

16th World Education Summit – Innovation in Education on 21st & 22nd Feb 2020 at Hyderabad

About the Submit:

Welcome to the 16th World Education Summit, Hyderabad, India's biggest event on Innovation in Education. Come and be a part of the most prolific space where the audience will be enlightened with the insightful sessions in a specially crafted forum, where the flag bearers of Indian and Global Education fraternity will indulge and speak their minds in an exclusive discussion to find out unique methods to revamp the education sector.

The star studded conference will witness the confluence of decision makers, influential experts and practitioners linked to education sector from across the world. At the 16th World Education Summit, Hyderabad, top decision-makers will share insights with on-the-ground practitioners and collaborate to finding the new ways to integrate technology in business, identifying emerging trends in constantly evolving education market and making inroads to the newer market segments of growth, the Summit will take in perspective new ways to impart opportunities across education segments.

The department of chemical Engineering has presented the working model of Removal of heavy metals from Industrial waste water and Smart Distillation Unit. The following are the students list participated in the summit.

B161115	P. Gopi	Removal of heavy metals from Industrial waste water
B151439	A. Navyasree	
B161616	A. Rachana	
	Sai Siddharth	Smart Distillation



• Introduction:

- As world is updating with many industries, the contamination in the water level also increasing.
- Many industries releasing industrial waste water in to pond,lakes and rivers .
- This water will consists of many harmful toxic elements and heavy metals.This watercauses dangerous diseases to the living species in the water and to which drink the water.
- We are going to remove one of mos havy metals in the collected water is LEAD.

REMOVAL OF HEAVY METALS:

. this process we are removing heavy metals from industrial waste water,in different step wise process. Here we use coloums, areation tunnels and some chemicals like alum ,NaOH,acativated carbon,where they removes heavy metals from waste water.

- In this we have four levels for process,firstly we coloeect the water that consists heavy metals from industries. By checking with metal detecting kit we will one to what are the metals that are present in the water.
- For step 1: Collect the waste water in to chamber, now to this NaOH(sodium hydroxide) where it increases PH level of water. (quantity:50ml for 5 liters of water).
- For step 2: With the help of a valve we transfer the water that is in the chamber to a coloumn, another valve that is connected to the chamber is switched on, with the help of a areation tunnel,forth will be formed ,we remove the forth that is formed on top of the water, where this forth consists of some heavy metals ions in it.
- In step 3: now we send the water that is at below to another coloumn, switch on blower by openig the valve connected to the second column,and close the first valve of first column.add acitvated carbon to water here we use areated tunnel to remove the remaining metals.now we can collect the water into a collecting chamber.

HEAVY METAL REMOVAL SET UP:



How can we know that the hevy metal is removed?
By titration process we can get aconfirmation of removal or presence of lead content in water.

- Applications:**
- By removing heavy metalsfrom industrial waste water we can stop the contamination of water and we can save manyliving species. Mainly aquatic species.
- Advantages:**
- One of the Easy way to remove metals
 - We can again by doing filtration process use this water for house hold purposes.
- Conclusion:**
- We can reduce the water contamination.
 - We can save the lives of living species from harmful and toxic metals and chemicals.









