DEPARTMENT OF CHEMICAL TECHNOLOGY 2014-15

I. Staff

- 1. Dr. M. Jayaramudu, lecturer in Chemistry has participated in the National Seminar on "Computer Simulations Chemistry of Bioactive Molecules" during 7 and 8 August, 2014 at Sri Venkateswara College, Suryapet, Nalgonda District, Telangana State.
- Dr. M. Jayaramudu and Mrs. D. Jyothsnica have participated in the UGC sponsored National Seminar on "Advanced Spectro Analytical Techniques" during 11 and 12 September 2014 at Loyola Academy Degree & PG College, Alwal, Secunderabad.
- 3. Two in-house projects done by two staff members
 - a) Dr. M. Jayaramudu: "Computer Simulations Chemistry of Bioactive Molecules"
 - b) Mr. P.V.R Sai Prasad: "A Study of Applications of Solar Energy".

II. Students

Three students from final year, G. Parameswara Reddy, P. Rangith and G.A.V.V.R Pavan Kumar have participated in the National Seminar on "Computer Simulations - Chemistry of Bioactive Molecules" during 7 and 8 August, 2014 at Sri Venkateswara College, Suryapet, Nalgonda District, Telangana State.

III. Activities 2014-15

- 1. The department of Chemical Technology has conducted "Lab to School Programme" on Saturday, 26 July 2014 in Zilla Parishad High School, Old Alwal, Secunderabad.
- 2. The department of Chemical Technology has conducted field trip to SEED (Society for Energy Efficient & Development) Road No.7, Jubilee Hills, Hyderabad on Thursday, 28 August 2014 as a part of understanding of General Elective subject "Solar Energy Technologies".
- 3. The department of Chemical Technology has conducted a one day seminar on "Emerging Trends in Chemical Technology" on Wednesday, 26 November 2014.
- 4. The department of Chemical Technology has organized a guest lecture on "Essential Aspects of Process Design for Successful Commercial Manufacture: Specific reference to Pharma Industry" by Mr. C. Raghunadh, Vice President Quality Assurance & Regulatory Affairs on Wednesday, 21 January 2015.
- 5. The department of Chemical Technology students has visited "Srini Pharmaceuticals Limited", Road No.8, Film Nagar, Hyderabad on Thursday, 22 January 2015.

DEPARTMENT OF CHEMICAL TECHNOLOGY 2015-16

I. Staff

- Mr. P.V.R. Sai Prasad has participated in the one day state level seminar on "Implementation of CBCS in Autonomous Colleges" Organized by IQAC of Loyola Academy Degree & PG College, Secunderabad, on Thursday 15 October 2015.
- 2. Mr. P.V.R. Sai Prasad has participated in one day National Workshop "How to get A Grade in NAAC" Organized by Alert Knowledge Services, Gurgaon, at Hotel Radisson Blu, Hyderabad, on Wednesday 25 November, 2015.
- 3. Mr. P.V.R. Sai Prasad has participated in one day seminar on "Implementation of CBCS in Colleges-Prospects and Challenges" Organized by Raja Bhadhur Venkat Rama Reddy (RBVRR) Women's College in collaboration with Telangana State Council of Higher Education and Indian Council of Science Research (Southern Region Center), Hyderabad, on Saturday 27 June 2015.

II. Students

- Three students, A. Jaya Surya (DCT), Mahesh Sharma (NCT) and Anirjit Ghosh (NCT) won third prize in group discussion in National Chemistry Festival, CHEM COGNIZANCE-2K15 organized by the Department of Chemistry Andhra Loyola College, Vijayawada on 1st and 2nd December 2015.
- Five students, S Rajya Lakshmi, K Lissy Mary Raju, A Anil Kumar, Ch Shiva Abhinay and Kirti Sharma have participated in National Chemistry Festival, CHEM COGNIZANCE-2K15 organized by the Department of Chemistry Andhra Loyola College, Vijayawada on 1st and 2nd December 2015.

III. Activities 2015-16

- The department of Chemical Technology has conducted "lab to school programme" on Saturday, 4 July 2015 at Zilla Parishad Boys High School, Bollarum, Secunderabad 500 010. The students have demonstrated 11 experiments to 9th & 10th class students (for both Telugu and English medium). All experiments are from State Government science text books of 9th & 10th class.
- 2. The department of Chemical Technology, Loyola Academy Degree & PG College has conducted Guest Lecture on Monday, 15 June 2015 for B.Sc. II and III year students on Smart

- ways to Success (S2S). The Speaker was Mr. B. Nithin Kumar, Senior PP Consultant, Panasonic Asia Pvt. Ltd., Singapore.
- 3. The department of Chemical Technology final year students have visited Hygro Chemicals Pharmtek Pvt Ltd, Hyderabad on Wednesday, September 2015.
- 4. The department of Chemical Technology has conducted National Seminar on "Emerging Trends in Chemical Technology" on 10-11 December 2015.













































DEPARTMENT OF CHEMICAL TECHNOLOGY

DEPARTMENTAL ACTIVITIES 2016-17

I. Staff

- Mr. Samaresh Basani has successfully completed the course "Fundamentals of Electronic Materials and Devices" from Indian Institute of Technology, Madras.
- Mr. Samaresh Basani has participated in UGC SAP sponsored National Seminar on "Multifunctional Materials and their Applications" organized by Department of Physics, University College of Science, Osmania University, Hyderabad.

II. Students

- 1. Mr. Chirag, a student of II year B.Sc. Chemical Technology won second prize in Model Making event conducted as a part of Rasayanika 2k16 an Annual National level Technical Fest organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IIChE), Hyderabad Regional Centre, Student Chapter of Anurag group of institutions.
- 2. Ms. K. Lissy Mary, a student of III year B.Sc. Chemical Technology won second prize in Poster Presentation event conducted as a part of Rasayanika 2k16 an Annual National level Technical Fest organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IIChE), Hyderabad Regional Centre, Student Chapter of Anurag group of institutions.
- 3. Ms. K. Lissy Mary, a student of III year B.Sc. Chemical Technology won second prize in Paper Presentation event conducted as a part of Rasayanika 2k16 an Annual National level Technical Fest organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IIChE), Hyderabad Regional Centre, Student Chapter of Anurag group of institutions.
- 4. Mr. Anirjit Ghosh, a student of III year B.Sc. Chemical Technology won second prize in Poster Presentation event conducted as a part of Rasayanika 2k16 an Annual National level Technical Fest organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IIChE), Hyderabad Regional Centre, Student Chapter of Anurag group of institutions.

