



# Summer School in Molecular Simulation & Structure Based Drug Design (MSSBDD - 2016)



## ABOUT THE UNIVERSITY

B.S. Abdur Rahman University, Vandalur, Chennai-600 048, (formerly B.S. Abdur Rahman Crescent Engineering College) has been established under section 3 of the UGC Act 1956. B.S. Abdur Rahman Crescent Engineering College, which has now been upgraded as B.S Abdur Rahman University, is an institution acclaimed throughout India for its quality in teaching and research. Being one of the largest engineering institutions in India, it lays emphasis on innovative research, investment in high-quality facilities and first-rate infrastructure. By making use of the latest technologies and quality teaching, the college is able to offer a wide choice of interdisciplinary degrees in engineering which has enabled students to gain accolades in the global level. It is one of the few institutions with all the UG and PG programmes approved by AICTE and accredited by the National Board of Accreditation. The placement record of the institution has been remarkable and students chart their careers before their graduation. All the graduates from its portals either occupy prestigious positions in multinational companies or join institutions of higher learning in India and abroad.

## ABOUT THE SCHOOL

School of Life Sciences has been established with twin objectives of making the campus cross disciplinary and initiating teaching, research and training programs across the areas of life sciences. The school has been visualized to emerge as a hub for state of the art research in all fields related to Molecular Biology, Bio-Chemistry, Microbiology, Bio-Technology, Cancer Biology, and Genetics etc., through sponsored projects from industries and Government agencies. It has also been visualized to be a training centre for scientists, researchers, clinical staff of hospitals, industry workers in advanced laboratory techniques with hands on experience, through short term intensive programs. The school offers Undergraduate, Postgraduate and Doctoral programmes in Life Sciences. For more information please visit [www.bsauuniv.ac.in](http://www.bsauuniv.ac.in)

## PROGRAMMING SCHEDULE

<i>Week 1 - Drug Design for Known targets</i>		<i>Week 2: Drug Design for Unknown targets</i>	
1	Target Visualization and Structure Analysis	7	Target Identification
2	Prediction of binding sites in target proteins.	8	Gene Expression Analysis
3	Ligand databases and Virtual Screening	9	Homology modeling of target proteins
4	Evaluation of Binding affinity by Docking	10	Estimation of binding free energy
5	Molecular Dynamics Simulations and Drug Discovery	11	SAR, QSAR and Drug optimization for ADME
6	Pharmacophore based drug design	12	Report Preparation / Written test

**COURSE FEE:** 3000/- per participant. Fee includes workshop manual, certificate, chemicals and other consumables and refreshment.

**ELIGIBILITY:** UG, PG, Research Scholars, Faculty and anyone who is interested in learning.

**INSTRUCTION TO PARTICIPANTS:** Total number of participants will be 20; Boarding and lodging can be arranged based on request. Three best performing students during the workshop and assessment will be given appreciation certificate in addition to participation certificate.

**FEE PAYMENT DETAILS:**

**For Account Transfer:** Indian Overseas Bank, Acc No. 165701000019853; IFSC code: IOBA0001657 in favour of Dean, School of Life Sciences.

**For demand draft:** DD should be drawn in favour of Dean, School of Life Sciences, B.S. Abdur Rahman University payable at Vandalur, Chennai.

**For cheque:** Cheque towards Dean, School of Life Sciences, B.S. Abdur Rahman University payable at Vandalur, Chennai.

**VENUE:**

School of Life Sciences (SLS)  
B.S.Abdur Rahman University,  
Vandalur, Chennai -48.

Landmark: Adjacent to Anna zoological park.

**FOR FURTHER COMMUNICATIONS CONTACT**

<b>ORGANIZING SECRETARY</b>	<b>CO-ORGANISER</b>	<b>IMPORTANT DATES</b>
<b>Prof. S. Hemalatha</b>	<b>Dr.M.S.Shahul Hameed,</b>	<b>Last date for</b>
<b>Dean School of Life</b>	<b>Asst. Prof., School of Life</b>	<b>Registration: 11<sup>th</sup> July</b>
<b>Sciences (SLS)</b>	<b>Sciences (SLS)</b>	<b>2016</b>
<b>B.S.Abdur Rahman</b>	<b>B.S.Abdur Rahman</b>	<b>Last date for</b>
<b>University, Chennai</b>	<b>University, Chennai</b>	<b>Participation</b>
<b>Phone: 044-22759215</b>	<b>Phone: 044-22759200</b>	<b>Confirmation:</b>
<b>Ext. 215</b>	<b>Ext 380</b>	<b>14<sup>th</sup> July 2016</b>
<b>Email:</b>	<b>E mail:</b>	<b>Workshop date:</b>
<b>dean.sls@bsauniv.ac.in</b>	<b>shahulhameed.sls@bsauniv.</b>	<b>18<sup>th</sup> July to 29<sup>th</sup> July</b>
	<b>ac.in</b>	<b>2016</b>