



SRI VENKATESWARA COLLEGE OF ENGINEERING

(An Autonomous institution, Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOTECHNOLOGY

Proforma for the approval of conduction of a Certificate Course

ACADEMIC YEAR : 2020-21

1.	Course Title	COMPUTER AIDED DRUG AND VACCINE DESIGN
2.	Course Duration in hours (15/30/45/60)	15
3.	Targeted audience	Internal participants and External participants from Engineering Colleges in Tamilnadu. The registration fee Rs. 1000/- will be collected from external participants only.
4.	Equivalent Credit	1
5.	Category (HS/BS/EEC/Management/Technical)	Technical
6.	Level (Undergraduate/ Postgraduate)	Undergraduate
7.	Eligibility Criteria	Students from B.Tech (Biotechnology), B.Sc (Biotechnology)
8.	Expected Outcome	This certificate course helps the participants to understand the basics of drug and vaccine design. This course also helps to train skills in drug and vaccine design through hands-on-experience sessions.
9.	Collaborator Details (If applicable)	Altem Technologies, Bengaluru & IITM, Chennai.
10.	Course Coordinator details (In SVCE) <i>Please attach the CV as a separate sheet</i>	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur Tk – 602117, TN, India
11.	Recourse Person(s) / Course Instructor(s) details (If applicable) <i>Please attach the CV as a separate sheet for each person</i>	1. Dr. Dhivya Shanmugham, Senior Application Scientist, Altem Technologies, Bengaluru. 2. Prof. Michael Gromiha, Department of Biotechnology, Indian Institute of Technology Madras, Chennai.

12.	Mode / Place of Course Conduction	Department of Biotechnology, SVCE, Sriperumbudur - 602117
13.	Whether Course content along with course plan is attached?	YES / NO
14.	Mode of Evaluation	1. Attendance \geq 80%. 2. Online MCQ of 20 Questions with Pass percentage \geq 60%.

Recommendations of Department Consultative Committee:

Recommended

Approval of Department Consultative Committee: Approved / Not approved

P.K. Praveen

Signature of Course Coordinator

P. PandiRabhu

Signature of Chairman/ DCC

Course code :- KE 02 001

CRN : 202 21 001 to 20221xxx
xxx is the last

**Sri Venkateswara College of Engineering
Department of Biotechnology**

08/07/2021

Submitted to the Principal:

Sir,

Sub: Submission of documents of fees of Rs. 21,500/- collected from external participants in the online certificate course on CADVD'21- reg.

The Department of Biotechnology has conducted an Online Certificate Course on "Computer-aided drug and vaccine design" in association with Altem technologies, Bengaluru. 25 external participants joined in this certificate course and the total amount collected from them was Rs. 21,500/-. The transaction proofs of the external participants and the details of both external participants and internal participants are attached for your reference. An approved proforma copy of this online certificate course from COE is attached. The mentioned course code for this course was KE02001.

We have to provide Rs. 6,000/- (Six thousand Rupees Only) to Dr. Dhivya, Sr. Application scientist, Altem technologies, Bengaluru for handling six guest lectures/sessions and Rs. 2,000/- (Two thousand Rupees Only) to Prof. Michael Gromiha, Professor, Department of Biotechnology, IITM, Chennai for handling a valuable guest lecture for this online certificate course.

Thanking you,

Sincerely,

P.K. Praveen
08/07/21

Dr. P.K. Praveen Kumar,
Organizing Secretary
Associate Professor
Department of Biotechnology
Sri Venkateswara College of Engineering
Pennalur, Sriperumbudur Tk, 602117

[Signature]
8/7/21

Forwarded through **HOD/BT**

Enclosures:

1. List of External and Internal Participants
2. Transaction proofs
3. A copy of proforma for the approval of conduction of a Certificate course

SYLLABUS

CERTIFICATE COURSE ON

“COMPUTER AIDED DRUG AND VACCINE DESIGN”

Total No. of Credits: 15

- 1. Drug Design:** Introduction, Drug Discovery, Drug target and lead identification, Drug and databases, Drug properties, Drug solubility/permeability, Drug-ADME, Drug-BBB, Drug Likeness. **5**
- 2. Molecular Mechanics:** Molecular Modeling, Forcefield, Conformational Search/MD, Quantum mechanics, 3D QSAR, QSPR, QSTR, Pharmacophore modeling, Target based drug design, Docking. **5**
- 3. Vaccine Design:** Immunological databases – T-cell epitope databases, B-cell epitope databases, SYFPEITHI MHC-presented epitopes, Concepts of reverse vaccinology, Tools & Servers for computational Vaccine design- from Genome to Vaccine. **5**

REGISTRATION FEE

Registration fee of Rs. 1000/- is charged for the External Participants. For group registration, registration fees will be waived to Rs. 750/-. Participants are requested to either fill your details in Registration form link provided below or fill in registration form which should be sent to the below mentioned E-mail id on or before 08th May, 2021. DD/ Cheque has to be taken in favour of The Principal, Sri Venkateswara College of Engineering, Sriperumbudur. Timings will be 6.30 pm – 7.30 pm on all the days. Confirmation will be sent to the selected participants through registered e-mail id.

