THEMES

ADVANCE SEPERATION

HEAT EXCHANGERS

DIALYSIS

WATER TREATMENT

HYDRAULICS

CHEM-A-THON

CHEM-A-THON
is a one of a kind
chemical design hack
which aims to unearth and unleash creativity
and deploy rapid prototyping

Goals

- Unleash creative designing and processing
- Implement effective resource management skills
- Unearth and explore ingenious ideas
- Exercising and developing rapid prototyping skills

GENERAL OUTLINES

- Themes will be allotted as per the preference and the seat limitations.
- Participants are expected to work for 2 days and create a working model for the same..
- Chem-a-thon is a team event and each team can have minimum of 2 and maximum of 3 members.
- Each team is expected to document their ideas to enable future development.
- Any extra materials, if required, will have to be purchased by the teams which could be taken back by the team after the model demonstration.
- Lab facilities will be provided according to the theme and participant's needs.
- Each team will be given a chance to select a mentor who will guide the team throughout the event.

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School of Civil and Chemical Engineering (SCALE), offers an unique 4 year undergraduate program in B.Tech Chemical engineering. This course is designed to develop process engineers and technical specialist capable of meeting challenges of strongly growing process industrial sector and to meet current industrial requirements with an emphasis on design, construction and maintenance of chemical and material manufacturing process.

CONVENERS

PROF. S K SEKAR
DEAN, SCALE

PROF. NIRMALA G S
HOD, CHEMICAL

CONTACT US

Prof. Rambabu K-9962056278
Faculty coordinator

Kartik Bomb - 9597632764
President AIChE VIT

Raj Saurabh -9994543338
Event head AIChE VIT

AIChE
VIT UNIVERSITY

AIChE-VIT student chapter aims to provide platform for further development for undergraduate chemical engineers.
The chapter organizes umpteen events, quizzes and workshops for the benefit of students and to familiarize them about the various scope in the fields of chemical engineering.

Department of Chemical Engineering

School of Civil & Chemical Engineering

&

AIChE – VIT Student Chapter

Report on

VALUE ADDED CERTIFICATE PRORGRAM

"CHEM-E-THON"

(2 days – 36 hours – Chemical Hack!!!)

Organized on

10th and 11th September 2016

VIT UNIVERSITY
(Estd. u/s 3 of UGC Act 1956)
VELLORE ■ CHENNAI
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Programme Schedule

Time	Activity	Venue
Day – I (10th Sep 2016)		
09:00 AM to 10:00 AM	Inauguration	SMV 209
10:00 AM to 10:30 AM	Refreshment	SMV G26
10:30 AM to 01:00 PM	Model Development – Phase I	SMV G26, SMV G29, SMV 127, SMV 216, TT221
01:00 PM to 02:00 PM	Lunch Break	
02:00 PM to 02:30 PM	Check Point – I	SMV G26, SMV G29, SMV 127, SMV 216, TT221
02:30 PM to 05:30 PM	Model Development – Phase II	SMV G26, SMV G29, SMV 127, SMV 216, TT221
05:30 PM to 06:00 PM	Refreshment	SMV G26
06:00 PM to 08:00 PM	Model Development – Phase III	SMV G26, SMV G29, SMV 127, SMV 216, TT221
08:00 PM to 09:00 PM	Dinner Break	
09:00 PM to 09:30 PM	Check Point – II	SMV G26, SMV G29, SMV 127, SMV 216, TT221
09:30 PM to 11:59 PM	Model Development – Phase IV	SMV G26, SMV G29, SMV 127, SMV 216, TT221
Day – II (11th Sep 2016)		
12:00 AM to 12:30 AM	Refreshment	SMV G26
12:30 AM to 08:00 AM	Model Development – Phase V	SMV G26, SMV G29, SMV 127, SMV 216, TT221
08:00 AM to 09:00 AM	Breakfast	

