



University of Agricultural Sciences, Bangalore
Department of Plant Biotechnology
Silver Jubilee Year 2022

International Conference

On

BIOTECHNOLOGY

TRENDS AND FUTURE PROSPECTS

Date: September, 13-15, 2022 | Venue: UAS, GKVK, Bengaluru-560 065



Celebrating 25 years of Academic Excellence

Chief Patron:

Dr. S. Rajendra Prasad

Vice-Chancellor, University of Agricultural Sciences Bangalore

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About the University

The University of Agricultural Sciences Bangalore (UASB) was established in 1964 as the first State Agricultural University (SAU) in Karnataka. This University has a legacy of more than 100 years as an Experimental Agricultural Station at Hebbal with 30 acres of land donated by Her Excellency Maharani Kempa Nanjammanni Vani Vilasa Sannidhi, the Regent of the then princely state of Mysore in 1899. Many visionaries, to be highlighted, Dr. Lehmann, German Scientist who initiated research on soil crop response with laboratory in the Directorate of Agriculture, later in 1906, Dr. Leslie Coleman, a Canadian Entomologist and Mycologist who succeeded Dr. Lehmann, strengthened the foundation for modern agricultural academics and research in Karnataka under the wings of this institution. Academic expansion happened by way of establishing the Mysore Agriculture Residential School at Hebbal in 1913, Agriculture College at Hebbal in 1946 with four year professional degree program in Agriculture affiliated to the University of Mysore. In 1964, with 1300 acres of land at Gandhi Krishi Vigjana Kendra Campus the University of Agricultural Sciences Bill (Act No. 22) which received assent of the President of India to become the Law. In 1964, Government appointed Dr. K.C. Naik, MSc, Ph.D (Bristol) working with USAID as the first Vice Chancellor on 12th June 1964. The UAS, GKVK campus was inaugurated by Dr Zakir Hussain, the Vice President of India on the 21st Aug 1964.

Department of Plant Biotechnology

The Department of Plant Biotechnology was established in 1996 with an aim of building human resource and conducting advanced research in biotechnological aspects for crop improvement. The department is presently functioning in a 3380 sq.mtrs building 'Advanced Center for Plant Biotechnology' with state-of-the-art infrastructure for research labs, teaching labs, modern class rooms, Bioinformatics lab, seminar hall, auditorium & library. The central instrumentation facility of the department has advanced analytical instruments viz. GC-MS, Fluorescence microscope, DNA Fragment Analyser, RT-PCR, HPLC, Ultra Centrifuge, Deep Freezer & Phase Contrast microscope, Lyophilizer, UV-VIS Spectrophotometer with Kinetics, Speed Vac, etc. for conducting research in genomics, metabolomics, molecular biology, plant transformation, nanotechnology, molecular diagnosis, biofuel, molecular markers, etc. Presently, the department is funded under DST-FIST (Fund for Improvement of S&T Infrastructure) Level II DST, GOI. Since its inception, the department is continuously supported by ICAR, RKVY, KBITS, DBT-HRD programme, BIRAC, DST FIST, KIRK HOUSE Trust, UK, and DBT-UAS HUB projects.

The department has Master's degree programme in three disciplines, Plant Biotechnology, Plant Biochemistry and Bioinformatics and also Ph.D. programmes in Biotechnology and Biochemistry.

The major research achievements and research areas

1, Isolation of Phosphate Solubilizing Bacteria (PSB); 2, Vit A enriched rice; 3, Plant Vaccines; 4, Enhancement of shelf life of tomato; 5, Drought tolerant bio fortified aerobic rice genotypes with high Zn and Fe content; 6, Anther culture in rice; 7, PR proteins; 8, Micorrhiza (VAM); 9, Biofuel; 10, Detection of cardamom Mosaic Virus (CdMV) for diagnosis of the virus; 11, Biosensor for detection of Papaya Ring Spot Virus (PRSV) infecting papaya, 12, Compost Tea (CT) application for enhanced biomass, yield and disease control in crops; 13, Early bearing and high yielding Jack fruit genotypes released and propagated for sales; 14, Ragi genome has been Sequenced, Association mapping panel and mapping populations developed; 15, Development of mapping populations and fine mapping of wilt resistance in Chickpea, QTLs in Ragi; 16, Heat tolerant inbred lines developed in Maize and promising hybrids produced; 17, Efficient strains of Microalgae for biofuel production identified; 18, Multigene approach for the development of transgenic maize against Turicum leaf blight; 19, Development of transgenic mulberry for the expression of antiviral proteins against BmNPV infection in mulberry silkworm; 20, Phytosynthesis of nanoparticles and application in Agriculture; 21, Host-parasite interaction of the root parasite Sandalwood.