BONAFIDE CERTIFICATE (For Students only)

Mr./Ms. _____
is permitted to attend "Online Certificate Course on Computer Aided Drug and Vaccine Design" during 10th to 26th May, 2021 at Sri Venkateswara College of Engineering, Sriperumbudur Tk. - 602 117, Tamilnadu.

Date: _____ Signature
(Designation & Seal)

BANK DETAILS (NEFT/RTGS)

Account Name & No: Principal, 467302331
Bank Info: Indian Bank, Sriperumbudur
IFSC Code: IDIB000S080
MICR No: 600019112

MAILING ADDRESS

Dr. P.K.Praveen Kumar
Associate Professor
Department of Biotechnology
Sri Venkateswara College of Engineering
(Autonomous)
Pennalur, Sriperumbudur Tk - 602 117
Tel: +91-9444495008/8778953918
E-mail: gds@svce.ac.in

Online Certificate Course on "Computer Aided Drug and Vaccine Design" 10th to 26th May, 2021 REGISTRATION FORM

1. Name :
2. Designation :
3. Age :
4. Participant Category : Student / Faculty / Industry
5. Branch & Year:
6. Name of the Institution with postal address:
7. E-mail ID:
8. Mobile number:
9. Specialization:
10. Registration fee:
Demand draft No. & Date:

Declaration

I agree to abide by the rules and regulations of the workshop.

Place:

Date:

Signature:

(Copy of this form can be used for registration)

Registration form link:

<https://forms.gle/HuxU5y2susWzuWBNA>

Online Certificate Course on "Computer Aided Drug and Vaccine Design" 10th to 26th May, 2021

Organized by



In association with



Altem Technologies, Bengaluru

CONVENERS
Prof. M. Sivanandham
Dr. V. Sumitha

ORGANIZING SECRETARY
Dr. P.K.Praveen Kumar

Pennalur, Sriperumbudur Tk - 602 117,
Tamilnadu, India

svce.ac.in



ABOUT THE INSTITUTION

Sri Venkateswara College of Engineering (Autonomous) (SVCE), one of the premier technical institutions in Tamilnadu, was established in 1985. The College is situated on the Chennai-Bengaluru National Highway (NH4) about 37 km south-west of Chennai. The college offers 11 UG programmes and 8 PG programmes. The National Board of Accreditation accredited many of the eligible programmes and SVCE is an ISO 9001:2008 certified institution.

DEPARTMENT OF BIOTECHNOLOGY

In order to support the growth in Biotechnology, SVCE started the Department of Biotechnology in 2005 under the guidance of our Chairman Dr.A.C.Muthiah, a well known Industrialist who understands the strength of Industrial Biotechnology. The department offers B.Tech and M.Tech Biotechnology programmes under Anna University, Chennai, approved by AICTE. It is also approved as a Research Center in Biotechnology for MS (by Research) and Ph.D. programmes by Anna University, Chennai. The Department has well established laboratory facilities namely Bioprocess and downstream processing, Immunology, Instrumental Methods of Analysis, Genetic Engineering, Animal house, Research Lab, Bioinformatics Lab and Computational Systems Biotechnology Lab.

The Department is continuously receiving Research Grants (1.7 Crore) from various funding agencies such as SERB, ICMR, AICTE, CSIR, DBT and CTS and funds for organizing Short Term Training courses, workshops, faculty development programmes from various funding agencies such as DBT, ICMR, CSIR and EDII.

PROGRAMME OBJECTIVE

Computer-aided drug design uses computational approaches to discover, develop, and analyze drugs and similar biologically active molecules. Structure based drug design (SBDD) and ligand based drug design (LBDD) are the two general types of computer-aided drug design (CADD) approaches in existence.

SBDD methods analyze macromolecular target 3-dimensional structural information, typically of proteins to identify key sites and interactions that are important for their respective biological functions. LBDD methods focus on known antibiotic ligands for a target to establish a relationship between their physicochemical properties and antibiotic activities, referred to as a structure-activity relationship (SAR), information that can be used for optimization of known drugs or guide the design of new drugs with improved activity.

Reverse Vaccinology focuses in the examination of the genome of an organism in order to identify novel antigens and epitopes that might constitute vaccine candidates.

This online certificate course is designed to train skills in computational biology, structural biology seeking to gain familiarity in drug and vaccine design. Hands-on-experience is provided in screening drugs and vaccines for dreadful cancer, autoimmune and viral diseases. Thus, this workshop will provide a platform for the students, faculty and industrialists to share their knowledge and recent advancements in the fascinating field of drug and vaccine design.