III. Activities 2016-17

- 1. The department of Chemical Technology has conducted "**Lab to School programme**" on 16-07-2016 at Z.P. High School, Kowkur, R.R District.
- 2. The department of Chemical Technology has conducted Guest lecture on "Roll of Chemical Engineer" on 10 September 2016 for B.Sc. third year students.
- 3. The department of Chemical Technology has taken the final year students to industrial visit on 15 December 2016 (**Gayatri Sugars Ltd, Adloor Yellareddy**).
- 4. The department of Chemical Technology along with departments of Chemistry, Biotechnology, Agricultural Science & Rural Development and Environmental Science has conducted International seminar on "Green Chemistry for Sustainable Development: Issues, Challenges and Prospects" on Friday, 20 & Saturday, 21 January 2017.

















Organizing Secretary
Dr Sonika Sharma
Head, Department of Chemistry (PG)

ead, Department of Chemistry (PG Coordinators Dr M.Jayaramudu Mrs. B.LalithaKumari Dr K.Shanthi Mrs. N.Kavitha Dr C H.Sirisha Mr. V.V.S. Chalapathi Rao Dr P.Thirupathi

List of Speakers

- List of Speakers

 IM Roed R. Ravanera, Excutive Director,
 SARSOUN, Navier University, Philippines.

 2 Prof. Steve Lanners,
 University of Namur, Reigium.

 3 Prof. Praven Martis,
 University of Namur, Reigium.

 4 Mr Anoop Basnet,
 St Xwier's College, Kathmandu, Nepal.

- St. Xavier's Conege, naturality

 Mr. SagarAryal,
 St. Xavier's College, Kathmandu, Nepal.

 Prof. D. B. Ramachary,
 School of Chemistry, University of Hyderabad,

- Department of Chemistry, III, 1900.

 8. Dr Manojit Pal, Dean,
 Dr Reddy's Institute of Life Sciences.

 9. Dr A.V.V. S. Swami,
 4-harayaNagarjuna University, Guntur,
- Andhra Pradesh.

 10. Dr J.V.N.S. Prasad, Principal Scientist,
 Central Research Institute for Dryland Agriculture,
- Prof. P. Chandrashekar Rao (Retd),
 Prof. Jayashankar Telangana State Agricultural

Registration:

Participants are requested to register by returning duly filled-in registration form along with registration fee Students/Scholars: Rs 500 Faculty/Scholars: Rs 1000 Last date for registration: Monday, 09 January 2017

Mode of Payment
Demand Draft:
Demand draft must be drawn in favor of The Princip
Loyola Academy Degree & PG College,
Secunderabad 500 010 TS, (Payable at Hyderabad)
Net Banking, 74, 171501000004237,
IFSC: IOBA0001715

Accommodation:
Accommodation will be arranged at a resonable rate.
Request to be made atleast 10 days in advance.
For details, please contact
Mr P. Sudhakar Reddy, Cell: 9490225998

Registration Form

E-mail: Mobile: Nature of participation: Faculty/ Student/Corporate Delegates Poster presentation: Yes / No Author/s & Title of the poster:

Details of registration fee :
Name of the bank :
D.D. Number :
Accommodation required :Yes / No
Date : __/ __/



Two-Day International

Seminar On
"Green Chemistry for Sustainable Development:
Issues, Challenges and Prospects"
Friday, 20 & Saturday, 21 January 2017

ORGANIZED BY

ABOUT THE INSTITUTION

ABOUT THE INSTITUTION

Loyola Academy (IA) is managed and administrated by the members of the Society of a continuation of the Society of the

OBJECTIVE
This seminar on "Green Chemistry for Sustainable Development" aims at creating awareness among students, faculty, and researchersabout the significance of green chemistry for a safer and environment-friendly sustainable development.

We invite papers on the following themes:

- We invite papers on the following themes:

 > Green Synthesis and Designing
 > New Trends in Green Chemistry
 Green Chemicals and Solvents
 Green Chemicals and Solvents
 Green Catalystiation of Green Chemistry
 Green Brands and Green Chemistry
 Green Brands Green Chemistry
 Green Brands Green Pasticides
 Renewable energy
 Green Building
 Industrial Waste Management/Treatment
 Carbon Capture Technology

Presentation can be Oral/Poster. The abstract should be between 200-250 words, typed in Times New Roman, fort size-12, Switmston of the papers indicates that it or similar version of it has not been previously published or accepted for publication. Papers selected through pere evaluation will be published in the souwerir. The soft copy of the abstract should be e-mailed to greenchemloyola 2017@gmail.com

ORGANIZING COMMITTEE

Chief Patron Rev Fr A. Santiago SJ

Patron Rev Fr J. Thainese SJ Correspondent

Convener Rev Fr Dr K.S.Casimir SJ Principal

Members

Dr N.Maria Das Dean of Administration

Mr P.V.R.S.Prasad Dean Developmental Affairs & IQAC Coordinator

Ms Jacintha Vincent NAAC Coordinator

Advisory Committee

Prof M. Devadas Head, Department of Chemistry, Osmania University, Hyderabad, TS, INDIA

Prof V. Uma
Dean of Sciences, Osmania Uni
Hyderabad, TS, INDIA

Prof D. B. Ramachary hool of Chemistry, University of Hyd Hyderabad, TS, INDIA

Dr H. Surekha Rani Department of Bio-Technology Bio-Technology, Osma Hyderabad, TS, INDIA

DEPARTMENT OF CHEMICAL TECHNOLOGY

DEPARTMENTAL REPORT 2017-18

I. Departmental Activities

- 1. The department of Chemical Technology has conducted "**Lab to School programme**" on 22-07-2017 at Z.P. High School, Chintal, Medchal District.
- **Purpose**: The purpose of this programme is to demonstrate learning through experiments. The initiation of lab experiments was something quite new, taking teaching and learning to a higher level. A social service in the field of education is the main thought behind this programme. It will also enable the teaching skills within our students.
- **Report**: On the morning of 22nd July, all the final years assembled at the college gate, from where they were taken to the Z.P.H.S in the college transportation. After reaching there the 9th and 10th class students were gathered in two different classes. Physics and chemistry experiments were demonstrated in the two classes simultaneously, which were later interchanged in the two classes. The high school students were questioned related to the experiments and prizes were given.
- **Review**: Taking the facilities to make learning practical, this programme sparked a large positive response from the school students. They enjoyed learning with the practical demonstration. Also, the department students, felt purposeful to contribute for a cause through this endeavour.





























