

**D.K.M COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**

**DEPARTMENT OF ZOOLOGY**

**REPORT ON NATIONAL WEBINAR ON**

**“EMERGING TRENDS IN BIOSCIENCES”**

**Organized on 10.08.2021**

## INVITATION



**D.K.M COLLEGE FOR WOMEN (Autonomous), Vellore -1**  
Affiliated to Thiruvalluvar University, Vellore  
in Commemoration with our Golden Jubilee Year celebration  
**Department of Zoology**  
Organises  
One Day National Level Webinar on  
**Emerging Trends in Biosciences**



**Resource Person-I**  
**DR YOGALAKSHMI. K.N**  
Associate Professor  
Department of Environmental Science  
and Technology  
Central University of Punjab  
Punjab  
*Topic: Solid Waste Management*



**Resource Person-II**  
**DR JASMINE M. SHAH**  
Assistant Professor  
Department of Plant Science  
Central University of Kerala  
Kerala  
*Topic: Epigenetic Regulation and  
Transgenerational Memory in Plants*



10.08.2021  
10.30 am to  
12.30pm

registration free  
to register: <https://forms.gle/k6cvejwffavz1xpp6>

Platforms



**Dr. V. Rekha**  
**Dr. G. Vidhya**  
**Dr. S. Vijayakumari**

**Dr. V. Kiruthiga**  
**Dr. A. Vinodhini**

**Dr. D. Sasikala**  
Convenor  
HOD of Zoology

**Dr. P.N. Sudha**  
Patron  
Principal

**Er. D. Maninathan, Secretary**  
**Dr. T. Sivakumar, President**  
Chief Patrons

Organising Committee Members

# **REPORT**

Department of Zoology of D.K.M College for Women (Autonomous) organised a National level webinar on “**Emerging Trends in Biosciences**” on **10.08.2021** at 10.30 a.m through Google Meet. Dr. D.Sasikala, HOD & Assistant Professor of Zoology, welcomed the gathering. Our Principal Dr.P.N.Sudha, gave the felicitation address.

Dr. A.Vinodhini, Assistant Professor of Zoology, D.K.M College for Women, Vellore, introduced the first resource person Dr. Jasmine Shah, Assistant Professor, Department of Plant Science, Central University of Kerala, Kerala. She gave a very informative and interesting talk on “Epigenetic Regulation and Transgenerational memory in plants”.

Dr. V.Kiruthiga, Assistant Professor of Zoology, D.K.M College for Women, Vellore, introduced the Second resource person Dr.K.N.Yogalakshmi, Associate Professor, Department of Environmental Science and Technology, Central University of Punjab, Punjab. She gave a very useful and fascinating talk on “Solid Waste Management”.

The programme ended successfully with a vote of thanks given by Dr. G. Vidhya, Assistant Professor of Zoology. Dr. V. Rekha and Dr. S.Vijayakumari, Assistant Professor of Zoology, extended their support for the successful conduct of the National webinar.

# PHOTO

The slide displays a flowchart of eukaryotic gene expression. It starts in the **NUCLEUS** with a **Signal** and **Chromatin**. The process involves **Chromatin modification** (DNA packaging, histone modification, and DNA demethylation) and **Gene availability for transcription**. **Transcription** of DNA produces **mRNA**. This is followed by **mRNA processing**, which includes adding a **5' cap** and a **3' poly-A tail**. The **mRNA is transported to the cytoplasm**. In the **CYTOPLASM**, **mRNA is translated** into a **Polypeptide**. This is followed by **Protein processing**, such as storage and chemical modification. The final stage is **Deposition of proteins**, which are then **Transported to cellular destinations** to perform **Cellular functions** (such as enzymatic activity and structural support).

10:45 AM | vsm-pgtw-ypt

The slide illustrates stress-induced transgenerational phenotypic changes using a diagram of three plants. A blue arrow labeled **Stress** points to the first plant. An orange starburst indicates **Increased fitness (seed production per individual)**. The second and third plants show a reduction in stress, with a minus sign between them, suggesting that the fitness benefits persist across generations.

11:01 AM | vsm-pgtw-ypt

Fwd: National Webinar on "Emerg... Meet - vsm-pgtw-ypt  
meet.google.com/vsm-pgtw-ypt?pli=1&authuser=1

Yogalakshmi K is presenting

## How much waste do we generate?

**WASTE GENERATION PER PERSON PER DAY (IN KG) IN SELECTED COUNTRIES**

Country	Waste Generation (kg/day)
World's highest	2.30
USA	2.25
UK	2.10
France	1.95
Germany	1.85
Japan	1.75
China	1.65
India	1.55
South Africa	1.45
Canada	1.35
Australia	1.25
South Korea	1.15
Italy	1.05
Spain	0.95
Sweden	0.85
Netherlands	0.75
Denmark	0.65
Switzerland	0.55
Belgium	0.45
Sweden	0.35
Denmark	0.25
Switzerland	0.15
Belgium	0.05

**TOP 5 MUNICIPAL SOLID WASTE GENERATORS ANNUALLY (in million tonnes)**

Country	2016 estimate	2019 projected	2026 projected
India	277.1	307.9	543.3
USA	263.7	311	319.9
China	225.4	295	353.8
Brazil	79.1	74.7	74.7
Indonesia	64.2	69.1	74.7
Netherlands	12.1	12.1	12.1

12:04 PM | vsm-pgtw-ypt

Fwd: National Webinar on "Emerg... Meet - vsm-pgtw-ypt  
meet.google.com/vsm-pgtw-ypt?pli=1&authuser=1

Yogalakshmi K is presenting

## Segregation of waste

Dr.Sircesha Y has left the meeting

12:24 PM | vsm-pgtw-ypt