Proposed Invited Speakers from Industries & Institutions

1. Dr. Dhivya Shanmugarajan, Senior App.Scientist, Biovia DS, Altem Technologies, Bengaluru.
2. Dr. Michael Grouha, Professor, Department of Biotechnology, IITM, Chennai.

COURSE CONTENT & SCHEDULE

The workshop consists of lecture sessions and hands on training sessions provided in the drug design areas like target identification using pathway databases, target modeling and validation, drug likeness properties, drug databases, drug-ADMET databases, virtual screening methods, molecular mechanics areas like methods & types of molecular modeling, types of forcefield, quantum mechanics, conformational search, 3D-QSAR, QSPR, QSTR, Pharmacophore modeling, molecular docking, molecular dynamics simulation. This course also focuses on areas of vaccine design in concepts of reverse vaccinology, immunological databases, T-cell epitope databases, B-cell epitope databases, tools & servers for computational vaccine design.

TERMS

Participants who have 80% or more attendance and secured 60% or more marks in MCQ conducted finally after all the sessions only will receive the certificate. The number of participants is limited, and the selection will be based on first-cum-first serve.

DATES TO REMEMBER

Last date for e- registration : 08.05.2021
Intimation of selection : 09.05.2021



DEPARTMENT OF BIOTECHNOLOGY

IN ASSOCIATION WITH



Conducting Online Certificate Course on
 “COMPUTER AIDED DRUG AND VACCINE DESIGN”

10/05/21 to 26/05/21

COURSE SCHEDULE (Time: All days from 6.30 pm – 7.30 pm)

<https://meet.google.com/lookup/canzw2ntr3>

S. No	Date	Topic	Description	Speaker
1	10/05/21	Vaccine design	Concepts of Reverse vaccinology	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
2	11/05/21	Vaccine design	Immunological databases, T-cell epitope databases	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
3	12/05/21	Vaccine design	B-cell epitope databases	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
4	13/05/21	Vaccine design	Tools & servers for computational vaccine design	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
5	14/05/21	Vaccine design	Case study for Vaccine design	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
6	15/05/21	Drug Design	Target identification using pathway databases	Dr. Dhivya Shanmugarajan, Sr. Application Scientist, Altem

				Technologies, Bengaluru
7	17/05/21	Drug Design	Target modeling and validation	Dr. Dhivya Shanmugarajan, Sr. Application Scientist, Altem Technologies, Bengaluru
8	18/05/21	Drug Design	Drug Likeness Properties, Drug databases	Dr. Dhivya Shanmugarajan, Sr. Application Scientist, Altem Technologies, Bengaluru
9	19/05/21	Molecular Mechanics	Molecular Docking	Dr. Michael Gromiha, Professor, Department of Biotechnology, IITM, Chennai
10	20/05/21	Drug Design	Drug- ADMET properties	Dr. Dhivya Shanmugarajan, Sr. Application Scientist, Altem Technologies, Bengaluru
11	21/05/21	Drug Design	Virtual Screening Methods	Dr. Dhivya Shanmugarajan, Sr. Application Scientist, Altem Technologies, Bengaluru
12	22/05/21	Molecular Mechanics	Molecular Modeling – Methods & Types	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
13	24/05/21	Molecular Mechanics	Types of Forcefield, Quantum mechanics, Conformational Search	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
14	25/05/21	Molecular Mechanics	3D -QSAR, QSPR, QSTR, Pharmacophore modeling	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur
15	26/05/21	Molecular Mechanics	Molecular Dynamics Simulation	Dr. P.K. Praveen Kumar, Associate Professor, Department of Biotechnology, SVCE, Sriperumbudur

SRI VENKATESWARA COLLEGE OF ENGINEERING (AUTONOMOUS)

DEPARTMENT OF BIOTECHNOLOGY
KE02001 -COMPUTER-AIDED DRUG AND VACCINE DESIGN

10th – 26th May, 2021

LIST OF ELIGIBLE EXTERNAL AND INTERNAL PARTICIPANTS

No. of External participants: 21						No. of Internal participants : 36				
S.No	Name	Affiliation	Affiliation Location	Date of Birth	Course Registration Number (CRN)	Course Duration (in Hrs)	Attended (in Hrs)	Course Period	Competence Level (%)	Association with
1	Aadhan G A	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	21-01-2003	210221001	15	14	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
2	Abhinav RA	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	22-02-2002	210221002	15	14	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru
3	Ajay Prabhakar. K	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	12-09-2000	210221003	15	14	10 May to 26 May, 2021	52	Altem Technologies, Bengaluru
4	Akshay J	Pasteur Institute of India	Coonoor - 643103	14-03-1997	210221004	15	15	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
5	Aleena.V	Anna University	Chennai - 600025	08-08-1994	210221005	15	13	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru
6	T.S.Amritha	Anna University	Chennai - 600025	22-11-1989	210221006	15	14	10 May to 26 May, 2021	95	Altem Technologies, Bengaluru