- 2. The department of Chemical Technology has taken the final year students and 13 second year students to **Dr. Reddy's Laboratories Ltd-Integrated Product Development Organization** (**R&D**), Bachupally, Hyderabad as part of industrial visit on 20 November 2017.
 - **Purpose**: To enhance the learning through the process of productive industrial visits. The unit operations and unit process would be witnessed practically, which made the students understand the concepts better.

- **Report**: The HR department of Dr. Reddy's have received our Chemical Technology students with warm welcome. The students were taken to the seminar hall and explained the procedures they are following in their R & D. After that, they have taken the students around the lab and showed all the equipments, apparatus and different lab-scale setups and they also provided lunch to the students in R & D canteen. The students were very happy with the visit.
- **Review**: The students enjoyed the process of observing the varied equipments at work. The theoretical lectures took a concrete shape through the practical demonstration.







- 3. A guest lecture was organized for the II and III year students of the Department of Chemical Technology on 'Career Opportunities and Challenges in Chemical Engineering' on 4 December, 2017 by Dr. Bala Narasaiah, Professor, College of Engineering, JNTU Ananthpur, Andhra Pradesh.
 - **Purpose**: To impart knowledge to the students in the field of chemical engineering, widening their scope for learning.
 - **Report**: Dr. Bala Narasaiah has explained what is Chemical Engineering and different fields in Chemical Engineering. The details of chemical industries that manufacture different products by Chemical Engineers like cosmetics, medicines, fertilizers, pesticides, paper and pulp, sugar, cement etc. were given to the students. The students were also told about the career opportunities in different fields of Chemical Engineering.
 - **Review**: The lecture was received with the increase appreciation. The participation and involvement of the students was commendable. It made the students grasp an idea of career opportunities in the field of education.





4. The department of Chemical Technology has organized a one day Seminar on "Emerging Trends in Chemical Technology" on 31 January 2018.

• **Purpose**: The purpose of the seminar is to instigate and get updated in the field of Chemical Technology. The new developments accompanied with original ideas, helped gather the growth in the field effectively.

• **Report**: The seminar was organized in PG seminar hall and it was started at 9.30 a.m. with an efficient set of speakers who enlightened the audience on the topics related to the seminar.

an efficient set of speakers who emightened the addrence on the topics related to the seminar.				
Session	Time	Topic	Name of the Speaker	
I	09:30 a.m. to 11:00 a.m.	Innovations in Chemical Technology for Sustainable Development of Indian Industry and Society	Dr. S. Sridhar , Scientist & Project Leader, Membrane Separations Group, Chemical Engineering Division, CSIR-Indian Institute of Chemical Technology, Hyderabad	
II	11:15 a.m. To 12:15 p.m.	"Concepts of Life & Life Sciences and Life Technologies"	Dr. P. Raja Rao, Professor & Chairman, BOS, HMCT & CA, University College of Technology, Osmania University, Hyderabad	
III	01:15 p.m. To 02:30 p.m.	"Principles and applications of Membrane Separations"	Dr. Radhika G.B. , Professor, Department of Chemical Engineering, Padmasri Dr. B.V. Raju Institute of Technology, Narsapur, TS	

The seminar was well received by both staff and students. It also enhanced the career skills in the students, who wished to pursue higher education in the field.

• **Review**: The seminar was quite appreciable. The varied speakers were glad to be a part of the seminar, where the outlook was to measure the research in the field of Chemical Engineering. It opened wide doors for exchange of new ideas, bringing people in the same field under one roof. The students happily received the lectures and clarified their doubts.













II. Staff

Achievements

- 1. Mr. P.V.R.S. Prasad has participated as a delegate in the "Workshop on Data Processing and Automation for National Institutional Ranking Framework" conducted on 2nd September, 2017 at St. Joseph's Institute of Management & Integrated Intelligent Research, Bangalore.
- 2. Mr. P.V.R.S. Prasad was a resource person in National conference on "Innovative practices in teaching, learning & evaluation", organized by internal quality assurance cell, A.V. College of Arts, Science & Commerce on 6th Feb, 2018.
- 3. Mrs. G. Lavanya has presented a paper in "Integrated International Immersion Conference (IIIC)" on "Dynamic Optimization study of Trickle bed Reactor for HDS and HDA of Diesel using Lagrangian Interpolation Method" organized by Loyola Academy Degree and PG college on 23rd Feb to 1st march, 2018.
- 4. **Mrs. B. Lalitha Kumari** has attended "**Integrated International Immersion Conference** (**IIIC**)" organized by Loyola Academy Degree & PG College on 23rd Feb to 1st march, 2018.

III. Student Achievements

- 1. **Mr. Ajeet Kumar Rai**, a student of B.Sc. Chemical Technology III year has participated in paper presentation Event conducted as a part of **Rasayanika 2k17**, an Annual National Level Technical Fest Organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IICHE), Hyderabad Regional Centre (HRC) student chapter of **Anurag Group of Institutions**.
- 2. **Mr. Chirag Molhora**, a student of B.Sc. Chemical Technology III year has participated in paper presentation Event conducted as a part of **Rasayanika 2k17**, an Annual National Level Technical Fest Organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IICHE), Hyderabad Regional Centre (HRC) student chapter of **Anurag Group of Institutions.**
- 3. **Mr. M.D. Altaf**, a student of B.Sc. Chemical Technology III year has participated in paper presentation Event conducted as a part of **Rasayanika 2k17**, an Annual National Level Technical Fest Organized by the Department of Chemical Engineering under Indian Institute of Chemical Engineers (IICHE), Hyderabad Regional Centre (HRC) student chapter of **Anurag Group of Institutions**.
- 4. **Mr. Ajeet Kumar Rai**, a student of B.Sc. Chemical Technology III year has participated in paper presentation in the event **SUDHEE-2017 and CHEMSPARK 2k17** conducted by the Department of Chemical Engineering, **Chaitanya Bharathi Institute of Technology**, Gandipet, Hyderabad on 15th and 16th September 2017.

- 5. **Mr. Chirag Molhora**, a student of B.Sc. Chemical Technology III year has participated in paper presentation in the event **SUDHEE-2017 and CHEMSPARK 2k17** conducted by the Department of Chemical Engineering, **Chaitanya Bharathi Institute of Technology**, Gandipet, Hyderabad on 15th and 16th September 2017.
- 6. **Mr. M.D. Altaf**, a student of B.Sc. Chemical Technology III year has participated in paper presentation in the event **SUDHEE-2017 and CHEMSPARK 2k17** conducted by the Department of Chemical Engineering, **Chaitanya Bharathi Institute of Technology**, Gandipet, Hyderabad on 15th and 16th September 2017.
- 7. Mr. Chirag Malhan and Mr. Ajeet Kumar have presented a poster entitled "Biodegradation of Waste" and won third prize in "Integrated International Immersion Conference (IIIC)" organized by Loyola Academy Degree & PG College on 23rd Feb to 1st march, 2018.

