



# MARUDHAR KESARI JAIN COLLEGE FOR WOMEN, VANIYAMBADI

(A Project of Sri Marudhar Kesari Jain Trust)



Recognised u/s 2(f) & 12(B) by UGC Act, 1956 - Permanently Affiliated to Thiruvalluvar University  
Re-Accredited by NAAC with "A" Grade, An ISO 9001:2015 Certified Institution

## PG AND RESEARCH DEPARTMENT OF BIOTECHNOLOGY ORGANIZED SCIENCE ACADEMIES LECTURE WORKSHOP ON INNOVATION IN MICROBIOLOGY AND BIOTECHNOLOGY - 09.12.2021 & 10.12.2021

### INVITATION

#### MANAGEMENT TRUSTEES

Sri M. Vimala Chand Jain	President
Sri J. Rathanaiah Jain	Vice President
Sri C. Lickmichand Jain	Secretary
Sri N. Sripal Kumar Jain	Treasurer
Sri M. Sudarsan Kumar Jain	Trustee
Sri K. Rajesh Kumar Jain	Trustee
Sri N. Lalith Kumar Jain	Trustee
Sri K. Anand Kumar Jain	Trustee
Sri U. Rishab Jain	Trustee

#### PATRON

Dr. M. Inbavalli	Principal
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#### CONVENER

Dr. MS. Sheshshayee  
Professor, Department of Crop Physiology,  
University of Agricultural Sciences,  
GKVK Campus, Bengaluru - 560 065

#### COORDINATOR

Dr. M. Gomathi  
Assistant Professor & Head,  
PG and Research Department of Biotechnology,  
Marudhar Kesari Jain College for Women,  
Vaniyambadi - 635 601, Tirupattur Dt., Tamil Nadu  
Email: hod.biotechnology@mkjc.in; Mobile: +91-9159891623

#### ORGANIZING COMMITTEE

Ms. S. Aruna, Assistant Professor	Dr. R. Jesu Jaya Sudan, Research Co-Ordinator
Ms. S. Santhiya, Assistant Professor	Dr. J. Lestha Jeeva Kumari, Research Associate
Ms. P. Amudhanila, Assistant Professor	
Ms. R. Thenmozhi, Assistant Professor	
Ms. Y. Sujithra, Assistant Professor	
Ms. S. Anupriya, Assistant Professor	

NO. OF PARTICIPANTS : Maximum 150

REGISTRATION - FREE

<https://forms.gle/8XoQB7m16wJTBsN9>

#### SCIENCE ACADEMIES' LECTURE WORKSHOP ON INNOVATIONS IN MICROBIOLOGY AND BIOTECHNOLOGY

#### Sponsored By



Indian Academy of  
Sciences  
(Bengaluru)

Indian National  
Science Academy  
(New Delhi)

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(Allahabad)

#### Organized by



#### PG AND RESEARCH DEPARTMENT OF BIOTECHNOLOGY MARUDHAR KESARI JAIN COLLEGE FOR WOMEN

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Permanently Affiliated to Thiruvalluvar University  
Re-Accredited with "A" Grade by NAAC || An ISO 9001:2015 Certified Institution  
Marudhar Nagar, Chinnakallupalli, Vaniyambadi - 635 751.

Website: [www.mkjc.in](http://www.mkjc.in)



#### HOST INSTITUTION

Marudhar Kesari Jain College for Women (MKJC), established in the year 1994, is approved by Govt. of Tamil Nadu. Recognized u/s 2(f) & 12(B) of UGC Act 1956 and is Permanently Affiliated to Thiruvalluvar University. It has been re-accredited with "A" grade (3rd cycle) by NAAC, Bangalore (UGC recommended) in the year 2019 and certified by BSI as an ISO 9001:2015 certified institution in the year 2018. The institution is "a dream come true" of Sri. Marudhar Kesari, who was a great poet, powerful orator and a champion of social service and public welfare.