BioNEST Agri-Innovation Center UASB

Two faculty from the Dept. of Plant Biotechnology are the PIs of a project funded by BIRAC, Gol, Main objective is to strengthen the start-up activities in the University and set-up a BioNEST incubator with state of the art facilities for Agri-entrepreneurs. The BioNEST AIC, UASB has two novel features of a Biological Repository and a Knowledge Cell along with the core functions of technology business incubation. The incubator is closely associated with Department of Plant Biotechnology and several of the faculty serve as Mentors to the start-ups. The BioNEST AIC conducts regular trainings and webinars for the students, faculty and entrepreneurs to create awareness about start up opportunities and encourage innovation in Agriculture and allied sectors.

Scope of the Conference

Biotechnology is one of the disciplines of life sciences with a great potential to contribute in the advancements of Agriculture, Medicine, Food, Feed and many Industrial processes. To extend the reach and multiply the utility of current understanding, fundamental and applied research findings in the core areas of biotechnology need to bridge with other non-biotechnological disciplines in order to enhance the cohesion between different expertise as well as for the evolution of transdisciplinary outcomes. Therefore, scientists from universities and research institutions who made a good foundation in their respective research area and willing to explore into transdisciplinary research, partnering with core and allied biotechnological areas, are invited for new opportunities in the frontier areas of advanced biotechnology. This conference aims at bridging disciplines such as advanced biotechnology, biochemistry, genomics, metabolomics, big-data analytics, etc.

Thematic Areas of Conference

1. Crop Improvement by Molecular and Biotechnological Approaches

Genetic Engineering and Genome Editing, Cell and Tissue Culture, Marker Assisted Breeding, RNA Biology.

2. Frontiers in Biochemistry and Bioinformatics

Protein Engineering, Signal Transduction and Plant Communication, Omics, Post-Harvest Technology, Nanotechnology, Phyto-chemistry

3. Environmental and Bio-fuel Biotechnology

Endophytes, Bio-control agents, Biofertilizers and PGPRs, Biofuels

4. Fisheries and Animal Biotechnology

Veterinary and Fisheries

5. Industrial Biotechnology

Cell culture based production, Secondary metabolites, Immobilized cell technology, Pharma farming

6. Entrepreneurship in Biotechnology

Crop improvement, Bio energy, Medical and Veterinary, Fisheries, Cell culture based production, post harvest technology

Awards will be conferred to best oral and poster presentations.

Who can attend this conference?

Scientist from research institutions, University faculty members, alumni of the Department of Biotechnology, postgraduate students, research scholars, industry professional, etc.

Call for Research Abstract

Research abstracts, broadly within the scope of the conference thematic areas, written in English language (250 words), are solicited with declaration of originality. Abstracts may be submitted electronically during the registration. Abstracts will be published in the conference compendium. A poster depicting the major research finding presented in the abstract need to be placed in the poster session during the conference. Abstract submission deadline: 20th August 2022.

Registration Fee (INR)

	Offline	Online
Students and Research Scholars	1,000	500
Scientist/University Faculty members	2,500	1,500
Industry Professionals	5,000	
Late registration	+250	
On-spot registration	+500	

Registration fee include conference kit, soft copy of souvenir, abstract compendium, lunch and snacks.

Registration dead line: 30th August 2022

Accommodation and Food

Participants need to make their own accommodation. No transportation will be provided by the organizers for the candidates to travel from conference venue to hotels.

Only lunch will be provided for the registered participants. Tea and light snacks will be provided between the sessions.