IV. Career Placements 2017-18 (upto 31 January 2018)

	UG 3 year Students placed in the year 2017-18				
Sl. No.	UID Number	Name of the Student	Organization Placed in	Salary Offered	
1	111715011001	Ch Sowmyasri	Dr. Reddy's Lab, Hyd, TS	2.2 lac CTC	
2	111715011010	G. Joseph Abhishek Reddy	Dr. Reddy's Lab, Hyd, TS	2.2 lac CTC	
3	111715011011	J. Sandeep	Dr. Reddy's Lab, Hyd, TS	2.2 lac CTC	
4	111715011020	V. Premchand	Dr. Reddy's Lab, Hyd, TS	2.2 lac CTC	
5	111715011017	R. Narender Reddy	Dr. Reddy's Lab, Hyd, TS	2.2 lac CTC	
6	111715011019	V.Lokeshwar Reddy	Vasanth Chemicals, Hyd, TS	1.2 lac CTC	
7	111715011007	B. Sateesh Reddy	Vasanth Chemicals, Hyd, TS	1.2 lac CTC	
8	111715011008	Chirag Malhan	ITC, Bhadrachalam, TS	2.2 lac CTC	
9	111715011015	P.Aravind	Enal drugs, Hyd, TS	1.5 lac CTC	
10	111715011005	R.Ramya	Enal drugs, Hyd, TS	1.5 lac CTC	
11	111715011012	L.Mukesh Goud	Enal drugs, Hyd, TS	1.5 lac CTC	
12	111715011013	M.Pramod Kumar	Enal drugs, Hyd, TS	1.5 lac CTC	
13	111715011014	P.Sandeep	Enal drugs, Hyd, TS	1.5 lac CTC	
14	111715011018	T.Pruthvi Raj	Enal drugs, Hyd, TS	1.5 lac CTC	

V. Research publications: Nil

VI. Book Publications: Nil

(Mrs. B. Lalitha Kumari) HOD, Dept. of Chemical Technology

DEPARTMENT OF CHEMICAL TECHNOLOGY

DEPARTMENTAL REPORT 2018-19

I. Departmental Activities

- 1. The department of BSc. Chemical Technology has conducted "**Lab to School**" program on 7th July, 2018 at Zilla Parishad High School, Macha Bolarum, Secunderabad.
 - **Purpose**: The purpose of this program is to help the students of ZPHS to understand the basic concepts of science in a creative and visualized manner. This program helped the students to embrace their ability of communication and social responsibility.
 - **Report**: The final year students along with a few second year students teamed up and set off to ZPHS along with the Head of the department Mrs. B. Lalitha Kumari, Mr. P.V.R. Sai Prasad and Mrs. Lavanya (lecturer in Chemical Technology). The experiments conducted are as follows:

The following experiments were demonstrated at the venue;

Physics	Chemistry
Series and Parallel connection	Flame test
Resonance	Titration, precipitation reactions
VIBGYOR, focal length	pH meter
Screw guage and Vernier Callipers	Brown ring test
Electroplating	Sugar and carbon elevation

The students were able to convey their concepts in a practical and visual way which helped the school students understand them even better. This also helped all the students to reinforce their spirit of teamwork and enhance their communication skills.

- **Review**: The event was a huge success. Students from both the ends enjoyed themselves thoroughly. This event endorsed the students to convey their ideas effectively and it was highly informative for the students of Zilla Parishad High School. We thank our Principal Rev Fr Dr.P. Anthony SJ for helping us to conduct this program.
- Photos:













2. The department of Chemical Technology has conducted a **guest lecture** on 14th September 2018. Dr. B. Sridhar Rao, Head of the Department of Chemical Engineering, CBIT, Hyderabad had delivered a lecture on the topic "Chemical engineering and its contributions to society". He has completed his B.Tech from Osmania University, M.Tech from JNTU and PhD from NIT, Warangal and has 13 years of industrial experience. He has also designed equipments.

- **Purpose**: the purpose of this lecture was to educate the students on how chemical engineering plays a pivotal role in our society. We understood that there is requirement for chemical engineers in various fields such as medicine, military, and many other areas.
- Report: The lecture was started with the meaning of chemical engineering and the various aspects involved in it. He spoke about the various fields in which a chemical engineer plays an important role such as medicine, industries, environmental issues etc. He also elaborated on the history of Chemical Engineering which was very interesting. He reiterated on the need for chemical engineers and how it is important for us to realize our potential and rise up to the standards. Lastly, he concluded his lecture by asking us to work hard and embrace the fact that we are chemical engineers. Mr. P.V.R. Sai Prasad expressed his gratitude and gave a vote of thanks to Mr. B. Sridhar Rao and the Head of our department Mrs. Lalitha Nelson presented him with a memento as a token of our appreciation and gratitude.
- Review: This session was very informative and useful to all of us. It made us learn even more about our course and its potential employment options. The session was very interactive as well and we thoroughly inspired. Mr. B. Sridhar Rao motivated us to work hard in order to achieve our true potential. This has inspired us all to put in lot more efforts. We would sincerely like to thank our principal Rev. Fr. Dr. P. Anthony SJ, our Head of the Department Mrs. Lalitha Nelson, our Dean Mr. P.V.R. Sai Prasad for arranging this special event and for helping us to attain more knowledge.

Photos:





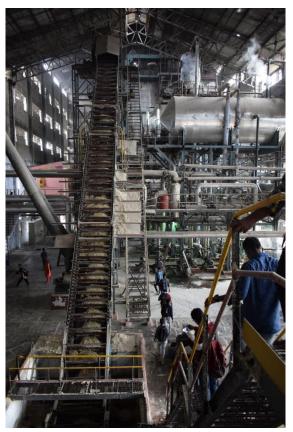


- 3. The department of BSc. Chemical Technology has arranged an **industrial visit** for the students at Gayatri Sugars, Kamareddy on 20th December, 2018.
 - **Purpose**: The purpose of this visit is to give the students a real time exposure of how an industry works and how the concepts they learn are being put to use.
 - Report: The final year students and a few second year students visited Gayatri Sugars, Kamareddy with Mrs. B. Lalitha Kumari (HOD) and Mr. P.V.R. Sai Prasad as their guides. They were greeted by Mr. Srinivas who showed the students around the industry. The students understood how various unit operations and processes they learn as part of the curriculum are being applied to get the sugar we consume on a daily basis. Apart from observing the manufacture of sugar, they also explained the importance of energy conservation and also how the industrial water is being treated. They were also shown the distillation unit which plays a crucial role in all industries.
 - Review: This visit has helped the students to comprehend their theoretical concepts and has also helped them approach their academics with a practical outlook. It has also helped them get an idea on what an industry is and how the subjects they learn play a pivotal role. We sincerely like to thank Mr. Srinivas and all the other faculty of Gayatri Sugars for being so patient and for spending their valuable time. Lastly, we thank our Principal Fr Dr. P. Anthony SJ for helping us by arranging this visit.