The focus of the college is RURAL DEVELOPMENT through women education. The college now offers 16 U.G. Programmes, 13 P.G. Programmes, 7 M.Phil. Programmes and 6 Ph.D. Programmes. The college has grown to a strength more than 2900 students, 181 Teaching staff and 159 Non Teaching staff.

The college is located in Vaniyambadi - Tirupattur Highway in Vellore District. It has a sprawling campus of 25 acres with a built-in area of about 2,15,000 Sq.ft. It is set amidst beautiful sylvan surroundings at the foot of Yelagiri Hills with vast stretches of greenery all around providing a congenial atmosphere for teaching and learning.

#### ABOUT THE DEPARTMENT

The department of UG Biotechnology was started in the year 2007, PG Biotechnology in the year 2014 & M.Phil Biotechnology in the year 2018 and Ph.D Biotechnology in the year 2019. The department has well established laboratory facility. The department periodically organizes various Seminars/ Conferences/ workshops. Faculty members of Biotechnology department are actively engaged in Teaching, Research and Publication of articles & books and in turn impart innovative research oriented teaching to the students.

#### ABOUT SCIENCE ACADEMIES

Indian Academy of Sciences was founded in 1934 by Sir C.V. Raman, Nobel Laureate. Its objectives include promoting the progress and upholding the cause of science, both in pure and applied branches. Starting in the mid-1990s, the Indian Academy of Sciences had initiated several activities for the benefit of students and teachers of science all over the country. These included Summer Research Fellowships for students and teachers to work with Fellows of the academy and other faculty in the country; Refresher Courses of two-week duration for teachers; Lecture Workshops of 2 or 3 days duration for students and teachers. The Indian National Science Academy (New Delhi) and The National Academy of Sciences, India (Allahabad) joined with this Academy in conducting three of the programmes viz. Summer Research Fellowships, Refresher Courses, and Lecture Workshops.

#### RESOURCE PERSONS

##### Dr. D. J. Bagyaraj

NASI Honorary Scientist and Chairman,  
Centre for Natural Biological Resources and Community Development,  
Bengaluru-560 064.

##### Dr. MS. Sheshshayee

Professor, Department of Crop Physiology,  
University of Agricultural Sciences,  
GKVK Campus, Bengaluru - 560 065.

##### Dr. T.K. Adhya

Director, South Asia Nitrogen Centre,  
New Delhi Co-Director (Science) UKRI GCRF South Asia Nitrogen Hub &  
Professor, School of Biotechnology,  
Kalinga Institute of Industrial Technology (Deemed University)  
Bhubaneswar - 751 024, Odisha

##### Dr. H. Prathap Kumar Shetty

Professor, Department of Food Science and Technology,  
School of Life Sciences,  
Pondicherry University (A Central University),  
RV Nagar Kalapet, Pondicherry - 605 014.

#### TOPICS TO BE COVERED

- Microorganisms as a Source of Human Medicine
- Arbuscular Mycorrhizal Fungi for Sustainable Agriculture
- Use of stable isotopes in understanding biological sciences
- Breeding Rice to produce more with less water
- Biodiversity beneath our feet - soil microbial diversity
- Plant growth promotory rhizobacteria in sustainable agriculture
- Gut based strategies for the management of health and wellness
- Inter and intra-microbial communications in health and diseases

#### PARTICIPANTS

Students/ Research Scholars undergoing M.Sc./M.Phil./Ph.D. in Life Sciences from recognized Institutions, Faculty and Industry Professionals.

Dr. M. INBAVALLI, M.Sc., M.C.A., M.Phil., Ph.D.,  
PRINCIPAL  
Marudhar Kesari Jain College for Women  
Vaniyambadi-635 751.



