	Ex-DDG, ICAR (CS) & Vice-Chancellor, Biswa Bangla Biswabidyalay, Bolpur, West Bengal
Dr. H Pathak	Director, ICAR-NIASM, Baramati, Maharashtra
Dr. D Maiti	Director, ICAR-NRRI, Cuttack, Odisha
Dr. RM Sundaram	Director, ICAR-IIRR, Hyderabad, Telangana
Dr. Ajay Parida	Director, ILS, Bhubaneswar, Odisha
Dr. Arunava Pattanayak	Director, ICAR-IIAB, Ranchi, Jharkhand
Dr. Atmaram Mishra	Director, ICAR-IIWM, Bhubaneswar, Odisha
Dr. Anil Kumar	Director, ICAR-CIWA, Bhubaneswar, Odisha
Dr. Saroj Kumar Swain	Director, ICAR-CIFA, Bhubaneswar, Odisha
Dr. Ajit Kumar Shasany	Director, ICAR-NIPB, New Delhi
Dr. Sudhanshu Singh	Director, IRRI South Asia Regional Centre, Varanasi, Uttar Pradesh
Dr. AR Sharma	Director Research, Rani Lakshmi Bai Central Agricultural University, Jhansi, Uttar Pradesh

Local Organizing Committee

Name	Role	Designation & Address	
Dr. Dipankar Maiti	Chairman	Director, ICAR-NRRI, Cuttack	
Dr AK Nayak	Convener	Editor-in-Chief, ARRW and Head, CPD, ICAR-NRRI, Cuttack	
Dr MJ Baig	Co-Convener & Organizing Secretary	Secretary, ARRW and Principal Scientist, CPB, ICAR-NRRI, Cuttack	
Dr. Totan Adak	Organizing Secretary	Treasurer, ARRW and Scientist, CPT, ICAR-NRRI, Cuttack	
Dr. KA Molla	Organizing Secretary	Scientist, CPBD, ICAR-NRRI, Cuttack	
Dr. P Bhattacharyya	Member	Principal Scientist, CPD, ICAR-NRRI, Cuttack	
Dr. S Samantaray	Member	Principal Scientist, CID, ICAR-NRRI, Cuttack	
Dr. SD Mohapatra	Member	Principal Scientist, CPtD, ICAR-NRRI, Cuttack	
Dr. B Mondal	Member	Principal Scientist, SSD, ICAR-NRRI, Cuttack	
Dr. K Chakraborty	Member	Senior Scientist, CPBD, ICAR-NRRI, Cuttack	
Dr. Anjani Kumar	Member	Scientist, CPD, ICAR-NRRI, Cuttack	
Dr. Parameswaran C	Member	Scientist, CID, ICAR-NRRI, Cuttack	
Dr. Basana Gowda G	Member	Scientist, CPtD, ICAR-NRRI, Cuttack	
Dr. PS Hanjagi	Member	Scientist, CPBD, ICAR-NRRI, Cuttack	
Dr. AK Pradhan	Member	Scientist, SSD, ICAR-NRRI, Cuttack	
Mr. SK Sinha	Member	Technical Officer, Director Cell, ICAR-NRRI, Cuttack	
Mr. SK Sethi	Member	In-charge, ARIS Cell, ICAR-NRRI, Cuttack	

Contact

Dr. MJ Baig

Co-convener and Organizing Secretary, ARRW Diamond Jubilee National Symposium 2021 & Secretary, ARRW, Principal Scientist, ICAR-NRRI, Cuttack 753 006, Odisha, India

> Mob. No.: +919437947925 Email: mjbaigcrri@gmail.com