• Photos:















- 4. The department of BSc. Chemical Technology has conducted an annual **seminar** on 8th January, 2019.
 - **Purpose**: The purpose of this seminar is to educate the students on the emerging trends in the field of chemical engineering as well as the various challenges that we, as chemical engineers need to face.

• **Report**: The event began with the kind words of our Principal Fr. P. Anthony and our Rector Fr. S. Raju SJ.

Session	Time	Topic	Name of the Speaker
I	10:00 a.m. to 11:00 a.m.	"How to become Chemical Engineering Entrepreneur and Role of MSME to help Startups"	Smt. N. Sumathi, Assistant Director, MSME-Development Institute, Hyderabad under Ministry of Micro, Small & Medium Enterprises, Govt. of India
II	11:15 a.m. To 12:15 p.m.	"Challenges in chemical process industry - our role to play"	Dr. P. V. Naga Prapurna, Associate Professor & Ex-HOD, Chemical Engineering, CBIT, Hyderabad
III	01:15 p.m. To 03:15 p.m.	"Quiz competition"	

The seminar comprised of two lectures. The first lecture was given by Smt. N. Sumathi, Assistant Director, MSME Development Institute, Hyderabad on the topic "Emerging Trends in Chemical Technology". She enlightened us about what entrepreneurship is and how we, the students can set up our businesses and industries. MSME Development Institute comes under the Ministry of micro, small and medium industries which helps in facilitating businesses and mentors the students. We were also notified on the various schemes available for us to enhance our ideas and how to hone our skills. This lecture was extremely informative and we sincerely thank Smt. N. Sumathi for that. At the end of the lecture, Mr. Sai Prasad presented her a memento as a token of our appreciation and gratitude and Mrs. Vijayasree honoured her with a shawl.

The second lecture was given by Dr. P.V. Naga Prapurna, associate professor and ex-HOD of the chemical engineering department, CBIT, Hyderabad. She spoke on the topic "Challenges in Chemical Process Industry and Our Roles to Play". She elaborated on how the economy of a country is dependent on the industrial sector. We understood the purpose of the subjects that we learn, play a crucial role in the manufacture of various products. Ma'am not only spoke about the history of chemical engineering, its applications and the various sectors present in it but also motivated us with her highly cheerful spirit. This lecture was highly knowledgeable

and helped us understand our role as a chemical technology graduate. Mr. Sai Prasad presented her a memento for sparing her valuable time.

The afternoon session began with the departmental quiz on the subjects of physics and chemistry conducted by Dr. Jayaramudu and Mr. Nityanada Ghosh. Students from the departments of Agriculture, Biotechnology, Computer Science and Chemical Technology took part. The competition was extremely lively and sportive. The department of B.Sc. Agricultural Sciences (AAG-A) won the competition with runner ups being the students from Biotechnology and Computer Science.

The event concluded with the distribution of trophies to the winners by our Vice-Principal Rev. Fr. Balaswamy and with a vote of thanks.

• Review: The students would like to thank our Principal Rev. Fr. P. Anthony and the head of our department Mrs. B. Lalitha Kumari and faculty associated with department of Chemical Technology for conducting this seminar. The seminar is highly informative and helpful to learn more about the Chemical Technology course. This seminar also proved to be conducive in furnishing new ideas of starting chemical industries etc. and the students are very grateful for this.

Photos

















II. Staff Achievements:

- a) Mr. P.V.R. Sai Prasad, lecturer in Chemical Engineering was a resource person in a National Conference on 'Innovative Practices in Teaching, Learning and Evaluation' on 6th February 2018 at A.V. College, Hyderabad.
- b) Mr. Nityananda Ghosh, lecturer in Physics has attended a one day work shop on "The National Programme on Technology Enhanced Learning" (NPTEL) jointly sponsored by Ministry of Human Resource Development (MHRD) and IIT Madras at JNTU Hyderabad on 24th August 2018.

III. Student Achievements: Nil

IV. Career Placements 2018-19: To be obtained

V. Research publications: Nil

VI. Book Publications: Nil

(Mrs. B. Lalitha Kumari) HOD, Dept. of Chemical Technology

DEPARTMENT OF CHEMICAL TECHNOLOGY

DEPARTMENTAL REPORT 2019-20

I. Departmental Activities

- 1. On 10th July 2019 the department of BSc. Chemical Technology has organized a lab to school program at Zilla Parishad High School (ZPHS), Macha Bollaram, Secunderabad.
- **Purpose:** The purpose of this program is to make students of ZPHS practically understand the concepts of science that they have been studying theoretically in classrooms.
- **Report:** The 2nd and 3rd year students of chemical technology conducted the program under the guidance of Head of the department Mrs. B. Lalitha Kumari and Mr. Zakir Husain faculty in chemical technology.

The following experiments were demonstrated:

PHYSICS	CHEMISTRY
Parallel and series connection	Flame test
Magnetic field lines	Identification of acids and bases
Dispersion	Adsorption
Volume of irregular solids	Diffusion
Viscosity of different liquids	Golden spangles
Density and gravity separation	Colorful rain
	Identification of gases
	Metals and non-metals

The concepts were explained in a creative way, that school children enjoyed learning. The sessions were so interactive that children actively participated and asked many questions with gave more insights to the concepts.

- Review: Students opined that this is a very unique program which provided a wonderful platform to interact with school students and ignite interest in science. This program was helpful in two ways:
 - ✓ Helped college students to sharpen their communication and teaching abilities.
 - ✓ Facilitated schools children to understand the concept of science in fun yet effective way laying pathway for children to opt for science subjects.

The entire team was very proactive during the event and it has become a big hit among school children.

We thank our faculty for being so supportive during the event and finally we thank our principle for being the backbone for this program.









2. On 11th December, the department of BSc. Chemical Technology has organized an industrial visit for final year (DCT) students at Jeedimetla effluent treatment limited (JETL), Jeedimetla, Chinthal, Hyderabad.

