Sarvajanik Education Society

Sarvajanik College of Engineering and Technology



Dr. R K Desai Marg, Athwalines, Surat- 395001

SCET Multi-Disciplinary Conference on Engineering & Technology (SMDCET - 2017)

National Conference

on

Advanced Research Techniques in Chemical Engineering "ARTCHEM-2017"

March 25 - 26, 2017



TECHNICALLY ASSOCIATED





About Conference

Sarvajanik College of Engineering and Technology, Surat has organized SCET Multidisciplinary Conference on Engineering & Technology (SMDCET-2017). Under this banner, Chemical Engineering Department has organized National Conference on Advance Research Techniques in Chemical Engineering (ARTCHEM-2017) on 25th and 26th March, 2017.

ARTCHEM 2017 is the second feather of conference which is being organized by Chemical Engineering Department. ARTCHEM–2017 was organized. The main objective of the conference is to provide platform for exploring recent developments as well as to foster interactions among researchers working in the area of Chemical Engineering. The conference would also enlighten the research students to update their knowledge.

ARTCHEM 2017 invited original unpublished research work in the following field of Chemical Engineering.

- > Process Modeling, Simulation and Optimization
- ➤ Waste Treatment Technology
- ➤ Advanced Separation Technology
- ➤ Green Chemistry / Cleaner Technology
- ➤ Alternative Fuel
- ➤ Nano Technology
- > Petroleum refinery and Petro Chemicals
- > Thermodynamics and Kinetics

The full Papers were invited for multidisciplinary research areas as well as other relevant research areas in the field of Chemical Engineering. Paper submission and review process is done online through the conference website: http://smdcet2017.scet.ac.in/ARTCHEM2017.html. An overwhelming response of the papers was received from the reputed institutions, across the nation including research institutes, NIT, IIT and industries.

Total 35 research papers were submitted by the researchers from various colleges/universities and they were reviewed by eminent reviewers from various esteemed academic institutes across the India. After the review and modifications a total of 23 research papers were accepted for the proceeding and were selected for final oral presentation at conference.

Inauguration of SMDCET 2017

All the Dignitaries, Deans, Head of Departments, faculty members of Sarvajanik College of Engineering & Technology and various engineering colleges, participants, research scholars, postgraduate & under-graduates students across India were invited for inaugural ceremony of SMDCET held at TIFAC seminar hall at 9:00 am on 25th March 2017.

To Grace the inaugural ceremony of multi conference, Dr S. R. Gandhi, Director, Sardar Vallabhbhai National Institute of Technology, Surat was invited as Chief Guest along with the Guest of Honours Dr. U. B. Desai, Director, IIT Hyderabad and Mr. Rajiv Bhatnagar, Director, Hazira Complex, Essar Steel. SCET also invited, Shri Yatish Parekh Chairman of Sarvajanik Education Society, Shri C.S Jariwala Vice Chairman 1 of Sarvajanik Education Society, Shri Kamlesh Yagnik Vice Chairman 2 of Sarvajanik Education Society and Shri Sudhirchandra Desai Chairman's representative, Sarvajanik College of Engineering & Technology (SCET) as dignitaries for the ceremony.

After the inauguration, Dr. U B Desai delivered a keynote address on "No Smart cities without sensors" to all the participants of SMDCET 2017.







Registration Desk





Conference Schedule

Day – 1, 25/03/2017			
Sr. No.	Time		
1	Registration & High Tea	8:00 to 10:00	
2	Inauguration	10:00 to 11:00	
3	Key note Speech, 11:00 to 12:3		
	Dr. U. B. Desai Director IIT, Hyderabad		
4	Lunch	12:30 to 1:30	
5	Session Talk,	01:00 to 02:00	
	Dr. Nitin V. Bhate, Associate Professor, Chemical Engineering Department,		
	Faculty of Technology and Engineering,		
	The Maharaja Sayajirao University of Baroda,		
	Vadodara.		
6	Technical Session – I	2:15 to 05:15	

Day – 2, 26/03/2017			
1	Session Talk,	09:15 to 10:15	
	Dr. M. S. Rao Professor & Head, Department of Chemical		
	Engineering, DDU, Nadiad.		
2	Technical Session – II	10:30 to 12:30	
3	Lunch	12:30 to 01:30	
4	Session Talk,	01:00 to 01:30	
	Mr. Vatsal Naik		
	Managing Director, Mahavir Synthesis Pvt Ltd & Mahavir Eco		
	Projects Pvt Ltd, Sachin.		
5	Technical Session – III 01:30 to 04:30		

Sessions for Oral Presentation of Research Paper

Dr. Rakhi Mehta, Program Chair and HOD have given the welcome speech before start of the first session talk by Dr. Nitin V. Bhate, Associate Professor, Chemical Engineering Department, Maharaja Sayajirao University of Baroda.

