REPORT ON ONLINE LIVE TALK -08-01-2020

An online live talk was conducted by the Basic Science and Humanities Department on "THE ROLE OF CHEMISTRY IN ENGINEERING "for the first semester students of SSET on January 8 th 2021.

> SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY Vidya Nagar, Palissery, Karukutty, Kerala-683576, Ph No: 0484 2882900

> > Department of Basic Science and Humanities

Online live talk on

THE ROLE OF CHEMISTRY IN ENGINEERING





Dr. June Cyriac, Assistant Professor, Department of Chemistry, SH College, Thevara.



Date: 08th January, 2021 Time: 5:30 pm to 7:00 pm

Google Meet





Topic: ROLE OF CHEMISTRY IN ENGINEERING Date: 8TH JANUARY , 2021 Time: 05:30 PM to 7: 00 PM Resource person: Dr . JUNE CYRIAC, Asst Professor , Department of Chemistry S .H COLLEGE THEVARA

The online talk was conducted in Google PLATFORM. Students of first semester of various branches registered for the online talk. The talk was open to first semester B.Tech students of various streams and students of M. TECH Environmental Engineering too participated for the online live talk, Dr. Mini Tom welcomed the resource person. The online talk emphasised two areas namely the chemistry in everyday life and around people and the role of chemistry in the field of engineering. The talk highlighted on the the different aspects of safety measures in the day to life situations

Chemistry and basic sciences in general are not cultural complements but form a truly important basis in order to produce a work force of versatile and open minded engineering professionals, able to adapt to scientific and technological innovations. It is important to design the programs with relevant chemistry subjects for the integral education of the students, with a real link to the engineering subjects.

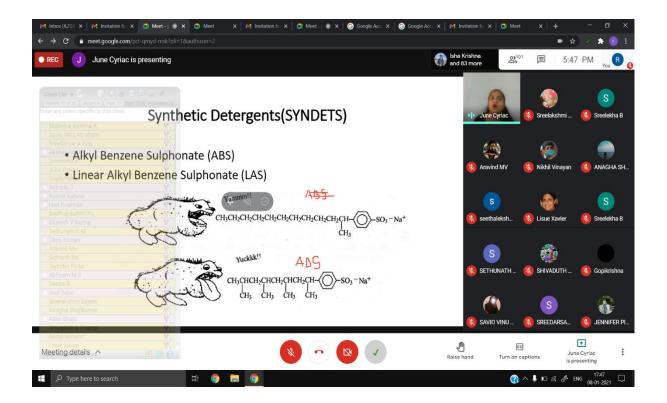
The life of chemistry was analysed as a need and as a tool to tackle all the problems related to Engineering. The speaker related the symbolic representations related to chemistry to apply in the real life situations. First Aid measures were generally explained to overcome certain accidents met in the daily life situations and make practical solutions for the problems met in one's life.

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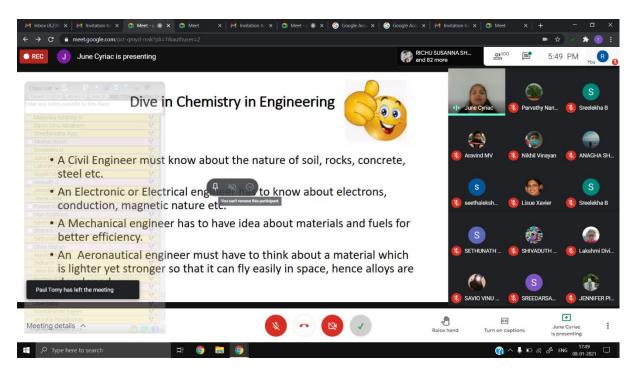
The classification of soaps was explained in a beautiful animation form . the classification of soaps based on high quality and low quality were explained to the participants. T he classification of soaps were done on the basis of total fatty maker (TFM). The discrimination between high quality and low quality soaps were explained . Synthetic detergents and non biodegradable substances causing environmental issues were analysed.