PURPOSE: The purpose of this program is to gain exposure and to acquire practical knowledge on the various working processes in the treatment of wastewater and effluents.

REPORT: The 3rd year students of chemical technology were taken to the Jeedimetla effluent treatment plant accompanied by the head of the department Mrs. B. Lalitha Kumari and DR. Zakir Hussain- faculty in chemical technology.

We were briefed about the history of the plant, then were given a detailed orientation on various parameters that determine the effluent treatment process, the working principles, equipment involved in the processes and the end uses of the treated effluent. The session was interactive and the students actively participated posing questions related to effluent treatment.

After the orientation, a guided tour of the plant was organized. The students got an opportunity to witness different types of equipment like aeration tank and sedimentation tank and their utility in effluent treatment. A detailed layout and operation of pilot plant, steam generation plant was shown.

REVIEW: Students opined that visit has reinforced the knowledge gained in the classroom on effluent treatment.

On behalf of Loyola Academy, we have thanked Mr. Bakka Reddy, Operations Manager at Jeedimetla Effluent Treatment Limited for giving us an opportunity to gain immense knowledge

on effluent treatment. We express our heartfelt thanks to our faculty and Principal Rev- Fr Dr. Pothireddy Anthony SJ for giving permission to organize such a resourceful visit.



















3. On 18th January 2020 the department of Bsc. Chemical technology has organised a guest lecture in Loyola academy, Alwal Secunderabad.

PURPOSE: The purpose of the program is to gain additional knowledge on separation processes involving mass and heat transfer operations utilised in industries.

REPORT: The lecture was given by Dr. V.V. Basava Rao the head of the department and professor in the department of technology-chemical engineering, Osmania university.

3rd and 2nd year students along with the faculty have attended the lecture. The lecture began after a brief introduction of Prof. V. V. Basava Rao by the head of the department, Ms. B. Lalitha Kumari. Prof. Basava Rao started by explaining what basic knowledge one must acquire in order to fulfill their role as a chemical engineer. Using visual aids, he gave a detailed orientation on what separation means, why industries employ separation processes and then discussed the main separation techniques involving mass and heat transfer operations.

The sessions were very interactive and the students participated by raising questions. As a token of appreciation Prof. Basava Rao was presented a memento by Ms. Lalitha Kumari.

REVIEW: The students opined that the lecture gave important insights on how the process that they learn theoretically were being implemented in industries

On behalf of Loyola Academy, we thanked Prof. V. V. Basava Rao for giving us an opportunity for enlightening us with his lecture and gain immense knowledge separation processes. And we express our heartfelt thanks to our faculty and Principal Rev- Fr Dr. Pothireddy Anthony SJ for organizing such resourceful lecture.









4. On 26th January 2020, the department of B.Sc. Chemical Technology has organized a one-day seminar in Loyola Academy, Alwal, Secunderabad.

PURPOSE: The purpose of the program is to gain exposure on "Emerging Trends in Chemical Technology" and also to obtain immense knowledge on general safety to be taken in work places.

REPORT: The seminar began with a prayer song followed by lighting of the lamp by the Principal, Rev. Fr. Dr. P. Anthony SJ, the Correspondent, Rev. Fr. P. Gnanadevan SJ and the chief guest of the day, Shri Ramakrishnan Iyer for the inauguration. Each of the dignitaries addressed the gathering.

All I, II, III year students of B.Sc. Chemical along with the faculty have attended the seminar. The seminar comprised of four sessions given by four guest speakers. As a token of service all the speakers were conferred a sapling by the head of the department and the faculty members before they started their presentation.

The inaugural session was given by the chief guest, Shri Ramakrishan Iyer who is currently the Vice President-Technical in Vasant chemicals Pvt. Ltd., Hyderabad. He spoke on the topic "Alignment of academic orientations and the industrial requirements of chemical engineers". He also talked about the importance of learning fundamental concepts in elicitive manner and significance of being presentable in their work place to succeed in the field of chemical engineering/ technology. He advised the students not to focus on earning but to serve the society. In addition, he addressed the faculty to help students develop their soft skills.

After the session ended the chief guest was felicitated by the correspondent with a shawl and a memento.

The speaker for the second session was Shri A. Ravinder, assistant professor, College of Technology, OU, Hyderabad. His insightful lecture on "Production of biofuels from renewable recourses using microbes through Novel Biochemical Process Technologies" was full of information. He gave a detailed orientation on the topics- sustainable development and various renewable resources. He explained what biofuels are, why it is important to choose them and the research design, methodology for the production of bio fuels.

The head of the department, Mrs. B. Lalitha Kumari and the IQAC coordinator, Mr. Sai Prasad handed over a memento to the speaker at the end of the lecture.

The 3rd session started immediately after the lunch break. Shri Lakshmi Narayana, safety manager in Indian Immunological Ltd., Hyderabad led this session. He spoke about "General safety, workplace hazards and controls in chemical industries". He explained to the students about MSDS (Material Safety Data Sheet), PDCA cycle (Plan Do Check Act) and the different IMS (Integrated Management System) standards. He talked about the general hazards and risks faced by the workers in chemical industries and the responsibilities of occupier to ensure the safety of the workers.

Mr. Nityananda Gosh, Lecturer in physics, presented a memento to Shri Lakshmi Narayana as a token of appreciation.

In the last session, Shri Bandari Balraj who is the assistant manager in Saptagir Labs Pvt. Ltd., Hyderabad delivered a lecture on "Safety terminology and fire safety". Using visual aids, he cautioned the students regarding different accidents occurring in various industries. He continued to explain the duty of safety officer and the risk assessment process.

A memento was handed over to Shri Bandari Balraj by Dr. Zakir Hussain, faculty in chemical engineering.

REVIEW: The students opined that all the sessions were quite thought provoking and captivating. The sessions were so interactive that the students actively participated by asking questions. The students were enlightened by the speakers as they provided information on various aspects in the field of chemical engineering.

On behalf of Loyola Academy, we have thanked all the speakers for giving us an opportunity to attend these resourceful lectures and gain immense knowledge. We express our heartfelt thanks to our faculty and Principal, Rev. Fr. Dr. P. Anthony SJ for organizing this educational seminar.































5. On 29th May 2020, the department of B.Sc. Chemical Technology has organized a one-day webinar via Zoom platform.

PURPOSE: The purpose of the program is to gain exposure on "Importance of Chemical Engineering and its Role in Combating Pandemics like COVID-19".