7	Amrutha. T	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	20-07-1998	210221007	15	14	10 May to 26 May, 2021	52	Altem Technologies, Bengaluru
8	Angelin Selva Princy	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	04-07-2001	210221008	15	13	10 May to 26 May, 2021	52	Altem Technologies, Bengaluru
9	Anusuya Narayanan	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	23-07-1999	210221009	15	15	10 May to 26 May, 2021	76	Altem Technologies, Bengaluru
10	Ashok Kumar K	Pasteur Institute of Science, Technology & Advanced studies	Chennai - 600043	08-07-1980	210221010	15	15	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
11	Bathmasree S	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	02-01-2002	210221011	15	15	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru
12	Charu Lekha Saray	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	07-09-2001	210221012	15	15	10 May to 26 May, 2021	52	Altem Technologies, Bengaluru
13	David Paul Rajakumar	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	30-03-2002	210221013	15	11	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru
14	Deepana Arulsamy	Jeppiaar Engineering College	Chennai - 603103	25-10-2000	210221014	15	12	10 May to 26 May, 2021	50	Altem Technologies, Bengaluru
15	Dharshene K	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	31-10-1998	210221015	15	15	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
16	Divyarani K	Tumkur University	Tumkur - 572101	10-03-1998	210221016	15	12	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
17	Elambarithi M	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	17-08-2002	210221017	15	13	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru

18	Farheen Begum J	Anna University	Chennai - 600025	12-06-1997	210221018	15	13	10 May to 26 May, 2021	76	Altem Technologies, Bengaluru
19	Jannavi R	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	02-12-2001	210221019	15	14	10 May to 26 May, 2021	81	Altem Technologies, Bengaluru
20	Jayashree B	Jeppiaar Engineering College	Chennai - 603103	12-03-2001	210221020	15	13	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
21	Jeya Prasath. R	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	20-08-2002	210221021	15	15	10 May to 26 May, 2021	86	Altem Technologies, Bengaluru
22	Jhishnu raj. K	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	03-08-2001	210221022	15	15	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
23	Kamalavarshini B	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	15-12-2001	210221023	15	15	10 May to 26 May, 2021	81	Altem Technologies, Bengaluru
24	Kamini singh	Institute of Chemical Technology	Mumbai - 400019	27-03-1981	210221024	15	13	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
25	Karthick balaji K.R	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	25-11-1998	210221025	15	12	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
26	Karthikeyan.M	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	13-02-2001	210221026	15	13	10 May to 26 May, 2021	50	Altem Technologies, Bengaluru
27	Kheerthivasan.R	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	21-02-2001	210221027	15	12	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
28	KIRTANA S	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	04-01-2003	210221028	15	14	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru

29	Lakshmi B	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	08-09-2001	210221029	15	15	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
30	Manaswini V	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	10-11-2001	210221030	15	15	10 May to 26 May, 2021	81	Altem Technologies, Bengaluru
31	Namritha Maniyoda	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	12-02-1993	210221031	15	13	10 May to 26 May, 2021	81	Altem Technologies, Bengaluru
32	Naveena Kandasari	Anna University	Chennai - 600025	14-09-1986	210221032	15	15	10 May to 26 May, 2021	100	Altem Technologies, Bengaluru
33	Neena Bharathi V	Rajalakshmi Engineering College	Thandalam - 602105	26-11-2000	210221033	15	14	10 May to 26 May, 2021	52	Altem Technologies, Bengaluru
34	Neha B	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	19-05-2000	210221034	15	15	10 May to 26 May, 2021	76	Altem Technologies, Bengaluru
35	NITESH S C	Rajalakshmi Engineering College	Thandalam - 602105	12-12-2001	210221035	15	11	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
36	Nivedita J	Rajalakshmi Engineering College	Thandalam - 602105	30-12-2002	210221036	15	13	10 May to 26 May, 2021	88	Altem Technologies, Bengaluru
37	Pavithra K	Anna University	Chennai - 600025	01-07-1998	210221037	15	14	10 May to 26 May, 2021	90	Altem Technologies, Bengaluru
38	Pranavakumaran S	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	08-04-2000	210221038	15	13	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
39	Prem Kumar G	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	21-08-2000	210221039	15	15	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru

40	Preyadarshne.T	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	18-01-2001	210221040	15	15	10 May to 26 May, 2021	76	Altem Technologies, Bengaluru
41	Rajarajeswari. N	Jeppiaar Engineering College	Chennai - 603103	29-09-2000	210221041	15	13	10 May to 26 May, 2021	50	Altem Technologies, Bengaluru
42	Rajashree R	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	18-08-2002	210221042	15	14	10 May to 26 May, 2021	86	Altem Technologies, Bengaluru
43	Renita Miriam Celc	Rajalakshmi Engineering College	Thandalam - 602105	08-07-2000	210221043	15	15	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
44	Rythika C	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	09-02-2000	210221044	15	13	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
45	Sarika Baburajan P	Pasteur Institute of India	Coonoor - 643103	07-05-1986	210221045	15	14	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
46	Sarvika. P. M	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	26-11-2001	210221046	15	15	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
47	Shreya Srinivasan	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	12-04-2000	210221047	15	15	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
48	Shruthi Sampath	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	17-05-2000	210221048	15	15	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
49	Srinithya S	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	15-03-2002	210221049	15	12	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
50	Sriram S	Rajalakshmi Engineering College	Thandalam - 602105	27-02-2001	210221050	15	13	10 May to 26 May, 2021	86	Altem Technologies, Bengaluru

51	Sujithra G	Anna University	Chennai - 600025	15-08-1995	210221051	15	15	10 May to 26 May, 2021	67	Altem Technologies, Bengaluru
52	Suresha E	Tumkur University	Tumkuru - 572101	02-06-1987	210221052	15	12	10 May to 26 May, 2021	50	Altem Technologies, Bengaluru
53	Sushmitha Magesh	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	09-10-1999	210221053	15	12	10 May to 26 May, 2021	71	Altem Technologies, Bengaluru
54	Swetha Magesh	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	09-10-1999	210221054	15	12	10 May to 26 May, 2021	62	Altem Technologies, Bengaluru
55	Vanaja.N	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	05-06-2002	210221055	15	15	10 May to 26 May, 2021	81	Altem Technologies, Bengaluru
56	Varshini Jayakanth	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	29-04-1998	210221056	15	14	10 May to 26 May, 2021	57	Altem Technologies, Bengaluru
57	Vidhyalakshmi.J	Sri Venkateswara College of Engineering	Sriperumbudur - 602117	03-07-1997	210221057	15	13	10 May to 26 May, 2021	86	Altem Technologies, Bengaluru

P.K. Praveen

ORGANIZING SECRETARY

Dr P.K. PRAVEEN KUMAR, M.Tech., Ph.D
Associate Professor
Department of Biotechnology
Sri Venkateswara College of Engineering
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Email: praveenk@svce.ac.in, Mobile: +91 9444495008

