MARUDHAR KESARI JAIN COLLEGE FOR WOMEN

(AUTONOMOUS)

VANIYAMBADI, TIRUPATTUR DT – 635 751

- Recognized u/s 2(f) & 12(B) of UGC Act 1956
- Permanently Affiliated to Thiruvalluvar University
- Supported by DST - FIST | DBT STAR College Scheme

NAAC A+

4 Star Rated INSTITUTION'S INNOVATION COUNCIL

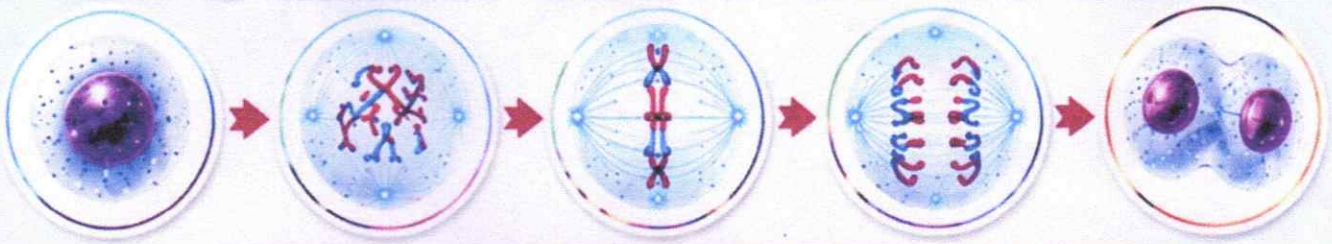
BEST COLLEGE AWARD

PG & RESEARCH DEPARTMENT OF BIOTECHNOLOGY

ORGANIZES

Workshop on

IDENTIFYING MITOTIC STAGES OF CELL DIVISION



Supported by

DBT STAR COLLEGE SCHEME

DATE	TIME	VENUE
24.08.2026	09.30 am	AV Hall & Biotech Lab

CHIEF GUEST

Dr. T. William Raja
Assistant Professor
Department of Biotechnology
Bishop Heber College (Autonomous)
Tiruchirappalli – 620017

PRINCIPAL
Marudhar Kesari Jain College for Women (Autonomous)

Sri. V. Dilip Kumar Jain | Sri. Anand Singhvi | Dr. M. Inbavalli | Mrs. S. Arjuna

MARUDHAR KESARI JAIN COLLEGE FOR WOMEN
(AUTONOMOUS) VANIYAMBADI

Recognised u/s 2(f) & 12(B) by UGC Act, 1956 || Permanently Affiliated to Thiruvalluvar University

Accredited by NAAC with "A+" Grade (4th Cycle) || An ISO 21001:2018 (EOMS) Certified Institution

33 Years of Educational Excellence...

PG & RESEARCH DEPARTMENT OF BIOTECHNOLOGY

Organizes

WORKSHOP ON

"Identifying Mitotic Stages of Cell Division"

Supported by DBT STAR College Scheme

Date: 24.08.2026 Time: 9:30 am Venue: Sri Arihanth Seminar Hall & Biotech Lab

AGENDA

Prayer

Master of Ceremony / Welcome address : **Ms. Tasleema Farzeen PM, III B. Sc Biotechnology**

Felicitation : **Dr. M. Inbavalli**
Principal, MKJC
Dr. H. Lookman Sithic
Vice Principal & Assistant Professor (AI)

Introduction of Guest : **Ms. Juviriya Sharmeen J, III B. Sc Biotechnology**

Honoring the Guest

Chief Guest Address : **Dr. T. William Raja**
Assistant Professor
Department of Biotechnology
Bishop Heber College (Autonomous)
Tiruchirappaalli- 620017

Vote of Thanks : **Ms. Nuseba Harmain P, III B. Sc Biotechnology**

National Anthem

*******ALL ARE CORDIALLY INVITED*******

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for Women (Autonomous)
Vaniyambadi - 635 751.
Tirupattur District

Activity Report

Topic/ Subject of the Activity

Workshop on Identifying Mitotic Stages of Cell Division under DBT STAR College Scheme.

Objectives (Input)

- ✓ To provide students with theoretical and practical knowledge of mitotic cell division.
- ✓ To explain the significance of mitosis in growth, development, repair and replacement of damaged cells.
- ✓ To familiarize students with the different stages of mitosis and chromosome behaviour.
- ✓ To develop students' skills in identifying different mitotic stages through microscopy-based observation.
- ✓ To familiarize students with the significance and applications of mitotic index in assessing cell proliferation and related biological studies.

Methodology (Process)

The PG & Research Department of Biotechnology organized the workshop on 24.08.2026 at 09.30a.m. at the AV Hall & Biotech Lab, with the support of the DBT STAR College Scheme.

