



**DST-NSTEDB**

*Sponsored*

**Three Day Hands on Workshop**  
*on*  
**Structural Biology & Phylogenetic Analysis**

*From*

**26<sup>th</sup> to 28<sup>th</sup> April 2018**



*Organized*

**By**

***SSIIE-TBI***

**SPMVV SOCIETY FOR INNOVATION INCUBATION AND ENTREPRENEURSHIP**  
**Technology Business Incubator**

**Catalyzed & Supported by NSTEDB Division, DST, Government of India, New Delhi**

**SRI PADMAVATI MAHILA VISVA VIDYALAYAM (Women's University)**

**Accredited by NAAC with 'A' Grade**

**Tirupati-517502, Andhra Pradesh, India**

**Website: [spmvv.ac.in](http://spmvv.ac.in)**

## About Sri Padmavati Mahila Visvavidyalayam

Sri Padmavati Mahila Visvavidyalayam, a Women's University was established by the then Chief Minister, Sri. N.T.Rama Rao in 1983. It is the second of its kind for being exclusive to women students in India established under UGC Act of 1956. The University is accredited by NAAC with A Grade. The University has a student population of nearly 5000 and an academic staff of around 250. The campus of Sri Padmavati Mahila Visvavidyalayam is spread out in the area of 130.62 acres and offers 59 courses at the post-graduate and undergraduate level. The University has made an extensive contribution to the society through community engagement activities. The University has grown into an institution of academic excellence and carved out its niche as one of the reputed higher learning institutions.

## About SPMVV Society of Innovation Incubation and Entrepreneurship Technology Business Incubator (SSIIE-TBI)

SSIIE-TBI is an initiative of Sri Padmavati Mahila Visvavidyalayam (Women's University) and National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Govt. of India. SSIIE-TBI provides a vibrant ecosystem and caters to the demands of business incubators/ Start-ups. It supports Innovations, Development of technology & Prototype/ Product Development.

SSIIE-TBI supports the "Space, Services and Knowledge" requirements of Start-Ups. SSIIE-TBI is well equipped to cater to the needs of innovators who are inclined towards research and innovation. SSIIE-TBI will offer budding entrepreneurs much needed infrastructure support and critical mentoring to turn their dream into reality.

## About the Workshop

A Three Day hands on workshop on Structural Biology & Phylogenetic Analysis is being organized by SPMVV Society of Innovation Incubation and Entrepreneurship, Technology Business Incubator [SSIIE-TBI]. Impressive progress in genome sequencing, protein expression and high throughput crystallography and NMR has radically transformed the opportunities to use protein three dimensional structures to accelerate drug discovery, but the quality and complexity of the data have ensured a central place for informatics. Knowledge of the three dimensional structures of protein targets is now playing a major role in all stages of drug discovery. The methods that structural biologists use to determine their structures generally involve measurements on vast numbers of identical molecules at the same time. Most often researchers use them to study the "native states" of macromolecules. But variations on these methods are also used to watch nascent or denatured molecules assume or reassume their native states.

Yet another approach that structural biologists take to understand structure is bioinformatics to look for patterns among the diverse sequences that give rise to particular shapes. Researchers often can deduce aspects of the structure of integral membrane proteins based on the membrane topology predicted by hydrophobicity analysis. In the past few years it has become possible for highly accurate physical molecular models to complement the in silico study of biological

structures for Biological research. The success of the method is now evident from drugs now in use and new ones reaching the market. It is clear that in many companies structure-guided approaches have become central to developing good drug candidates. In the post genomic era, bioinformatic analysis of sequence similarity is an immensely powerful tool to gain insight into evolution and protein function. The importance of phylogenetic analysis lies in its simple manifestation and easy handling of data.

## Objectives

- To impart thorough understanding on Structural and computational biology of Biological macro molecules
- To disseminate hands- on training and phylogenetic methods, analysis and its software tools

## Theme of the Workshop

- Structural Biology -Patterns among diverse sequences -Integral membrane proteins
- Membrane topology & Hydrophobicity analysis
- Protein structure analysis & validation
- High throughput Virtual Screening
- Protein-ligand Interactions
- Biological databases & retrieving
- Sequence and Phylogeny
- Phylogenetic methods and Software tools.

## Target Audience

Faculty & Research Scholars from Science Departments

## Registration Fee

- No Registration Fee
- Participants restricted to 50.
- No TA& DA will be given to the participants.
- Registration is compulsory for participation.
- Working lunch will be provided at Workshop Venue.
- Duly filled in registration form must reach the organizers latest by **23<sup>rd</sup> April, 2018.**
- Registration form can be downloaded from [www.spmvv.ac.in](http://www.spmvv.ac.in)

**Chief Patron**

**Prof.V.Durga Bhavani**  
Vice-Chancellor, SPMVV

**Patron**

**Prof.V.Uma**  
Rector, SPMVV

**Convenor**

**Prof. R.Usha, *Executive Member, SSIIE***

**Prof D.M.Mamatha , *Treasurer, SSIIE***

**Co-Convenors**

**Mr.Y.Mallikarjuna Reddy, *CEO, SSIIE – TBI***

**Dr.D.Sujatha, *Executive Member, SSIIE***

***Organising Committee***

**Dr. I.N. Bheema Lingeswar Reddy, Incubation manager, SSIIE-TBI**

**Dr.D.Pragathi, Scientific Assistant, SSIIE-TBI**

**Ms.Y.Usha, Lab Assistant, SSIIE-TBI**

**For further details or queries  
Contact**

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**“Structural Biology & Phylogenetic Analysis”**

**26<sup>th</sup>-28<sup>th</sup> April 2018**

**REGISTRATION FORM**

**PERSONAL INFORMATION**

Name: Dr./Mr./Ms./Mrs. ....

Designation: .....

Academic Qualifications: .....

**CORRESPONDENCE ADDRESS:**

.....  
.....  
.....

**CONTACT DETAILS** Phone : (Code) ..... No. ....

Mobile No. ....

E-Mail: .....

**DATE:**

**PLACE:**

Signature  
(Name of the Participant)