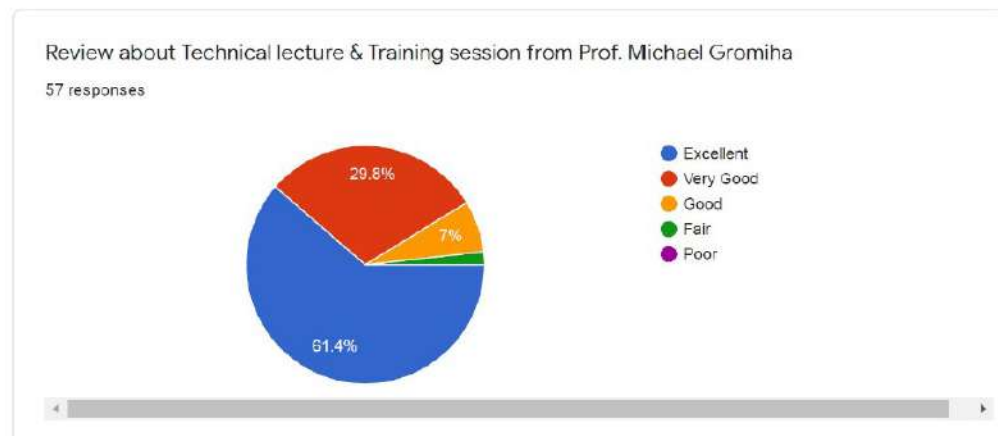
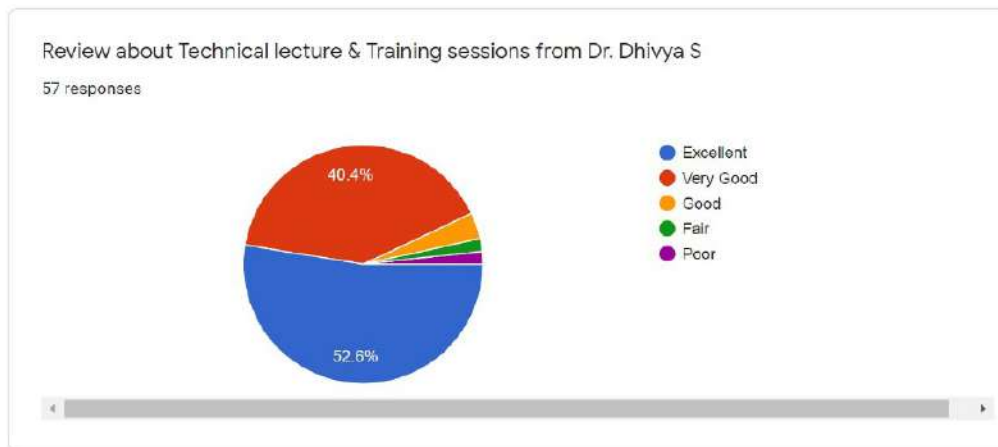
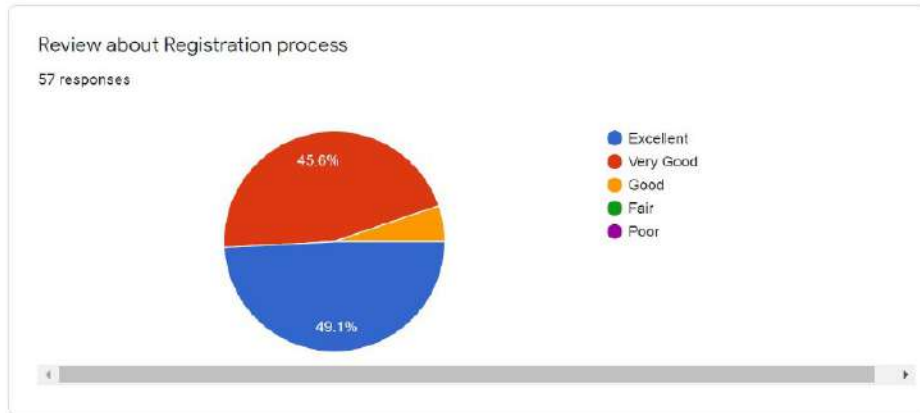
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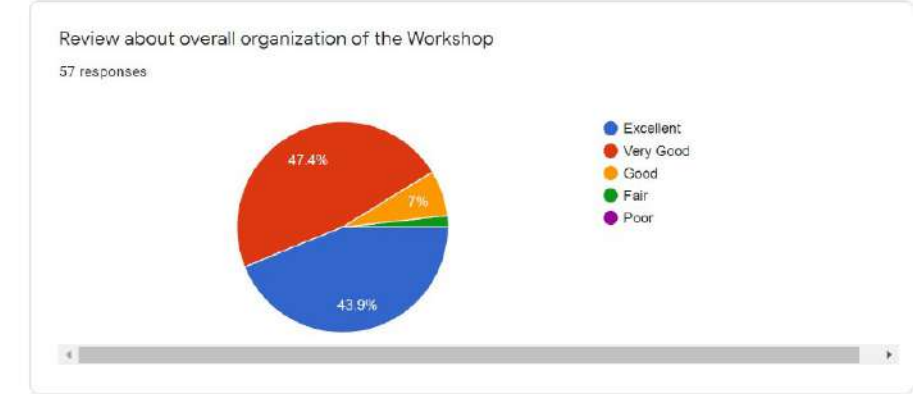
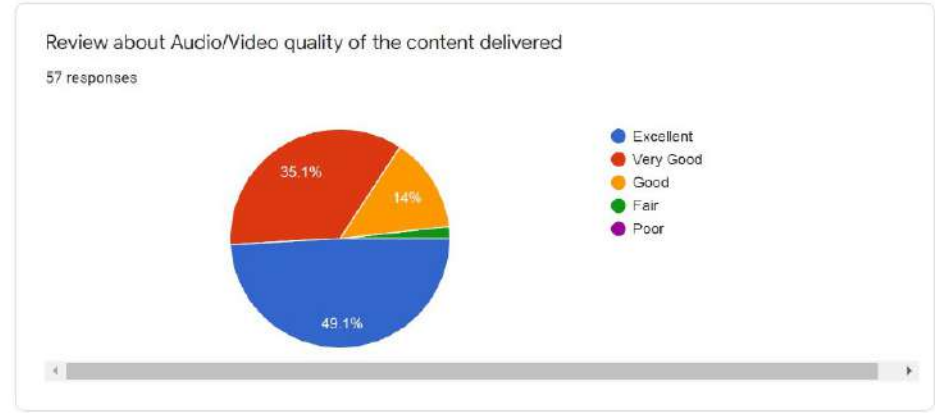
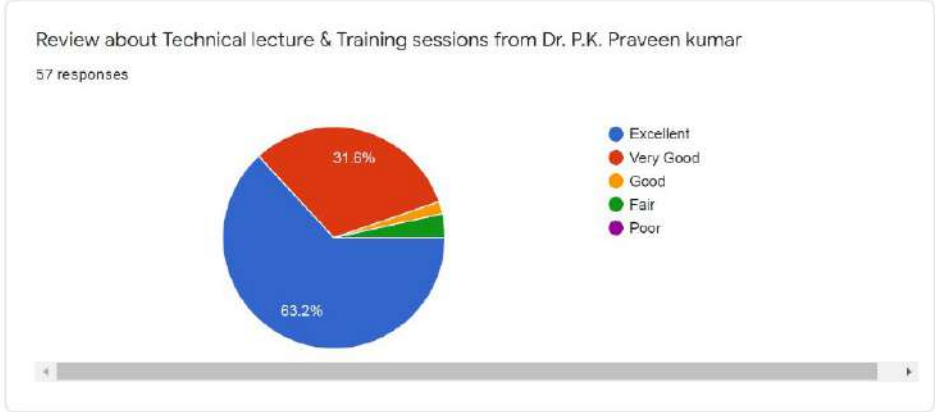
HOD/BIO