09:00 AM to 09:30 AM	Check Point – III	SMV G26, SMV G29, SMV 127, SMV 216, TT221
09:30 AM to 11:00 AM	Model Development – Phase VI	SMV G26, SMV G29, SMV 127, SMV 216, TT221
11:00 AM to 11:30 AM	Refreshment	SMV G26
11:30 AM to 01:00 PM	Model Development – Phase VII	SMV G26, SMV G29, SMV 127, SMV 216, TT221
01:00 PM to 02:00 PM	Lunch Break	
02:00 PM to 02:30 PM	Check Point – IV	Foodys
02:30 PM to 03:30 PM	Model Display (with presentation)	Foodys
03:30 PM to 04:00 PM	Refreshment	Foodys
04:00 PM to 05:30 PM	Model Evaluation	Foodys
05:30 PM to 06:00 PM	Finalization of Results	Foodys
06:00 PM to 07:00 PM	Valedictory & Certificates / Prizes distribution	Foodys
07:00 PM to 08:30 PM	Dinner	Foodys

(Prof. Rambabu K)
Coordinator
Chemical Engineering Dept.

(Prof. Vikrant Vohli)
Coordinator
Chemical Engineering Dept.

Two days chemical engineering design competition

"**CHEM-E-THON**"

(A Chemical Hack!!!)

Date: **10th and 11th September 2016**

A two day, 36 hours non-stop, chemical engineering design competition "Chem-E-Thon" was organised jointly by the Department of Chemical Engineering, SCALE and and AIChE – VIT Student chapter, VIT Vellore for all the undergraduate students of university (Vellore campus). The event was started with an inaugural function on 10th September 2016 with Dr. Rajan Rathinasabapathy, Philips, USA as the chief guest. Dr. Anand Samuel, Vice Chancellor and Dr. S.K. Sekar, Dean SCALE were also present for the function. Dr. G.S. Nirmala, HOD, Chemical Department welcomed all the delegates and the participants for the event. The overview of the event along with its benefits and outcome was highlighted by Prof. K. Rambabu, Faculty Advisor, AIChE VIT Student chapter, VIT. Dr. S.K. Sekar highlighted the importance of Chemical Engineering and the benefits of these kinds of programs for the students in his chief guest speech. Dr. Anand Samuel emphasised the importance of project based learning which was the underlying principle for the CAL curriculum. He requested the students to participate more in these types of events as students would get knowledge on real world problems and how to solve them with their learnings. The chief guest, Dr. Rajan stressed upon the point that these type of group events promotes human ethics and social respect enabling individuals to work as team in addition to technical knowledge improvement. The inaugural function was concluded with the official release of the problem statements of five different tracks for the competition the chief guest by Dr Rajan. The tracks included Heat Transfer, Hydraulics, Advanced separation, Waste water treatment and Health care (Artifical kidney).

Following the inaugural function, the participants and the faculty mentors were explained about the problem statements. Each track consisted of one problem statement having industrial and/or social importance. In total 146 students participated in the event who registered as groups under various tracks. Each track had a minimum of 3 teams and a maximum of 7 teams. Around 16 faculty members from various departments and schools volunteered as mentors to guide the student teams. The common objective for each problem statement was to develop an economic and feasible working model as the solution. The necessary infrastructure / components to build the model were also supplied to them. Each track participants were working in separate venue for effective output. The Phase I of the model development involved the idea design of the solution. During Checkpoint – I, mentors validated each idea of the teams to ensure whether idea would produce a viable working model and provided inputs for effective model. Phase II and Phase III of the model development involved the construction of the physical model. Each team showed lot of interests and enthusiasm in creating their respective models. Teams were able to understand the various challenges and bottlenecks in constructing the model and established innovative measures to address the same. Checkpoint – II ensured the correctness of the respective

developed model through the involvement of mentors and their constructive comments on the model. Phase IV of the model development was devoted for incorporating the changes in the model based on the mentor's recommendations.

Day II (11th September 2016) started with the Phase V and VI of the model development during which the teams checked for the working principle of the developed model. Each team ensured that their model was effective enough to meet the given objective. The mentor's remarks as provided through Checkpoint – III helped the student teams to improve the working nature of their model. The final phase of the model development, Phase – VII was devoted to optimise the efficiency of the individual models. Checkpoint – IV was carried out by the event organisers on every individual model to access and permit the model for evaluation. All the developed models met the required criteria for its respective problem statement and thus no model was rejected.