## AGENDA

### SCIENCE ACADEMIES' LECTURE WORKSHOP ON INNOVATIONS IN MICROBIOLOGY AND BIOTECHNOLOGY

PG AND RESEARCH DEPARTMENT OF BIOTECHNOLOGY

MARUDHAR KESARI JAIN COLLEGE FOR WOMEN VANIYAMBADI

Dates of the Workshop: 9.12.2021 & 10.12.2021

Venue/Platform: ZOOM Application and You Tube Live

Streaming

### PROGRAMME SCHEDULE

9<sup>th</sup> December, 2021 (Day 1)

**Inauguration: 10:00 A. M. – 10:15 A. M**  
**(9.45 to 10.00 am – Participants admitted in the Zoom App)**

Welcome Address	Dr. Ms. Sheshshayee Professor, Department of Crop Physiology, University of Agricultural Sciences, GKVK Campus, Bengaluru – 560 065.
Felicitation	Dr. M. Inbavalli Principal, Marudhar Kesari Jain College For Women, Vaniyambadi – 635751

Dr. M. INBAVALLI, M.Sc., M.C.A., M.Phil, Ph.D.,  
PRINCIPAL  
Marudhar Kesari Jain College for Women  
Vaniyambadi-635 751.

## **TECHNICAL SESSION**

<b>TIME</b>	<b>TOPIC</b>	<b>RESOURCE PERSON</b>
Chief Guest Introduction		Ms. A. Ramya sree III B.Sc Biotechnology
10.15 a.m – 11. 30 a.m	Gut based strategies for the management of health and wellness	Dr. H. Prathap Kumar Shetty Professor, Department of Food Science and Technology, School of Life Sciences Pondicherry University (A Central University), RV Nagar Kalapet, Pondicherry 605 014.
Chief Guest Introduction		Ms. N. Uzma Nuzhath II B.Sc Biotechnology
11. 30 a.m – 12. 45 p.m	Use of stable isotopes in understanding biological sciences	Dr. MS Sheshshayee Professor, Department of Crop Physiology, University of Agricultural Sciences, GKVK Campus, Bengaluru – 560 065.
Lunch Break : 12.45 P. M. – 01.45 P.M.		
Chief Guest Introduction		Ms. A. Preetha III B.Sc Biotechnology
01.45 p.m – 03.00 p.m.	Biodiversity beneath our feet - soil microbial diversity	Dr. T.K. Adhya Director, South Asia Nitrogen Centre, New Delhi Co-Director (Science) UKRI-GCRF South Asia Nitrogen Hub & Professor, School of Biotechnology, Kalinga Institute of Industrial Technology (Deemed University), Bhubaneswar – 751 024, Odisha.
Chief Guest Introduction		Ms. R. Pavithra II B.Sc Biotechnology
03.00 p.m – 04.15 p.m.	Microorganisms as a source of Human Medicine	Dr. D. J. Bagyaraj, NASI Honorary Scientist and Chairman, Centre for Natural Biological Resources and Community Development, 41, RBI Colony, Anand Nagar, Bengaluru – 560 024.

Vote of Thanks	Ms. V. Priya III B.Sc Biotechnology
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**10<sup>th</sup> December, 2021 (Day 2)**

TIME	TOPIC	RESOURCE PERSON
10.00 a.m – 11. 15 a.m	Arbuscular Mycorrhizal Fungi for Sustainable Agriculture	Dr. D. J. Bagyaraj, NASI Honorary Scientist and Chairman, Centre for Natural Biological Resources and Community Development, 41, RBI Colony, Anand Nagar, Bengaluru – 560 024.
11. 15 a.m – 12.30 p.m	Breeding Rice to produce more with less water	Dr. MS Sheshshayee Professor, Department of Crop Physiology, University of Agricultural Sciences, GKVK Campus, Bengaluru – 560 065.
Lunch Break : 12.30 P. M. – 01.30 P.M.		
01.30 p.m – 02.45 p.m.	Plant growth promotory rhizobacteria in sustainable agriculture	Dr. T.K. Adhya Director, South Asia Nitrogen Centre, New Delhi Co-Director (Science) UKRI-GCRF South Asia Nitrogen Hub & Professor, School of Biotechnology, Kalinga Institute of Industrial Technology (Deemed University), Bhubaneswar – 751 024, Odisha.
02.45 p.m – 4.00 p.m.	Inter and intra-microbial communications in health and diseases	Dr. H. Prathap Kumar Shetty Professor Department of Food Science and Technology School of Life Sciences Pondicherry University (A Central University), RV Nagar Kalapet, Pondicherry 605 014.
04.00 p.m – 04. 15 p.m.	Valediction	
Vote of Thanks	Ms. J.S. Lakshmi Praba III B.Sc Biotechnology	