Head of the Department
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Tk - 602 117, Tamilnadu, INDIA

SRI VENKATESWARA COLLEGE OF ENGINEERING
DEPARTMENT OF BIOTECHNOLOGY

FEEDBACK FROM PARTICIPANTS ON
ONLINE CERTIFICATE COURSE ON “COMPUTER-AIDED DRUG AND VACCINE DESIGN”
10th May 2021 to 26th May 2021





P.K. Praveen

ORGANIZING SECRETARY/BIO

Dr. P.K. PRAVEEN KUMAR, M.Tech., Ph.D
Associate Professor
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Email: praveenk@svce.ac.in, Mobile: +91 9444495008

HOD/BIO

Head of the Department
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Tk - 602 117, Tamilnadu, INDIA

SRI VENKATESWARA COLLEGE OF ENGINEERING (AUTONOMOUS)

DEPARTMENT OF BIOTECHNOLOGY

One credit Online Certificate Course on

“KE02001 - COMPUTER AIDED DRUG AND VACCINE DESIGN”

10/05/21 to 26/05/21

ACTIVITY REPORT

The Department of Biotechnology, Sri Venkateswara College of Engineering has conducted the Online National certificate course on “Computer aided drug and vaccine design” in association with Altem technologies, Bengaluru. The certificate course was approved by COE, SVCE and was conducted from 06.30 PM to 07.30 PM on all the fifteen days. 92 Internal and 25 external participants are registered for this online certificate course. All the fifteen guest lectures are conducted in online through google meet. Dr. Dhivya Shanmugarjan, a senior application scientist and an Industrial resource person, BIOVIA DS, Altem technologies, Bengaluru presented 6 technical lectures on “Drug Design” and “Molecular Mechanics”. Dr. P.K.Praveen Kumar, Associate Professor, Department of Biotechnology and Coordinator of this certificate course have handled 8 technical lectures on “Molecular Mechanics” and “Vaccine Design”. Prof. Michael Gromiha, Professor, Department of Biotechnology, Indian Institute of Technology Madras has handled one guest lecture on “Molecular Docking”.

The certificate course was finally ended with Vote of Thanks by Dr. P.K.Praveen Kumar. All the participants have provided excellent feedback on Guest lectures and Hands-on-training sessions arranged. Appreciation is received excellent to the Organizing secretary because of ample supply of training materials and recorded videos on time. After department consultation committee, only 38 internal and 21 external participants are screened based on final day MCQ test performance and overall attendance performance. Minimum attendance from the participants considered was 75% and above and similarly MCQ test score of 50% and above. In future, I have planned to conduct similar certificate course on contemporary approaches on drug and vaccine design. Thanks for providing me the excellent opportunity to conduct this course.

Thanking you,

Sincerely,

Organizing Secretary/BIO

Dr. P.K. PRAVEEN KUMAR, M.Tech., Ph.D.
Associate Professor
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Tk - 602 117, Tamilnadu, India
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HOD/BIO

Head of the Department
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Tk - 602 117, Tamilnadu, INDIA

PARTICIPANT CERTIFICATE



SVCE | Sri Venkateswara College of Engineering

Autonomous - Affiliated to Anna University
Pennalur, Sriperumbudur, Tamil Nadu | www.svce.ac.in

35 Years of Excellence

ISO 9001:2015 Certified by IQS
ANMAT SVCS RvA C071

Certificate of Participation

This is to certify that Mr. **Sriram S** of Rajalakshmi Engineering College, Thandalam has participated in the Online National Certificate Course on “KE02001 - Computer-aided Drug and Vaccine Design” organized by the Department of Biotechnology, Sri Venkateswara College of Engineering in association with Altem Technologies, Bengaluru from 10.05.2021 to 26.05.2021.