The last session of Day II involved the evaluation of the model by a panel of faculty judges. Each team presented its model along with a powerpoint presentation explaining the construction and working principle of the model. The jury panel analysed the output / performance of the model based on fundamental concepts and key factors measurements for each of the track. The jury panel appreciated that most of the teams were able to develop innovative and effective working models which surprised them. It was really a tough work to judge the best model for a respective track as every model (for a given track) was competitive enough to be judged as best model. Based on the innovation, construction, performance and team explanation, the best model and second best model for every track was recommended by the jury panel.

Following the evaluation, student organisers performed music shows for the participants and the faculties. In the valedictory function, Dr. G.S. Nirmala, HoD, Chemical Engineering Department, VIT distributed the certificates and cash prizes to the first and second place winners for the each theme. Also, certificates were distributed to the faculty mentors, student organisers and coordinators of AIChE – VIT student chapter for supporting the event. The event was finally concluded with the dinner organised for all the faculties, mentors, student organisers and participants of the Chem-E-Thon event.

Outcome of the Program

Through the Chem-E-Thon event, the student participants were able to

1. Analyse and interpret a given problem statement.
2. Design a system or a process and understand the realistic constraints on design.
3. Understand the importance of working as a team and managing a project.
4. Work as multi-disciplinary team and solve engineering problems.

5. Appreciate ethics and professional responsibility.
6. Recognise the importance of oral and written communication
7. Assess the impact of engineering in a societal context and lifelong learning on contemporary issues.

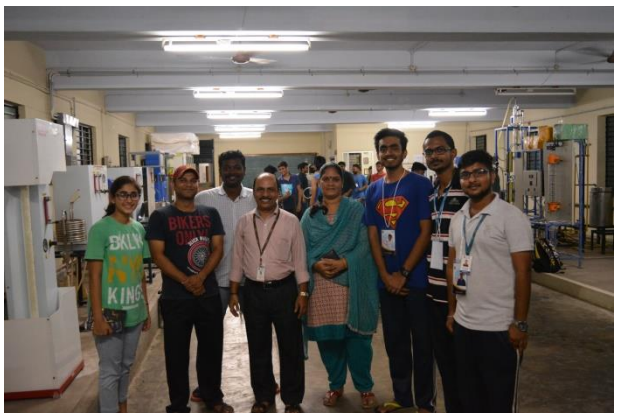
Suggestions:

1. To plan and conduct many such events in the future.
2. To include Chem-E-Thon as a part of curriculum.

(Prof. Rambabu K)
Coordinator
Chemical Engineering Dept.

(Prof. Vikrant Vohli)
Coordinator
Chemical Engineering Dept.