Schedule of Event

	FN-Session-1		FN-Session-2		AN-Session-1		AN-Session-2
Day 1	Inaugural Function	Tea Break	Crop Improvement by molecular and Biotech. Approaches (Part-1)	Lunch Break	Crop Improvement by molecular and Biotech. Approaches (Part-2)	Tea Break	Crop Improvement by molecular and Biotech (Online)
Day 2	Frontiers in Biochemistry and Bioinformatics (Part-1)		Frontiers in Biochemistry and Bioinformatics (Part-2)		Environmental and Bio-fuel Biotechnology		Frontiers in Biochemistry and Bioinformatics (Online)
Day 3	Fisheries and Animal Biotechnology		Industrial Biotechnology		Entrepreneurship in Biotechnology		Valedictory Function

Venue: Rajendraprasad Convention Centre / North Block Auditorium, University of Agricultural Sciences, GKVK, Bengaluru-560 065

Language of conference: English

Note

The organizing committee is not responsible for any financial transaction the participants make with local hotels and travel agents. The payment towards your accommodation and travel should be borne by the participants. All expenditure pertaining to the accompanying person should also be borne by the participant.

COVID Advisory

All participants are required to get two dose vaccination and adhere to the COVID appropriate behavior guidelines issued by the local competent authority from time to time.

Lead Speakers

Crop Improvement by Molecular and Biotechnological Approaches



Dr. A. K. Singh
Director
IARI, New Delhi

Crop Improvement



Dr. K. G. Raghothama
Professor, Purdue University
USA

Plant Nutrient Absorption



Dr. Ramanjini Gowda
Prof. (Rtd.), Member
Board of Regents
UAS Bangalore

Genetic Engineering



Dr. C. S. Prakash
Professor, Tuskegee
University, Alabama
USA

Crop Genomics



Dr. Ravikumar R. L.
Prof. (Rtd.), Department of
Plant Biotechnology,
UAS Bangalore

Marker Assisted Breeding



Dr. Jochen Kumlehn
PK Gatersleben
Germany

**Transgenesis & Genome
Editing**



Dr. C. Viswanathan
Division of Plant
Physiology, IARI
New Delhi

Abiotic stress and Epigenetics



Dr. Vibha Ahuja
Chief General
Manager, Biotech
Consortium India
Limited, New Delhi

Biosafety



Dr. Kishor D.S.
Department of Biological Sciences
College of Natural Science
Seoul National University
South Korea

Fast-Track Breeding



Dr. Hee -Jong Koh
Professor in Plant Breeding
Dept. of Plant Science
Seoul National University
Seoul, South Korea

Plant Architecture for Higher Yield



Dr. Channa Chikkaputtaiah
Principal Scientist
CSIR-NEIST, Jorhat

Genome Editing



Dr. Ramu S Vemanna
Asst. Professor
RCB, Haryana

Stress Tolerance in Crops

Frontiers in Biochemistry and Bioinformatics



Prof. R. Sowdhamini
NCBS, Bangalore
Karnataka, India

Computational Biology



Dr. P. V. Shivaprasad
NCBS, TIFR, Bangalore
Karnataka, India

Plant Epigenetics



Dr. Utpal Nath
Professor, Indian
Institute of Science, Bangalore

Molecular Plant Development



Dr. Satendra Kumar
Mangrauthia
Scientist, IIRR, Hyderabad

Stress Tolerance



Dr. Murukarthik Jayakodi
Head of Grain Legume
Genomics group, IPK
Gatersleben, Germany

Genomics



Dr. Ramesh S V
Scientist, ICAR-CPCRI, Kasaragod

Plant Biochemistry



Dr. Dinesh A. Nagegowda
Principal Scientist
CSIR-CIMAP
Bengaluru

Metabolic Engineering



Dr. Kisan Babu
Asst. Professor
UAS, Raichur

Bioprospecting

Environmental and Bio-fuel Biotechnology



Prof. Dr. Oelmüller, Ralf
Professor, Friedrich
Schiller University, Jena, Germany
Molecular Interactions of Endophytes



Dr. T. K. Siddarame Gowda
Prof. (Rtd.), Department of
Biotechnology
UAS Bangalore
Agricultural Biotechnology



Dr. Vandana Vinayak
Dr. Harisingh Gour
Vishwavidyalaya, Sagar, INDIA
**Diatom Nano Engineering
and Metabolism**

Fisheries and Animal Biotechnology



Dr. Shankar, K. M
Prof (Retd.)
Fisheries college, University of
Veterinary Sciences, Bidar
Biotechnology in Fisheries



Dr. Ravi Manjithaya
Professor
JNCASR, Bangalore
Molecular Neuroscience,



Dr. Sweety Samal
Scientist, THSTI, New Delhi
Translational health Science and
Technology Institute, Faridabad
Virology & Animal Models

