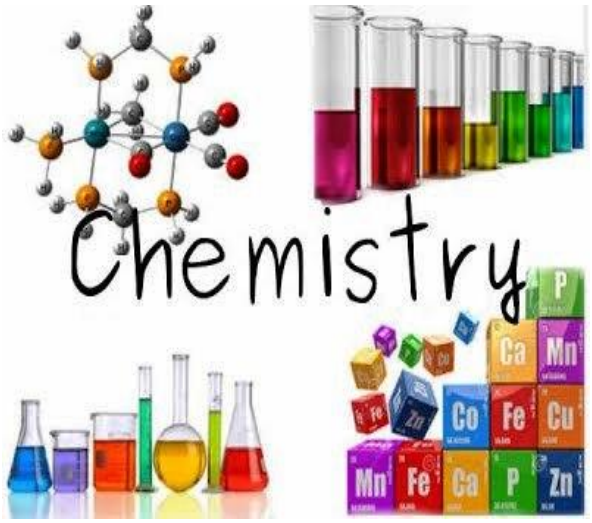


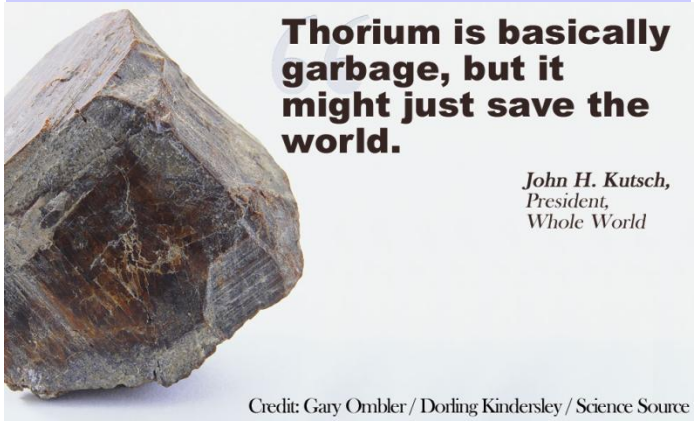
July - 2017
Vol. 6
Issue: 1

CHEMFLASH

THE CHEMISTRY NEWS LETTER

EASWARI ENGINEERING COLLEGE

CONTENTS



MESSAGE FROM THE HOD'S DESK

Dr. C. Ravichandran
Professor and Head

The department of chemistry has brought out its quarterly news letter **chemflash**. Its focus is on all the recent happenings in the field of chemistry. This news letter is sure to give a suitable platform to all the budding engineers to widen their perspective. I express my heartiest congratulations to all the staff and students who were behind the success of chemflash.

I seek their continued co-operation in all the future endeavours.

Dr. C. Ravichandran

"Hot glassware looks the same as cold glassware"

ACHEIVEMENTS

PAPER PUBLICATION

Dr. M. Kumar published a research article entitled "Equilibrium and Modeling Studies for the Removal of Crystal Violet Dye from aqueous solution using eco-friendly activated carbon prepared from Sargassm wightii seaweeds" in the Journal of Materials and Environmental Science.

Mrs. R. Anusa, Dr. C. Ravichandran has published a research article entitled "Removal of heavy metal ion from industrial waste water by nano-ZnO in the presence of electrogenerated fenton reagent" in the International Journal of ChemTech Research.

Ph.D. Viva-Voce

Mrs. J. Kalapana, Assistant professor, Jawahar Engineering College has successfully completed Ph.D. open Viva-Voce under the Guidance of Dr. C. Ravichandran, Professor and Head.

"The solution to pollution is dilution"

Quotes

The country which is an advance of the rest of the world in chemistry will also be foremost in wealth and general prosperity.

WILLIAM RAMSAY. 1852-1916

The third-rate mind is only happy when it is thinking with the majority. The second-rate mind is only happy when it is thinking with the minority. The first-rate mind is only happy when it is thinking.

-A. A. Milne

"Don't take rest after your first victory because if you fail in the second, more lips are waiting to say that your first victory was just luck"

"If you want to shine like a sun. First burn like a sun."

"Be more dedicated to making solid achievements than in running after swift but synthetic happiness."

A. P. J. Abdul Kalam

ARTICLES

Water Purification at a Nanoscale Level

In 2015, Dr. Suriyasarathi Bose, Assistant Professor of Department of Materials Engineering and a team invented a water purifying system that could even eliminate harmful bacteria at a nanoscale level. The filter consisted of a porous membrane made of two polymers, along with minute quantities of silver, titanium dioxide and carbon nanotubes. The pores filter out the micron-sized bacteria, while the silver-titanium-carbon mixture kills the bacteria.

A Revolutionary Cancer Molecule Inhibitor

In 2012, Sathees C Ragavan, associate professor with IISc's biochemistry department and his team developed a molecule inhibitor, SCR7, which could revolutionise cancer treatment. In 2014, scientists at MIT tested the molecule and discovered its efficiency and potential in becoming an integral part of anti-cancer drugs. The molecule inhibitor binds with the cancer cells to block its DNA from repair, thereby killing the cancer cells. While the drugs are still under research, the fact remains that an Indian team was vital in creating an anti-cancer drug.

Self-Cleaning Material Washes Away Stains With Sunlight

Institute of Technology are bringing back the clothesline. Only this time, it'll be a washing machine, too. That's because they've used nano-threads to create a fabric that can be cleaned with nothing more than sunlight.

Silver and copper nanostructures woven throughout the textiles absorb sunlight. This heats up the fabric on small scales and breaks down organic matter. In other words, when the fabric is exposed to light, it breaks down and eliminates a food stain. The research was published in Advanced Material Interfaces. The team will now move on to weaving the nanostructures in with cotton and other materials used in clothing, with the hope of scaling up enough to provide a true anti-stain shirt that never has to be washed or dry cleaned. This, in turn, could drive down household water consumption, a big boon in some drought-prone areas.

Prepared By:	Approved By:
Dr. M. Kumar	HOD/Chemistry