PHOTOS



LIST OF PARTICIPANTS

S. No	Reg. Number	Name
1	16BEE0095	NAMAN AGRAWAL
2	16BEE0045	VEDATROYEE GHOSH
3	16BCM0035	MANUJ JAIN
4	16BCM0093	AKASH PAUL
5	16BCM0073	TEJAS MAGDUM
6	16BCM0082	ANIL KUMAR VINAYAK
7	16BCM0089	MANU MOHAN BENZIGAR
8	16BCM0032	K A DEEPANKAR
9	16BCM0014	R KIRAN
10	16BCM0012	DIVYAPRATIM DAS
11	16BCM0079	NITHISH KUMAR E R
12	16BCM0060	ELURI BHAVANI SHANKAR
13	16BCM0058	S R SUSANTH
14	16BCM0044	BAISHAYAN GUPTA
15	15BCH0080	SHOURADEEP DUTTA
16	16BEE0385	BASIL ANGEL
17	16BEE0326	BALAJI SHRINIVASAN
18	15BBT0042	RAJNANDINI SINGH SHIKHAWAT
19	15BCM0087	JAGRITI SINGH SHEKHAWAT
20	15BCL0013	SANCHAY TANDON
21	15BEC0179	DIVYANSH YADAV
22	15BCH0028	SHIVAM GUPTA
23	15BCH0027	ABHISHEK PANDA
24	15BCH0012	BHARAT GUPTA
25	15BCH0082	OMKAR PATRA
26	15BEI0021	GITESH DAS
27	15BCH0006	ROHAN PADHI
28	15BCM0037	ARUNDHATI KHAUTA
29	15BCM0047	VAIBHAV DATTA
30	15BCM0023	GAURAV KUMAR
31	15BCM0077	DHANANJAY SHUKLA
32	15BCM0049	SAYALI TAPAS
33	15BCH0019	ABHISHEK KUMAR
34	16BIT0031	ANANT KATOCH
35	16BCI0159	ANANT SINGHAL
36	16BCE0801	NEHA KUMARI
37	16BCM0046	NANDINI JAIN
38	16BEE0195	LAWANAYA SHRIVASTAVA
39	16BCB0076	MILI BHARADWAJ
40	15BCM0024	ANANTH PERI
41	15BCH0086	SAVYASACHI SHRIKHANDE
42	15BCM0004	SAIKAT SAHA
43	15BCM0062	MOHIT KUMAR MAURGA
44	14BBT0102	SHIBU ANTONY
45	14BBT0112	TAMOOGHNA DAS
46	16BBT0005	VARSHA M S
47	14BCH0017	SWAPNIL SHARMA
48	14BCH0038	AKHIL PREMKUMAR
49	14BCH0059	PRAYAG BANSAL
50	15BCH0034	SACHIN NAVATHE
51	15BCH0007	ASHUTOSH KUMAR
52	15BCH0044	YELUKAR ANUPAMA
53	15BCH0040	SHRISTI
54	15BCH0075	AJIT SINGH JAGTAP
55	15BCM0003	AYUSH CHOUDHARY
56	16BCM0023	KANAV DANG
57	15BCM0024	YASH AGARWAL
58	15BCH0005	GAURI AHUJA
59	15BCH0018	SURYANSH AGARWAL
60	16BCM0040	NANDINI MALIK
61	16BCM0041	RATNIKA GUPTA
62	16BCM0061	MOHAN VARSHA
63	15BME0899	PRIYANSH AGARWAL
64	15BCH0013	VEDANT MISHRA
65	15BCM0092	K RAJA
66	15BCM0034	AYUSH V K
67	15BCM0085	ARINANDAN GANGULY
68	15BCM0027	KARAN MAGNANI
69	15BCH0048	KAMAL RADHAKRISHNAN
70	15BCH0043	PRATEEK LIDHOO
71	15BEC0148	UDEERNA GUPTA
72	15BEC0139	PRASHANTH KAMATH
73	15BCH0015	SHUBHAM BABEL
74	16BCM0055	MOHAMED KHALIL
75	16BCB0013	SURYA PRATAP SINGH
76	16BIT0268	DIPANSHU RAJPUT
77	16BME0228	NIPUN SINGHAL
78	16BCB0014	ADITYA SINGH
79	16BEE0172	SHREENAM