REPORT: The seminar began with a formal introduction of two speakers:

- 1. DR. Jyothi Thati, Assistant Professor, Department of Chemical Engineering, Osmania University.
- 2. DR. S. Sridhar, Senior Principal Scientist, Council of Scientific and Industrial Research-Indian Institute of Chemical Technology (CSIR-IICT).

All I, II, III year students of B.Sc. Chemical Technology along with our faculty have attended the webinar. The webinar comprised of two sessions given by two speakers.

The first session titled as "Importance of Chemical Reaction Engineering in Process Industries" was presented by DR. Jyothi Thati. She started with a scope of chemical engineering and chemical reaction engineering. She highlighted the importance of learning fundamental concepts of chemical reaction engineering (CRE) and how the single subject "CRE" makes the branch of chemical engineering / technology unique. She paid a special emphasis on how CRE may help to design, maintain, trouble shoot and improve capacity and selectivity of the industrial processes. Moreover, she showed some glimpse of research concept like catalysis in CRE and their

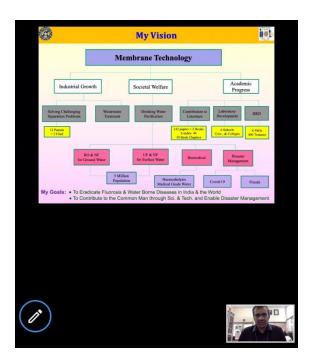
importance in research and development (R& D) of various industrial units and academic branches.

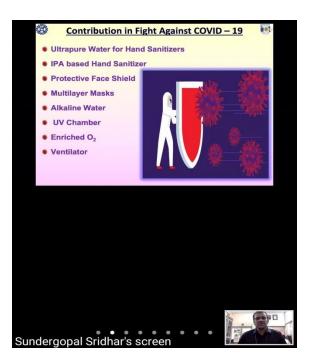
The speaker for the second session was DR. S. Sridhar, whose topic is titled as "Technology Interventions to Provide Relief from COVID-19". His vision statement and insightful lecture are very useful and helpful to efficiently combat COVID-19 like pandemics. He explained how to synthesize hand sanitizers, face masks, Personnel protection equipment's (PPEs), protective masks, oil based biomask, cotton cloth based mask using simple house hold and stationary items through his self-made videos. Moreover, he highlighted the importance of alkaline water in combating various diseases and how IICT's own technology of producing alkaline water at low cost is serving the society. Furthermore, he highlighted the importance of personnel hygiene, hand hygiene, personnel protection and respiratory protection. Finally, DR. Zakir Hussain has given the vote of thanks to both speakers highlighting important points from the lectures.

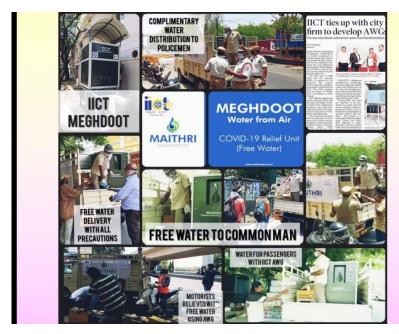
REVIEW: The students opined that the sessions were very useful and helpful in combating COVID-19 efficiently. Moreover, students are able to understand the role of CRE in serving industry and society.

On behalf of Loyola Academy, we have thanked all the speakers for giving us an opportunity to attend these resourceful lectures and gain immense knowledge. We express our heartfelt thanks to our faculty and Principal, Rev. Fr. Dr. P. Anthony SJ for active participation in proposing and organizing this webinar.

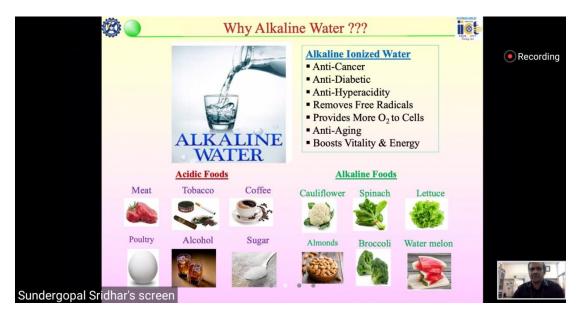


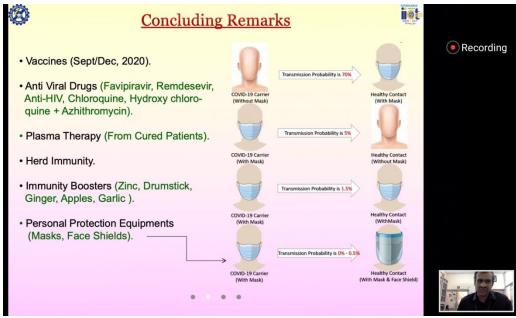












II. Staff Activities:

1. Our faculty members have participated in various seminar, webinars quizzes and FDPs. Details of these participations are as follows:

S.No.	Name of the	Name of the Event	Date & Place of	Туре	Purpose
	Participant		the Event		
1	DR. Zakir	2 Week Faculty	18th May to	FDP	Participation
	Hussain	Development	3rd June 2020		
		Programme on	& Ramanujan		
		"Managing Online	College, Delhi		
		Classes and Co-	University		
		Creating MOOCS	under Pandit		
		2.0"	Madan Mohan		

			Malviya National Mission on Teachers and Teaching by MHRD, Government of India.		
2	DR. Zakir Hussain	International webinar on "Fluid Dynamics and its Applications"	28th and 29th May 2020 & Government First Grade College, Bangalore University, Bangalore.	Webinar	Participation
3	DR. Zakir Hussain	National Webinar on "Interdisciplinary Approach to Economics"	29th May 2020 & St. Pious X Degree & PG College for Women, Hyderabad	Webinar	Participation
4	DR. Zakir Hussain	Online Webinar on "PPP: Pharma, Patent, Prosecution & Allergic Effects to COVID19"	27 May 2020 & Operant Pharmacy Federation.	Webinar	Participation
5	DR. Zakir Hussain	A Webinar on "IPR & Patent Filling"	22nd May 2020 & Aurora's Degree & PG College, Hyderabad in Collaboration with Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur (Government of India)	Webinar	Participation