The use synthetic detergents causing health issues were seriously analysed and the presence of LAS in the detergent penetrates deep into the skin causing irritation. The use of Alpha Olefin Sulphate (AOS) which is a biodegradable substance paved way through the fact that the phosphate used as a filter in detergents act as a nutrient for algae and other micro organism which prevents the oxygen from reaching the marine below and emphasised the promising replacement and substitute for phosphate is the Zeolite.



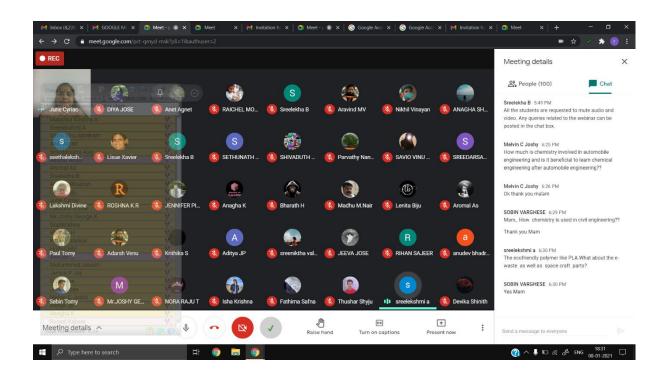
The importance of chemistry for Engineers was an applied science and entrusted upon the fact that the life of an engineer is of no worth if chemistry has no sustainable part in it. The role of an Engineer in different spheres of life and the various streams in B. Tech and M.Tech level were correlated. Dive in Chemistry in the life situation as a Civil, Mechanical, Electronic and Electrical streams were magnificently analysed.

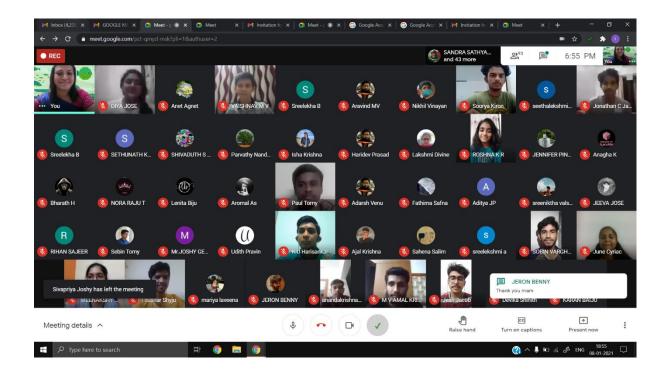


The use of chemistry in future for finding new ways to maintain the environment, preserve food and get the solution of many incurable diseases like Corona and overcome the pollution rate. The necessity of Chemistry in yielding crop and food production was the key point. The effective use of Pharmaceutical pesticides to destroy harmful insects was the basic need for the agricultural production. The structure of conducting polymers were explained and the materials required for the making a conducting polymer were envisaged. The use of Poly Lactic Acid (PLA) as an eco-friendly polymer and the bio medical polymers in the medicine field were also explained.



The emerging trends of Nano Technology were explained and the the chemistry related to the Engineering Structures were related to the Nano Composite in the field of Automobile Engineering . The advantages of Nano materials as a Heat Transfer Enhancement , Solar Thermal Energy Conservation, application of Nano Fluids inoil wells and the use of Nano technology in Cancer treatment was effectively explained. The students asked thought provoking questions in the feedback session .The overall participation was overwhelmed with responses from the students .





The session concluded with the photo session of the participants . The students suggested strong feedbacks for the positive use of Chemistry in life and their field of study . The online talk on the Role of Chemistry in Engineering envisaged the importance of chemistry in the academics not only as a subject but influencing the the practical issues and matters in our daily life and in engineering due to which we cannot ignore it in any aspect of our life. Most of the engineering depends upon chemistry but we are not so aware of it. There should be a subject of chemistry in one of the middle semesters of engineering to promote the knowledge of chemistry in students. So, that they can apply chemistry theories in their practical life situations and analyse and synthesis Chemistry in whole sphere of life.