

20th February 2020 to 11th March 2020

Jointly Organized by
Dept. of Biomedical Sciences,
School of Bio-Sciences and Technology, VIT Vellore
and

Instituto de Investigaciones Biológicas Clemente Estable (IIBCE), Uruguay

Beneficiaries:
UG / PG/ Research

ABOUT VIT:

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by the Chancellor Dr. G. Viswanathan. From its humble beginning, the institution has grown exponentially to that of having more than 39,000 students. VIT attracts students from all the 28 states and 9 UTs of India and from more than 50 countries because of its excellence. The credentials of VIT in academics and research have placed VIT in the 13th position among the engineering institutions in India by NIRF, Govt. of India. The world ranking body namely the QS (Quacquarelli Symonds) has given 4 STAR rating to VIT, with that VIT becomes the first institution in India to have the 4 STAR rating. In addition to this, the consortium of industries, FICCI has adjudged VIT as the "Excellence in Faculty". VIT has also completed 3 cycles of NAAC accreditation and has been rated as "A" grade institution. In addition, VIT also has obtained for the coveted ABET accreditation by US agency. Govt. of India recognizes VIT as an Institute of Eminence (IOE) in 2019 to become the world's best. VIT has introduced many innovations in academic processes which add value to every student. FFCS (Fully Flexible Credit System), PBL (Project Based Learning) for better learning, fully digitized academic portals that assist students in equipping themselves for 2020 market place.

ABOUT SBST:

School of Bio Sciences and Technology (SBST) offers programs in various disciplines such as B.Tech., M.Tech. Biotechnology, M.Sc. Applied Microbiology, Biotechnology, Biomedical Genetics, 5 year Integrated program in Biotechnology and Ph.D. The school houses excellent infrastructure and well trained faculty members which makes it to be one among the largest populations of trained biologists in our country.

Govt. of India recognizes
VIT as an
Institution of Eminence (IoE)



Dr. Radha Saraswathy

Sr. Professor, Dept. of Biomedical Sciences, SBST, VIT
Organiser, VAP

Dr. Pragasam V

Dean, SBST
Chairperson, VAP

RESOURCE PERSONS:

- Dr. Wilner Martínez-López, MD, PhD
Epigenetics and Genomics Instability Laboratory,
Instituto de Investigaciones Biológicas Clemente Estable,
Montevideo – Uruguay
- Dr. Radha Saraswathy, Sr. Professor
Dept of Biomedical Sciences SBST, VIT

DATE:

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VENUE: 120TT, Biomedical Genetics Research
Laboratory
TT, Kamaraj Auditorium
205, CBMR

REGISTRATION FEE: INR 500/-

REGISTRATION LINK: <http://info.vit.ac.in/Events-VIT/Genotoxicity-Testing/apply.asp>

COURSE OBJECTIVES:

- To relate the importance of genotoxicity and Epigenetic toxicity to environmental monitoring and human health.
- An opportunity to obtain extensive, basic theoretical knowledge and insights in this field.
- To interpret the action of mutagenic substances and carcinogens with long-term irreparable consequences.
- To illustrate the fundamental and advanced techniques for genotoxic testing and assessment.

COURSE OUTCOMES:

- Have competence in the practical skills in handling basic laboratory processes for analysis and genotoxicity testing.
- Understand various aspects of environmental monitoring techniques.
- Design/develop an idea for identifying the cause or solution for protecting Human health.

THEMES/TOPICS:

1. Genotoxicity and Epigenetic toxicity
2. Human health
3. Genotoxicity biomarkers
4. Epidemiological studies
5. Recommendations and implementation

Total course duration: 60 hours

LIST OF CHALLENGING EXPERIMENTS:

- EXPT 1 Comet assay in human peripheral blood mononuclear cells
- EXPT 2 Comet assay in human cell lines
- EXPT 3 Cytokinesis block micronucleus assay in human peripheral blood mononuclear cells
- EXPT 4 Lymphocyte culture for chromosomal aberrations
- EXPT 5 Sister chromatid exchanges
- EXPT 6 Determining cell survival with different dyes
- EXPT 7 Cytokinesis block micronucleus assay in exfoliated buccal cells
- EXPT 8 Karyotyping
- EXPT 9 Western blotting
- EXPT 10 γ H2AX immunofluorescence staining

CONTACT

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