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**REPORT**

**DAY - 1 (09.12.2021)**

Two day Virtual Science Academies Lecture Workshop was organized by Department of Biotechnology at Marudhar Kesari Jain College for Women, Vaniyambadi in the zoom platform. 100 participants in zoom and more than 199 participants in the youtube live stream have participated. The program started with prayer song. Welcome address was given by Dr. MS Sheshshayee Professor, Department of Crop Physiology, University of Agricultural Sciences, Bengaluru. Followed by Dr M. Inbavalli, Principal, MKJC felicitated the gathering. Next Ms. A. Ramya sree (III B.Sc Biotechnology) introduced the first speaker Dr. Prathap Kumar Shetty, Professor, Department of Food Science and Technology, School of Life Sciences, Pondicherry University (A Central University), Pondicherry. Then Dr. Prathap Kumar Shetty had taken the session on the topic of Gut Based Strategies for the Management of Health and Wellness. This session describes fermented foods and diversity of fermentation, and also explains about benefits of fermented food to the gut. Next Ms. R Pavithra (II B.Sc Biotechnology) introduced the second speaker Dr. D J Bagyaraj, NASI Honorary Scientist and Chairman, Centre for Natural Biological Resource and Community Development, Bangalore. Next Dr. D J Bagyaraj had taken the session on the topic "Microorganisms as a Source of Human Medicine". In this session he explains about various benefits of microorganism in Industry, Aquaculture, Agriculture, Biofertilizers, plant growth promoting rhizo microorganism, biocontrol organism etc. which uplifted the thoughts of participants.

**HEAD OF THE DEPARTMENT**

**Dr. M. INBAVALLI, M.Sc., M.C.A., M.Phil., Ph.D.,**  
**PRINCIPAL**  
Marudhar Kesari Jain College for Women  
Vaniyambadi-635 751.



Afternoon session Ms. A. Preetha (III B.Sc Biotechnology) introduced the third speaker Dr. T. K. Adhya, Director, South Asia Nitrogen Centre, New Delhi Co-Director (Science) UKRI- GCRF South Asia Nitrogen Hub & Professor, School of Biotechnology, Kalinga Institute of Industrial Technology (Deemed University), Odisha. Subsequently Dr. T. K. Adhya had taken the session on the topic “Biodiversity beneath our feet- soil microbial diversity”. He clearly explained about the biodiversity and different microorganisms in the soil and he elicited many unknown extremities in soil biodiversity which enlighten the participants.

Next Ms. Uzma Nuzhath (II B.Sc Biotechnology) introduces fourth the chief guest Dr M S Sheshshayee, Professor, Department of Crop Physiology, University of Agricultural Sciences, Bengaluru. Then Dr M S Sheshshayee had taken the session on the topic of Use of Stable Isotopes in Understanding Biological Sciences. In this session he noticeably explains about Isotopes and the mass calculations. Eventually the first day programme was ended with vote of thanks by Ms V Priya (III B.Sc Biotechnology).