Industrial Biotechnology



Dr. Narasimha Prasad
Samartha Life Science
Tumkur, Karnataka
Vaccines



Dr. Basavaraj Girevannur
Cryagen, Bangalore
Biotech. Entrepreneurship

Entrepreneurship in Biotechnology



Dr. K. Shrinivas
ADG, Intellectual Property
ICAR, New Delhi
**Unleashing Innovation &
Entrepreneurship
in Agriculture, Biotechnology
and Allied Sectors**



Dr. K K Narayanan
CEO, Agrigenome,
Bangalore, India
**Biotechnology
Entrepreneurship**



Dr. Ramjee Pallela
Atal Incubation
Centre of CCMB
Hyderabad
Biotechnology Entrepreneurship



Dr. Suhas Nimbalkar
Partner & Consultant, IP & Regulatory Affairs
eitimo Ventures
Bengaluru
Regulatory Compliances for Startups

Registration

Scan the QR code or click the hyperlink for online registration



<https://forms.gle/KFe6fTLjqGn685M59>

Account Detail:

Account Name: Organising Secretary BTFFP
AC/No.: 110053242583
Name of the Bank: Canara Bank
IFSC: CNRB0002737
Branch: GKVK, Bengaluru-560 065, Karnataka, INDIA

Registration Fee payment:



UPI ID: 310609076242583@cnrb



Organizing Committee

Organizing Secretary:

Dr. Shyamamma S.
Professor & Head

Co-organizing secretaries:

Dr. K. M. Harinikumar
Professor and AO, UAS Bangalore
Dr. Anitha Peter
Professor
Dr. Veena S. Anil
Professor

Organizing Committee Members:

Dr. Krishnaprasad, B. T; **Dr. Benherlal, P. S.**
Dr. Mohan Chavan; **Dr. Nagesha, N.**
Mrs. Poornima, R.; **Dr. Ningaraju, T. M.**
Dr. Nagesha, S. N.; **Dr. Ramesh, B. N.**
Dr. Bhavani. P.; **Dr. Geetha Govind**
Dr. Manoj Kumar, H. B.

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Explore Bangalore and Neighborhood....

Bengaluru Urban

Bengaluru is a fast-paced amalgam of the old and new. It is an exciting destination with tantalising sights to take in, mixed with the sensations of a happening cosmopolitan city. Bengaluru Urban is more than just a city; it is a vibrant melange of the past, present and future, a potpourri of experiences unlike any other! With its cosmopolitan nature, Bengaluru welcomes you into its fold.



Major Attractions



Lalbagh Botanical Garden



Bannerghatta National Park



ISKCON Sri Radha Krishna Temple



Visvesvaraya Industrial and Technological Museum

Mysuru

Mysuru, the 'City of Palaces', is royalty and magnificence embodied; overflowing with history, sprawling gardens and tree-lined boulevards. One of South India's most fascinating cities, Mysuru has a plethora of places to visit and explore. Ruled over by the Wadiyars from 1399 till Independence, Mysuru is renowned for its royal heritage and splendid monuments and buildings.

Major Attractions



Mysuru Palace



Chamundeshwari Temple



Jayalakshmi Vilas Palace



Nagarahole National Park



Mandya

Mandya is also known as the land of five rivers due to the presence of the rivers Cauvery, Hemavathi, Shimsha, Veeravaishnavi and Lokapavani. These rivers give Mandya both religious importance and scenic beauty. Mandya has been ruled by many dynasties like Gangas, Cholas, Hoysalas, Vijayanagara, Prabhus of Nagamangala and Wadiyars but the major influence has by Hyder Ali-Tipu Sultan regime as they had their capital in Srirangapatna.

Major Attractions



Brindavan Gardens



Ranganathittu Bird Sanctuary



Kokkarebellur



Shivanasamudra



Hassan

Hassan is blessed with a pleasant climate and a great picturesque location. It is here where the plains (maidaans) begin to gently slope into the Western Ghats (malnad). Although not a proper hill station, Hassan is often referred to as "Poor Man's Ooty". It is also associated with the Hoysala Empire who had their capital at Belur and Dwarasamudra (present-day Halebeedu). The district is a veritable treasure-house of Hoysala architecture and sculpture, the best specimens of which are at Belur and Halebeedu.

Major Attractions



Halebeedu



Belur



Shravanabelagola