80	15BEC0447	SHASHANK SHEKHAR
81	15BCM0096	ABDUL SUBAN
82	16BPI0009	UTKARSH CHAUDHARY
83	15BCM0018	SRI ADITYAA
84	15BCM0017	HARSH SHARMA
85	15BCH0011	SAMARTH GUPTA
86	15BCM0094	ANOOJ RAMANATHAN
87	15BCM0053	PRANJAL SAMARTH
88	15BCM0050	SHWETA SRINIVASAN
89	16BCM0062	SHRINKHLA
90	16BCM0031	SIVA SURENDAR T
91	16BCM0002	ANJALI KABRA
92	16BCM0074	RISHABH BOTHRA
93	15BCM0097	SANJAY V
94	16BBT0132	SHATABDI KALPITA NANDA
95	16BBT0117	ANN SARA MATHEW
96	16BBT0154	DIYA ANNA THOMAS
97	16BBT0199	SHREYA SAHA
98	16BBT0143	RIA MALIK
99	15BCM0057	RAMKUNJ VERMA
100	16BCM0064	ADITI GOUKISHANKAR
101	15BCM0055	NISHA DEVI
102	15BCM0013	NANDINI S
103	15BCM0067	HARSHINI RAVICHANDRAN
104	15BCM0007	SATHIYA NARAYANAN
105	15BCE0388	R S P VARUN
106	15BCH0089	ASHUTOSH SINGH
107	15BCH0058	ADITYA SINGH
108	15BCM0076	SHARATH KRISHNA
109	15BCH0042	SHASHANK AMIN
110	15BCM0042	THOMAS JOHNEY
111	15BCM0006	ROHAN THOMAS FRANCIS
112	15BCM0030	ROSWAN RAPHEL
113	15BCM0011	KALINGA SAHIL HAQUE
114	15BCM0002	ANUPAMA MUKHERJEE
115	15BCM0001	ASWATHY BALAKRISHNAN
116	15BCM0095	TANVI M
117	15BCM0088	KRITHIKA RAVICHANDRAN
118	15BCH0046	MUSKAN MARYA
119	15BCM0052	ARINJOY DAS
120	15BCH0061	PRANAV PANDEY
121	15BCH0076	YOGESHWAR
122	15BCH0038	SAURABH ANAND
123	15BCH0010	SATCHIT KULKARNI
124	15BCH0033	SAURABH JOSHI
125	15BCH0063	ANMOL MISHRA
126	15BCH0068	AMAN SHARMA
127	15BBT0091	PRACHI MANOREY
128	15BCH0059	KARTHIK KRISHNAMOORTHY
129	15BCH0054	AJINKYA GORAY
130	15BCH0045	SHUBHAM GUPTA
131	15BCM0021	DEEPASH BANSAL
132	15BCH0077	SUDHAKAR KOTA
133	15BCH0081	VIKRAM KUMAR CHOUDARY
134	15BCH0030	AKASH SINGH
135	15BCH0021	SRIKAR.P.A
136	15BCH0062	VISHAL AGARWAL
137	15BCH0084	AYUSH KHANDELWAL
138	15BCH0003	EESHA AGARWAL
139	15BCH0024	JATIN AGARWAL
140	15BCH0094	CHAHIL PATEL
141	15BCM0015	JEEVARATHINAM T
142	15BCM0044	NARESH S
143	15BCH0052	SINDHU MANCHIKANTI
144	15BCH0060	RAJAN JAIN
145	15BCM0008	KARTHIK GANESH
146	15BCH0073	SHREYANSH PAGARIA

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AIChE
VIT UNIVERSITY

CHEM-A-THON

2016

CERTIFICATE OF *Achievement*

THIS CERTIFICATE IS PRESENTED TO

SRIKAR P.A

for actively participating
in CHEM-A-THON '16 , A Chemical Hack!
which was organised by Chemical Engineering
Department,SCALE and AIChE-VIT at VIT University
Vellore on 10th-11th September 2016.

Prof Rambabu.K	Dr. Nirmala G.S	Dr. S.K Sekar
Faculty Co-Ordinator	HOD	DEAN
AIChE-VIT	Chemical Engineering Department	SCALE

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AIChE
VIT UNIVERSITY

CHEM-A-THON
2016

CERTIFICATE OF Achievement

THIS CERTIFICATE IS PRESENTED TO

SANJAY V.

for securing

2nd POSITION - (HYDRAULICS)

in CHEM-A-THON '16 , A Chemical Hack!
which was organised by Chemical Engineering Department,SCALE and AIChE-VIT at VIT University Vellore on 10th -11th September 2016.

Prof Rambabu.K	Dr. Nirmala G.S	Dr. S.K Sekar
Faculty Co-Ordinator	HOD	DEAN
AIChE-VIT	Chemical Engineering Department	SCALE

CHEM-A-THON

2016

CERTIFICATE

OF

Achievement

THIS CERTIFICATE IS PRESENTED TO

K. RAJA

for actively participating
in CHEM-A-THON '16 , A Chemical Hack!
which was organised by Chemical Engineering
Department,SCALE and AIChE-VIT at VIT University
Vellore on 10th-11th September 2016.

Prof Rambabu.K	Dr. Nirmala G.S	Dr. S.K Sekar
Faculty Co-Ordinator	HOD	DEAN
AIChE-VIT	Chemical Engineering Department	SCALE