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INSIDE THIS ISSUE:

Visit of Dr. Adam Price 2

Invited talks 2

Gender sensitisation initiatives at IRDM 2

Research @IRDM 3

Research-in-Focus: Organic Farming 3

News-in-Focus: New courses 3

Students' Corner: LOA 2018 4

Faculty Activities 4

The Vice-Chancellor speaks



**Swami Atmapriyananda
Vice-Chancellor**

Among the 'thrust areas' chosen for study and research in our University bearing Swami Vivekananda's hallowed name is 'Integrated Rural Development and Management (IRDM)' and the Centre chosen for

the implementation of postgraduate and research programmes in this important area is Ramakrishna Mission Ashrama, Narendrapur which has several decades of experience in running programmes on education, outreach and extension programmes in agriculture, rural development and related fields with an ideal ambience, elevating and peaceful. After a decade of initial struggle, this Centre can now proudly boast of being one of the finest Centres in the State of West Bengal in the field of agriculture and rural development for education and research in these areas. This *Newsletter*, whose first issue is being

published on the eve of the Bengali New Year's Day, will tell the story of the IRDM Faculty Centre in its journey towards greater heights of excellence. On this occasion, we seek the good wishes, cooperation and support of all the stakeholders for the success of this new venture. May it enlighten, enliven and encourage all those connected with the IRDM Centre at Narendrapur for years to come is the earnest prayer of

Swami Atmapriyananda
Vice Chancellor

New Dean at the IRDM Faculty Centre



Prof. Tapash Dasgupta assumed the office of the Dean, IRDM

Faculty Centre on 1st January 2018. Prof. Dasgupta brings a wealth of academic and administrative skills to the role of Dean. He is an alumnus of Bidhan Chandra Krishi Viswavidyalaya and did his Post-Doctoral research from ICRISAT. Prof. Dasgupta received Marie-Curie International Fellowship to work as a Visit-

ing Professor at the University of Aberdeen, UK and CIRAD, France. Later, he served as Professor and Director at the Institute of Agricultural Science, University of Calcutta. Prof. Dasgupta is an eminent plant breeder, prolific writer and has developed several popular varieties of sesame and rice.

RKMVERI implements the Erasmus Plus Project

RKMVERI is partnering with 13 other Universities in the European Commission supported Erasmus Plus project titled "Strengthening Education Research and Innovation in Environmental Health in Central Asia" since 2016. As a part of the programme, two PhD scholars of IRDM Faculty Centre (Jayashree Sen and Tandra Mondal) participated in a capacity building programme organized by University of Milano, Italy during 3-21 July 2017. The training programme covered three

universities of Europe, namely University of Milano, Italy (2 to 8 July), University of Tartu, Estonia (9 to 15 July) and Technical University of Berlin, Germany (16 to 23 July). The course content covered different topics on occupational and environmental health, such as basic research skill, the RISK 21 framework, pesticides risk assessment, methods for studying extreme temperature health effects, indoor environment and health, E-Learning Tools.



PhD scholars of IRDM Faculty Centre participated in a workshop at University of Milano, Italy

Adam Price speaks on genetic mapping of rice

Adam Price addressing the audience at the IRDM Faculty Centre



Dr. Adam Price, Professor of Plant Molecular Biology, University of Aberdeen, Scotland delivered a talk on “Accurate genetic mapping in rice” on 9 March, 2018 at the Seminar Hall of IRDM Faculty Centre. Dr. Price shared his journey as a geneticist and his

long-standing association with the genetic mapping of rice. Students, scholars and faculty members of the IRDM Faculty Centre attended the seminar and interacted with Dr. Price. The Dean and faculty members of the Narendrapur Centre discussed the possibility of initiating collaborative programs between IRDM Faculty Centre and University of Aberdeen.

Invited talks are regularly held at IRDM Faculty Centre to bring in new ideas and intellectual stimulation

Invited talks and visits at IRDM

Dr. Samarth Chandra, formerly a doctoral fellow at TIFR and a post-doctoral fellow from NIH, USA, delivered an interesting talk on the role of “Electric impulse in solute movement in plants and also in neurons” on 8th May, 2017 at IRDM Faculty Centre, Narendrapur.