7	DR. Zakir Hussain DR. Zakir	A Webinar on "Signalling Networks in Cancer" A Webinar on	18th May 2020 & Little Flowers Degree College, Uppal, Hyderabad. 5th May 2020 &	Webinar Webinar	Participation Participation
	Hussain	"Alternative and Non-Traditional Careers in Chemistry and Related Sciences"	American Chemical Society-USA.		
8	DR. Zakir Hussain	Virtual Conference on "Materials for Energy Harvesting and Catalysis"	1st May to 3rd May 2020. & Tata Institute of Fundamental Research- Mumbai, IISER- Kolkata and American Chemical Society-USA.	Webinar	Participation
9	DR. Zakir Hussain	A webinar on "Ultrapyc the solid density analyser"	22nd April 2020 & Anton Paar GmbH, Austria.	Webinar	Participation
10	DR. Zakir Hussain	Online Seminar on "Basics of Gas Adsorption: Physisorption"	20th April 2020 & Anton Paar GmbH, Austria.	Webinar	Participation
11	Mr. Nityananda Ghosh	Two Day faculty Development Programme on "MOODLE"	14th and 15th February, 2020 & Loyola Academy, T.S.	Workshop	Participation
12	DR. Zakir Hussain	One Day National Seminar on "Intellectual Property Rights in Academic Research"	15th February, 2020 & Raja Bahadur Venkat Rama Reddy Womens College (Autonomous), Hyderabad. T.S.	Seminar	Participation
13	DR. Amaladass	One Day National Seminar on Intellectual	15th February, 2020 & Raja Bahadur	Seminar	Participation

14	Mr. P.V.R. Sai Prasad	Property Rights in Academic Research Two Day Faculty Development Programme on MOOCs	Venkat Rama Reddy Womens College (Autonomous), Hyderabad. T.S. 21st and 22nd February, 2020 & Raja Bahadur Venkat Rama Reddy Womens College (Autonomous),	FDP	Participation
15	DR. Zakir Hussain	Three Day National Faculty Development Programme on "Quality Enhancements in HEIs - Future Vision"	Hyderabad. T.S. 4th - 6th May 2020 & St. Ann's College for Women, Hyderabad, T.S.	FDP	Participation
16	DR. Zakir Hussain	Webinar on "Recent Trends in Industrial Automation"	27th May 2020 & Swarnanandhra College of Engineering & Technology (Autonomous), Narsapur, A.P.	Webinar	Participation
17	DR. Zakir Hussain	"State Level Online Workshop on Intellectual Property Rights (IPR-2020)" and scored 75/75 marks.	27th May 2020 & Shri R. L. T. College of Science, Amaravati University, Maharashtra	Workshop	Participation and wrote Final Exam
18	DR. Zakir Hussain	Online Workshop on "Intellectual Property Rights for Academician and Researchers"	11th April 2020 & Pandit Deendayal Petroleum University- Gandhinagar and Intellectual Property	Workshop	Participation

			Protection Organisation- Ahmedabad.		
19	DR. Zakir Hussain	Given "Coronavirus Disease (COVID19) Awareness Quiz" and Secured Score of 100%.	24 th May 2020 & TERI School of Advanced Studies, New Delhi	Quiz	Participation and Examination

2. Faculty members from the department have registered for various courses and the details are as follows:

S.No.	Registrant Name	Course Name	Date of Completion	Institute / Awarding Body
1	Mr. P.V.R. Sai Prasad	Optimization in Chemical Engineering	Pursuing	NPTEL-IIT,Kharagpur
2	DR. S. Prithvika	English language & Literature	Pursuing	NPTEL-IIT, Guwahati
3	Mr. P. Sudhakar Reddy	Fundamentals of Spectroscopy	Pursuing	NPTEL-IISER, Pune
4	DR. Zakir Hussain	E-certificate course on Renewable Energy	30 th May 2020	Shri R. L. T. College of Science, Amaravati University, Akola, Maharashtra.
5	DR. Zakir Hussain	Hazard Assessment Process	5th May 2020	ABCS Safety Training Inc., USA
6	DR. Zakir Hussain	Let's Break the Chain of COVID-19 infection	1st April 2020	The Mohammed Bin Rashid University of Medicine and Health Sciences, United Arab Emirates (UAE)

III. Staff Achievements: Nil

III. Student Activities:

1. Four students of NCT have visited open day conducted by ARCI, Balapur on 24 October 2019 and they have gained knowledge of what's going on there. They have witnessed nano coating on different materials using different methods. The list of students participated are as follows:

S.No	UID No	Name	Place	Purpose	Remarks
1	11171801100 9	Egalapati Vinay			1.Glimpse of research
2	11171801101 9	Mohammed Isaac		On an Davi	2. Various
3	11171801102 0	N. Sri Naga Ravi Teja	ARCI, Balapur	Open Day Visit	methods available for
4	11171801102 6	Shailesh Guthikonda			nano- coatings



2. Twelve Students of Department of Chemical Technology have participated in National Science Day organized by Loyola Academy on 28th and 29th February, 2020. The list of students participated are as follows:

S.No	UID No	Name	Purpose
1	11171701100 2	B. Mounika	
2	11171701104 1	N. Krishna Chaitanya	
3	11171701100 4	D. Naga Lakshmi Kumari	Presented working model on solar electricity generation
4	11171701101 4	P. Padmini	
5	11171701102 0	S. N. Gayatri Devi	
6	11171701103 0	D. Parmesh	
7	11171701103 9	Mohammed Azeem	Presented working model on Solar Dryer
8	11171701104 6	N. Rudra Manikanta	

9	11171701104 8	B. Shiva Subramanium	
10	11171701105 1	V. Sai Sandeep	
11	11171801101 9	Mohammed Isaac	Power Point Presentation on Nuclear Thermal Rocket
12	11171801102 0	N. Sri Naga Ravi Teja	Power Point Presentation on Nano catalysis and Green Chemistry

3. Two students from NCT have registered in NPTEL courses and the details are as follows:

S.No.	Name of the Registrant	Name of the Course	Date of Completion	Mentor Institute
1	N. Sri Naga Ravi Teja	Fundamentals of Spectroscopy	Pursuing	NPTEL-IISER, Pune
2	Mohammed Isaac	Fundamentals of Spectroscopy	Pursuing	NPTEL-IISER, Pune

- 4. Three student from ACT have participated in face painting competition:
- 5. One student from NCT selected for internship and the details are as follows:

S.No.	Name of the Student	Name of the Institute	Period of Internship	Year of Student at Loyola
1	N. Sri Naga Ravi Teja	Council of Scientific and Industrial Research- Indian Institute of Chemical Biology (CSIR-	2 Months (May and June 2020)	2 nd
		IICB)	Julie 2020)	

IV. Student Achievements: One student from ACT own the face painting competition

IV. Career Placements 2019-20: To be obtained

V. Research publications: Nil

VI. Book Publications: Nil

(Mrs. B. Lalitha Kumari) HOD, Dept. of Chemical Technology