Expert talk started around 1:00 pm after the lunch on Day1. Following are the oral paper presented for session I chaired by Session Chair: Dr. Nitin V. Bhate, Dr. Swati Sharma from 2:15 to 6:00 pm Session ends with a review by the internal and external having a nice research review and also appreciated for 2nd year students.

Oral Presentation Session-I

Sr. No.	Paper ID	Paper presented by	Торіс
01.	ARTCHEM001	Jaymin S. Patel,	Removal of phenol from industrial waste water by using non-ionic resin bed
02.	ARTCHEM019	Shireen Singh	Biomass upgrading via pyrolysis route
03.	ARTCHEM022	Shireen Singh Panchami Patel Dipesh Kachhadiya	Synthesis, Characterization and Application of Nanoparticles as Fuel Additives
04.	ARTCHEM024	Meet B. Patel Meet J. Patel	A review on Biocolours
05.	ARTCHEM028	Varshil Shah, Utsav Chovatia, Divyesh Kakadiya,	Extraction of essential oil using supercritical fluid
06.	ARTCHEM023	Deepashri Marathe, Akshat Khandelwal,	A review on separation of heavy metals from waste water by various techniques
07.	ARTCHEM026	Siddhant Bhasarkar, Diksha Kadu	Removal of ash from waste water of Indrayani river by using NiO nanoparticles
08.	ARTCHEM003	Hiral Bhatt	Kinetic data for non-catalytic methane decomposition using quantum calculations





Day 2 (26/03/2017) started by session talk given by Dr. M. S. Rao Professor & Head, Department of Chemical Engineering, DDU, Nadiad on the topic of municipal waste management at 9:00 am to 10:30 am.

Oral presentation session II started with the following papers in presence of the session chair Dr. M. S. Rao, Dr. Rakhi Mehta between 10:30 to 1:00 pm. Session ends with a review by the internal and external having a nice research associated by the students.

Oral Presentation Session-II

Sr.No.	Paper ID	Paper presented by	Topic
09.	ARTCHEM004	Yashashree Watkar, Vineet Balan Prashant Pawanipagar	Extraction of active ingredient from zea mays
10.	ARTCHEM006	Sargam M. Rajput	Concentration and composition dependent dual role of ionic liquid in changing interfacial and micellar properties of gemini surfactant
11.	ARTCHEM007	Shipra Gupta Riddhi Chandegara Tarun Chauhan	Prediction of thermo-physical properties of jatropha curcas oil using process simulator
12.	ARTCHEM027	Urvij B Dave,	Comparative study of map and electrochemical oxidation process for ammonical nitrogen removal
13.	ARTCHEM002	Bharti G. Limbad	Recovery of chemicals and pharmaceuticals from effluent via freeze crystallization
14.	ARTCHEM010	H.B.Vagadia R.M.Patel	Treatment of industrial wastewater by electrocoagulation process







Session – III with expert talk given by the Industrialist Mr.Vatsal Naik from 1:30 to 2:30 pm on wastewater treatment.

Oral presentation session III started with the following papers in presence of the session chair Mr. Vatsal Naik, Prof. Vaishali Umrigar between 2:30 to 6:00 pm.

Session ends with a review by the external having a good initiative by the students.

Oral Presentation Session-III

Sr.No.	Paper ID	Paper presented by	Topic
15.	ARTCHEM009	Krunalsinh Chauhan Hasanraza Bhojani	Treatment of sludge using supercritical water oxidation methode (scwo)
16.	ARTCHEM020	Nilesh Prajapati	Forced degradation studies and development and validation of stability-indicating rp-hplc chromatographic method for temazepam assay and related substances
17.	ARTCHEM005	Pooja j. Rupapara,	Modification and evaluation of the design of common effluent treatment plant (cetp)
18.	ARTCHEM011	Dimple Master	Comparative studies for acid dye adsorption on coal fly ash in column application of adsorbent
19.	ARTCHEM013	Nikita Choksi	Study of the solid waste management system in surat city and waste segregation, proximate analysis and energy content of solid waste
20.	ARTCHEM016	Not presented	Review on efficient removal of heavy metals from oil-field produced water
21.	ARTCHEM012	Amit H. Mesvaniya	Review: process parameter affecting on transesterification reaction and its optimization for biodiesel production

22.	ARTCHEM014	Amit H. Mesvaniya	A review on kusum (schleichera oleosa): potential feedstock for biodiesel production
23.	ARTCHEM018	Kunj Patel	Reduction in chemical oxygen demand for pigment industry by granulated activated carbon (coconut shell based, activated carbon)

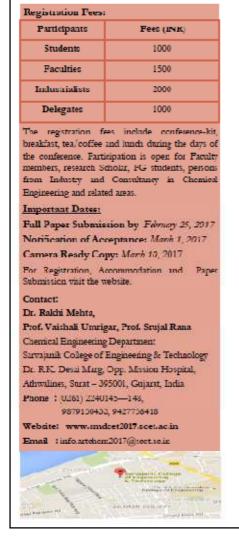












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My Ekta Desai



Acknowledgements

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