Dr. Ranajit K. Samanta, former Vice-Chancellor of Bidhan Chandra Krishi

Viswavidyalaya and former Director of National Academy of Agricultural Research Management delivered a popular lecture on “Scientists’ Profile of Personality to Win and Excel” on 3 November 2017 at the IRDM Faculty Centre. The faculty members and students interacted with Dr. Samanta and reflected on the outcomes of several psychological tools.

Dr. N. Ravisankar, National PI, Network Project on Organic Farming (NPOF) and Principal Scientist, ICAR-Indian Institute of Farming Systems Research (ICAR-IIFSR), visited the IRDM Faculty Centre on 21 November 2017. Apart from monitoring the NPOF project, he discussed the possibilities of further collaboration between IIFSR and RKMVERI.

Students debating ‘Gender in Development’ at the IRDM Faculty Centre



–A gender sensitization workshop was held at the IRDM Faculty Centre on 11 December

2017. The students prepared posters related to the gender issues and presented them in front of the faculty members. The faculty members addressed diverse gender concerns that plagues our society and the students interacted throughout the event with full enthusiasm.

– International Women’s Day

was celebrated by the students and teachers of the IRDM Faculty Centre on 8 March 2018. The students participated in a debate session and the teachers reflected on the significance of the day. The event was followed by distribution of awards to the winners of the debate competition.

Research@IRDM



– **National Horticulture Mission (NHM) supported project:** The Tissue Culture laboratory at the Faculty Centre is now propagating G9 variety of banana. Also, standardisation of Date palm is going on under the supervision of Dr. Joshitha Vijayan. The laboratory has been developed with the financial

Tissue culture laboratory is ready for mass production of G9 banana

support of Dept. of Food Processing Industry and Horticulture, Govt. of West Bengal.

– **Biotechnology and Microbiology laboratory:** This laboratory is recently being funded by DST-SERB under the supervision of Dr. Gautam Chatterjee.

– **Quality Control Laboratory:** The laboratory has applied for accreditation of Directorate of ISM Drugs Control, Govt. of India and aspires to be recognised as a laboratory for quality certification of Ay-

urvedic products. The laboratory is enriched with instruments like HPLC, GC, HPTLC, AAS and many other advanced analytical instruments.

– Six scholars of the faculty centre have been awarded **PhD degrees** during 2017-18 session—

- Sathi Paul
- Syandan Sinha Ray
- Lucina Yeasmin
- Purnabha Dasgupta
- Sanchayeeta Misra
- Sudarsan Biswas

Research in Focus: Organic farming, new Cancer marker

— **Network Project on Organic Farming (NPOF):** School of Agriculture and Rural Development initiated NPOF in 2015 with full financial support of ICAR-IIFSR, Modipuram. The project has documented growth and yield parameters, and soil physico-chemical and biological properties for four cropping systems with six different crop management practices. Two organic inputs, Panchagavya and Shasyagavya, have been scientifically characterised and validated. Plant-beneficial bacterial isolates from them have also been characterised by mod-

ern biochemical and molecular tools. It has been shown that Shasyagavya is a rich source of nutrients and various plant-beneficial bacteria such as nitrogen fixers, phosphate solubilizers, and IAA producers. This project is expected to become an All India Coordinated Project (AICRP) on Organic Farming in near future.

— **Identification of Cancer marker:** Prof. Amitabha Chatterjee has identified a novel breast cancer marker (Matrix metalloproteinase-2) from the saliva of breast cancer patients using non-invasive methods.

The enzyme stays in highly active form in saliva of the patients but gets reduced appreciably after surgery. This marker is found to be very efficient in both diagnosis and prognosis. The work has already been presented as an invited lecture at the International Cancer Conference in Boston, USA in August 2016. This is the first report of its kind in world literature. Since the sample is taken from bio fluid using noninvasive method, it holds great promise in commercialisation of this innovation.