Dr. T. William Raja, Assistant Professor, Department of Biotechnology, Bishop Heber College (Autonomous), Tiruchirappalli, served as the Chief Guest and Resource Person. The programme commenced with a prayer by the UG Biotechnology students, invoking blessings for the successful conduct of the programme. This was followed by the Welcome Address delivered by Ms. Tasleema Farzeen PM, III B.Sc. Biotechnology, who warmly welcomed the Chief Guest, faculty members and students. The Chief Guest was felicitated by Dr. H. Lookman Sithic, Vice Principal. The Chief

Guest was then formally introduced by Ms. Juveriya Sharmeen J, III B.Sc. Biotechnology. Following the inaugural proceedings, the resource person delivered a two-hour detailed lecture session in the AV Hall, explaining the cell cycle, different stages of mitosis, chromosome behaviour and the identification of mitotic stages. Following the lecture, the students participated in a hands-on practical training session at the Biotech Laboratory, where they were trained to identify the different stages of mitosis using onion shoot tip cells through microscopic observation. The practical session provided students with valuable laboratory exposure and enhanced their understanding of cell division through direct observation and identification of mitotic stages. The session covered the major stages of mitosis, namely prophase, metaphase, anaphase and telophase. The structural features of chromosomes, chromatids, centromeres and kinetochores were explained. Chromosome condensation and spindle formation during prophase, chromosome alignment at the equatorial plate during metaphase, separation and movement of sister chromatids during anaphase, and formation of daughter nuclei during telophase were discussed. Cytokinesis and the differences between animal and plant cell division were also explained. The practical component enabled students to observe and identify different mitotic stages using microscopy-based techniques. The resource person also introduced the concept of mitotic index and explained its applications in cell proliferation, cancer research, cytotoxicity, environmental studies and drug development. Students interacted with the resource person and clarified their doubts regarding chromosome structure, mitotic stages and microscopic identification. The Vote of Thanks was delivered by Ms. Nuseba Harmain, III B.Sc. Biotechnology, expressing gratitude to the Chief Guest, faculty members, organizers and students for their valuable contributions and participation. The programme concluded with the National Anthem rendered by the UG Biotechnology students.

Output

- ✓ A total of 117 students from I B.Sc. Biotechnology and I B.Sc. Biochemistry actively participated in the workshop and gained theoretical knowledge of the cell cycle and the various stages of mitosis. Eight Faculty members also attended the programme.
- ✓ Students received practical exposure to microscopy-based identification of different mitotic stages.
- ✓ Students developed an understanding of chromosome structure and chromosome behaviour during cell division.
- ✓ Students gained knowledge about the concept of mitotic index and its applications in biological and biomedical studies.

Outcomes

The workshop enhanced students' understanding of mitotic cell division and improved their ability to distinguish different mitotic stages based on chromosome behaviour and cellular changes. It provided practical exposure to microscopic observation and strengthened their observation and identification skills. The session also helped students understand the relevance of mitotic index in cell proliferation, cancer research, cytotoxicity, environmental studies and drug development. Overall, the programme enriched students' theoretical knowledge, practical competence and scientific understanding of cell division.

HOD | Dean | Programme Co-ordinator DBT Star College Scheme | IQAC Director | Principal

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Tirupattur District

MARUDHAR KESARI JAIN

College for Women (Autonomous), Vaniyambadi.

133 Years of Educational Excellence...

DBT STAR COLLEGE SCHEME

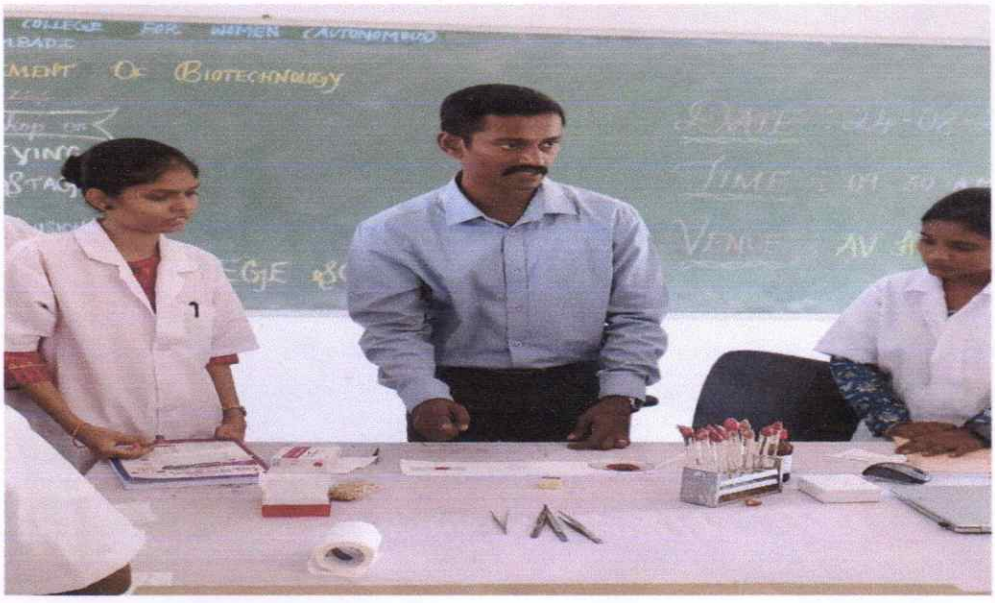
24.08.2026

School of Life Sciences Organizes Workshop

on

Identifying Mitotic Stages of Cell Divison

Venue: AV Hall & Biotech Lab



Principal

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