## **DAY - 2 (10.12.2021)**

The Second day of the conference started with prayer song. Followed by D J Bagyaraj had taken the session on the topic Arbuscular Mycorrhizal Fungi for Sustainable Agriculture. Then Dr M S Sheshshayee had taken the session on the topic of Breeding Rice to produce more with less water. Followed by Dr. T. K. Adhya had taken the session on the topic Plant Growth Promotory rhizobacteria in Sustainable Agriculture. Next Dr. Prathap Kumar Shetty had taken the session on the topic of Inter and Intra Microbial Communications in health and diseases. Finally the Second programme ended with vote of thanks delivered Ms J S Lakshmiprabha (III B.Sc Biotechnology)

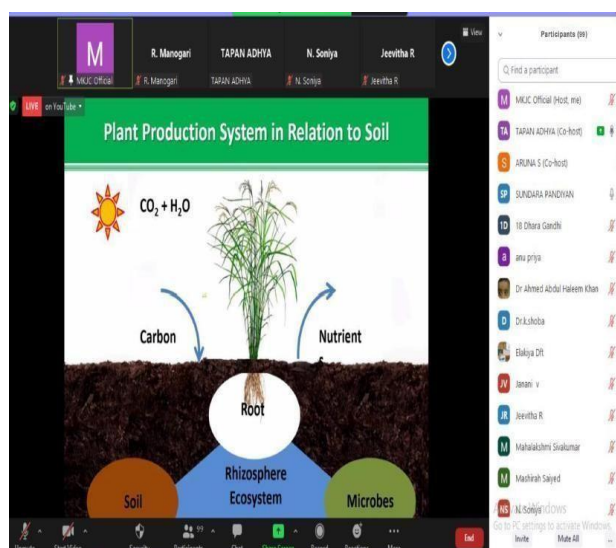
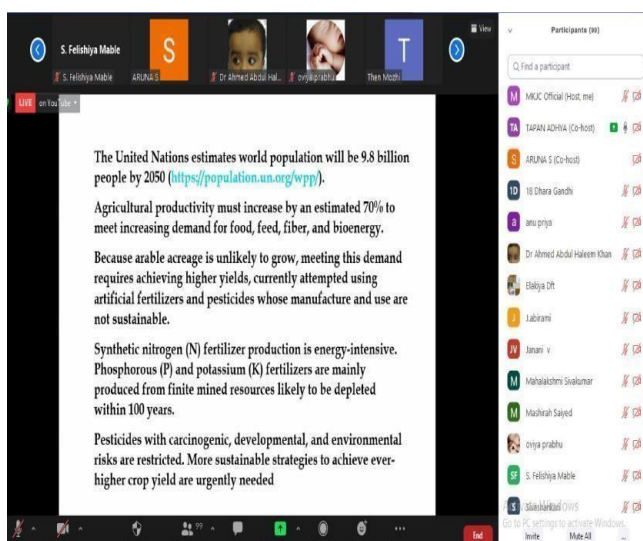
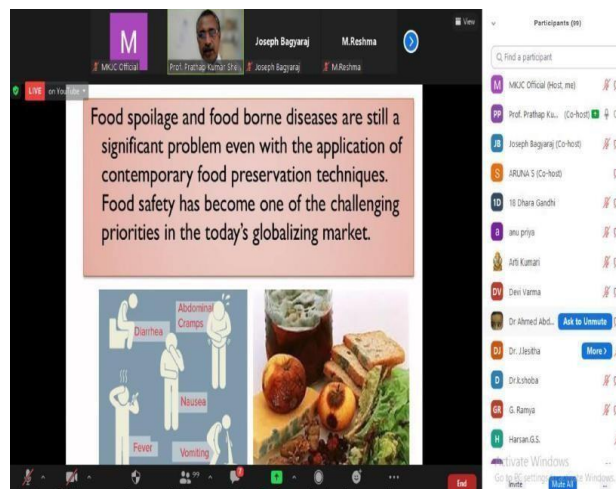


**HEAD OF THE DEPARTMENT**



**Dr. M. INBAVALLI, M.Sc., M.C.A., M.Phil, Ph.D.,**  
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## PHOTOS



*[Handwritten Signature]*

Dr. M. INBAVALLI, M.Sc., M.C.A., M.Phil, Ph.D.,  
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