P. K. Praveen
Organising Secretary

[Signature]
HoD I/C

[Signature]
Principal

Top Ranked Affiliated Institution in Tamil Nadu

5/5 Star Rated Innovation Cell

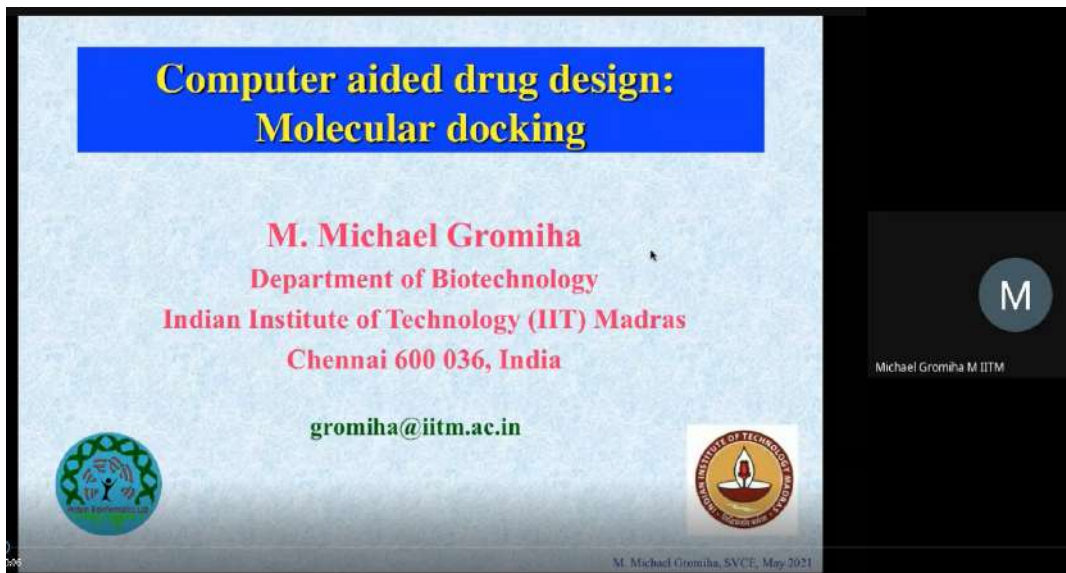
Top Performer

Recognized Incubation Center

Certified Organization

Accreditations

ONLINE WEBINAR PICTURES



**Computer aided drug design:
Molecular docking**

M. Michael Gromiha
Department of Biotechnology
Indian Institute of Technology (IIT) Madras
Chennai 600 036, India

gromiha@iitm.ac.in

Michael Gromiha M IITM

M. Michael Gromiha, SVCE, May 2021

Meeting details

Knowledge based scoring function

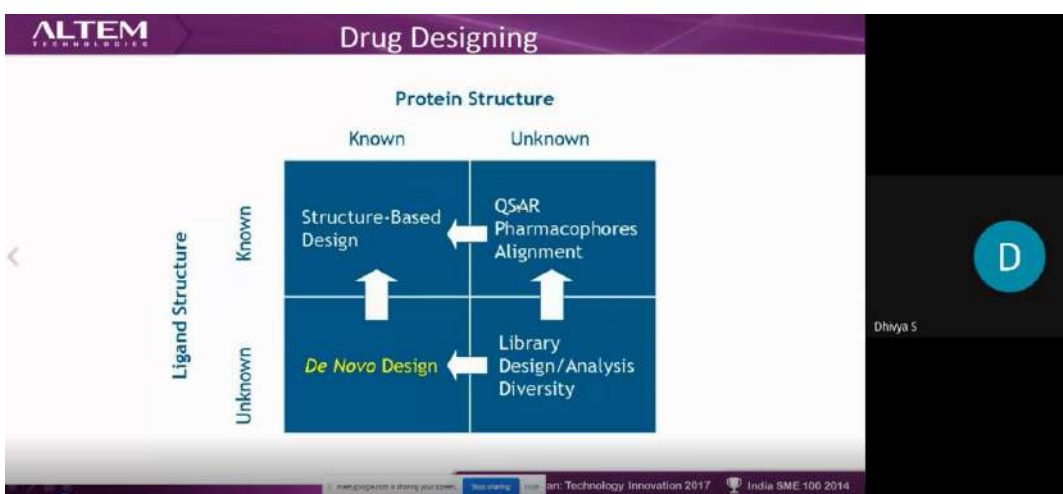
VANAJA N BT 7:12 PM
Consensus

sri ram 7:17 PM
mol wt less than 500

VANAJA N BT 7:17 PM
Molecular weight less than 500

sri ram 7:17 PM
top p

Michael Gromiha M IITM



Name	Type	Value
1. AROMATIC_RING	yes	yes
2. AROMATIC_RING	yes	yes
3. AROMATIC_RING	yes	yes
4. AROMATIC_RING	yes	yes
5. AROMATIC_RING	yes	yes
6. AROMATIC_RING	yes	yes

Pharmacophore Generator

Parameter Name: Signal Receptor
Receptor Value: Signal/100W

Parameter Name: Lipid Lipid
Receptor Value: Signal/100W

Parameter Name: Maximum Pharmacophore
Receptor Value: 5

Parameter Name: Minimum Feature
Receptor Value: 4

Parameter Name: Maximum Feature
Receptor Value: 4

Parameter Name: Validation
Receptor Value: None

Parameter Name: Adjustment
Receptor Value: None

Parameter Name: Feature Priority
Receptor Value: None