“New cancer marker from saliva of breast cancer patients identified”

New Courses at the IRDM Faculty Centre from 2018-19 session

– **New courses at the IRDM Faculty Centre:** Several new courses will commence from the 2018-19 academic session at IRDM Faculty Centre—

a) MSc (Agriculture) in Genetics and Plant Breeding (10 seats); Eligibility: BSc (Agriculture) Hons. with minimum 60% marks

b) PG Diploma in Post-Harvest and Food Technology (15 seats); Eligibility: BSc (Chemistry) Hons/BSc (Agriculture) Hons/ BSc (Horticulture) Hons, or BSc

(Hons.) in any branches of Biological Sciences with 50% marks

c) PhD (Agriculture) in Genetics and Plant Breeding; Eligibility: MSc (Ag.) in Genetics and Plant Breeding/ Plant Breeding with BSc (Ag.) Hons. securing at least 60% marks

– Prof. P.K. Nag has received a INR6m project titled “Human surface thermographic profiling as indicator of climate susceptibility and impact mitigation using social networking” from the Dept. of Science and Technology, Govern-

ment of India. The project will study the response of human body to changing climatic conditions.

– **DBT project sanctioned:** A new twinning project between North Eastern Hill University and RKMVERI, titled “Development of potential AChE inhibitors from North-East Indian plants”, has been approved by Department of Biotechnology (DBT), Govt. of India under Dr. Alok Kumar Hazra.

Students' Corner: LOA-2018, RLLE, Tri-celebration

- The students of the Semester-III, MSc ARD course completed their Learning through Organisational Attachment (LOA) programme at eleven development organisations of the country during 13 January – 12 March 2018. Some of the prominent organisations were - National Institute of Rural Development, National Innovation Foundation, Samaj Pragati Sahyog, Snehalaya, Child in Need Institute and Save Our Soul Children's Village.
- The students of the Semester-III, MSc AgBT course completed their LOA programme during 18 August to 22 September 2017 at different Agricultural Research and Development organisations.
- The Rural Living and Learning Experience-II (RLLE) of MSc ARD course was organised during 6-21 September 2017 at different villages of West Bengal.
- Most of the passed out students (2017 pass-out) of the ongoing courses are



Students participating in the community radio programme of Snehalaya (Radio Nagar)

working in different organizations with reputation. Some of these organizations are — National Innovation Foundation, Child in Need Institute, Weather Risk Management Services Ltd., Ambuja Neotia Foundation, Samaj Pragati Sahyog, Agricultural Technology Management Agency, Krishi Rasayan Pvt. Ltd., Pan Seeds Pvt. Ltd., Collectives for Integrated Livelihood Initiatives (CInI), Tata Trust, Pravah-Jharkhand, Develop-

ment Research Communication and Service Centre, Tea Research Institute, Presidency University, IIT-Guwahati, IISER-Bhopal, University of Hyderabad.

- The students and staff of the IRDM Faculty Centre participated in the Tri Celebrations of the Ramakrishna Mission Ashrama, Narendrapur during 26-29 January 2018. The students hosted a stall that featured the history of IRDM Faculty Centre, its activities and ongoing projects.



Students hosted a stall in the Tri-Celebration at RKMA-Narendrapur

Faculty Activities

- Dr. Amitava Chatterjee delivered a Keynote Lecture on breast cancer marker in the Bioleagues Indo-Oncology Conference held at Bhubaneswar during 2-4 February 2018.
- Mr. Amitava Dutta participated and delivered and invited lecture in the 1st International Conference on "Promoting Community and Environmental Sustainability" organised by Community Social Work Practice & Development Foundation at Dhaka, Bangladesh during 20-21 March 2018.
- Prof. Tapash Dasgupta has been appointed by the Director General-ICAR as an Expert Member of Genetics and Plant Breeding in the Research Advisory Committee of ICAR-CRIJAF.
- Prof. Tapash Dasgupta delivered the Dipa Memorial Lecture titled "Agricultural Challenges and Priorities in India" at the Bose Institute, Kolkata on 5 December, 2017.
- Dr. Rupak Goswami delivered an invited talk at the Special Concurrent Session on "Out-scaling Site-specific nutrient management using Nutrient Expert Fertilizer Decision Support Tool" at the



Mr. Amitava Dutta addressing the conference participants at Dhaka, Bangladesh

82nd Annual Convention of ISSS at the Amity University, Kolkata, on December 12, 2017.

- Dr. Gautam Chatterjee delivered an invited talk in the 10th Conference on Yeast Biology at Jawaharlal Nehru University, New Delhi, India during 8-11th February, 2018.



Delegates in front of the JNU Convention Centre