

# ELECTRON ATOM

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ENGINEERING DEPARTMENT, BAGALKOT ROAD,  
NAURASPUR, VIJAYAPURA- 586109

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"When dealing with people remember you are not dealing with creatures of logic, but creatures of emotion."

## From HOD'S Desk

It gives me immense pride and pleasure to lead the electrical and electronics engineering department of this esteemed institution.

The department encourages students to participate in cultural and co-curricular activities, sports, seminars, paper presentation etc. keeping in mind overall growth of the students.

To fill the gap between industry and the academics providing industrial visits and internships to the students are regular practice of the department, which assist the student in smooth transition from academic life to work life.

I wish the students make best use of the facilities provided by the department and work towards achieving excellence in the chosen field.

*Jameel.K 4th SEM*

## Secret Life of Luggage -And the New Tech That Tracks It

Missing luggage is one of the banes of air travel. And even though the airlines lost 68 percent fewer bags in 2014 than in 2007, 24.1 million bags were lost or temporarily mislaid that year. That's why any innovations that help with bag tracking are always welcome. The above video from Wired highlights a few.

British Airways is testing a smart tag that passengers can reuse on other flights. The tag would have a bar code and customers would use a smartphone app to input their latest flight information. This would eliminate the time and paper spent attaching those sticky tags to suitcases.

Delta Air Lines rolled out RFID chips in their luggage tags earlier this year. Instead of baggage handlers scanning each bag with a hand scanner, conveyor belt loaders will have sensors that flash green when a piece of luggage is loading on the right aircraft and red when it's not. Delta says the tracking works 99.9 percent of the time. Passengers should be able to follow their luggage's journey via push notifications to the Fly Delta app by the end of 2016.

And there's more: Iberia Airlines (in conjunction with Siemens) has tested a service where passengers can print their own baggage tags and boarding pass and load them directly onto a conveyor belt. Let's hope your suitcase is not too heavy. The Siemens president of airline logistics in Spain says this feature will give the passenger more autonomy and save waiting time.

One day industrial visit has been organized on 5th February 2018 to 220kv substation near Vijayapura



## Installing a submarine transmission cable

Munnawar K 6<sup>th</sup> sem

### Laying the cable

Installing a submarine transmission cable is a **costly and challenging activity**. The lifetime of a submarine cable might be tens of years and the technical interventions for its repairing in case of faults are also costly and difficult.

. Therefore the **cable route must be carefully surveyed and selected** in order to minimize the environmental impact and maximize the cable protection.

Laying down the transmission cable on the seafloor is done by specialized vessels (Fig. 1). The most active vessels used for such operations are: Skagerrak (owned by Nexans), Giulio Verne (Prysmian), Team Installer (Topaz Energy and Marine) and C.S. Sovereign (Global Marine Systems Ltd). They are all equipped with a turntable **for at least 4000 tons of cable** and have the appropriate gear to handle it.

**Installing a submarine transmission cable involves a series of actions:**

1. Selection of the provisional path;
2. Obtaining permission from the relevant authorities;
3. Survey of the path;
4. Designing the cable system in order to meet the conditions of the selected path;
5. Laying the cable, including burial in appropriate areas;
6. A post-lay inspection may be necessary in some cases;
7. Notification of cable position to other marine users.

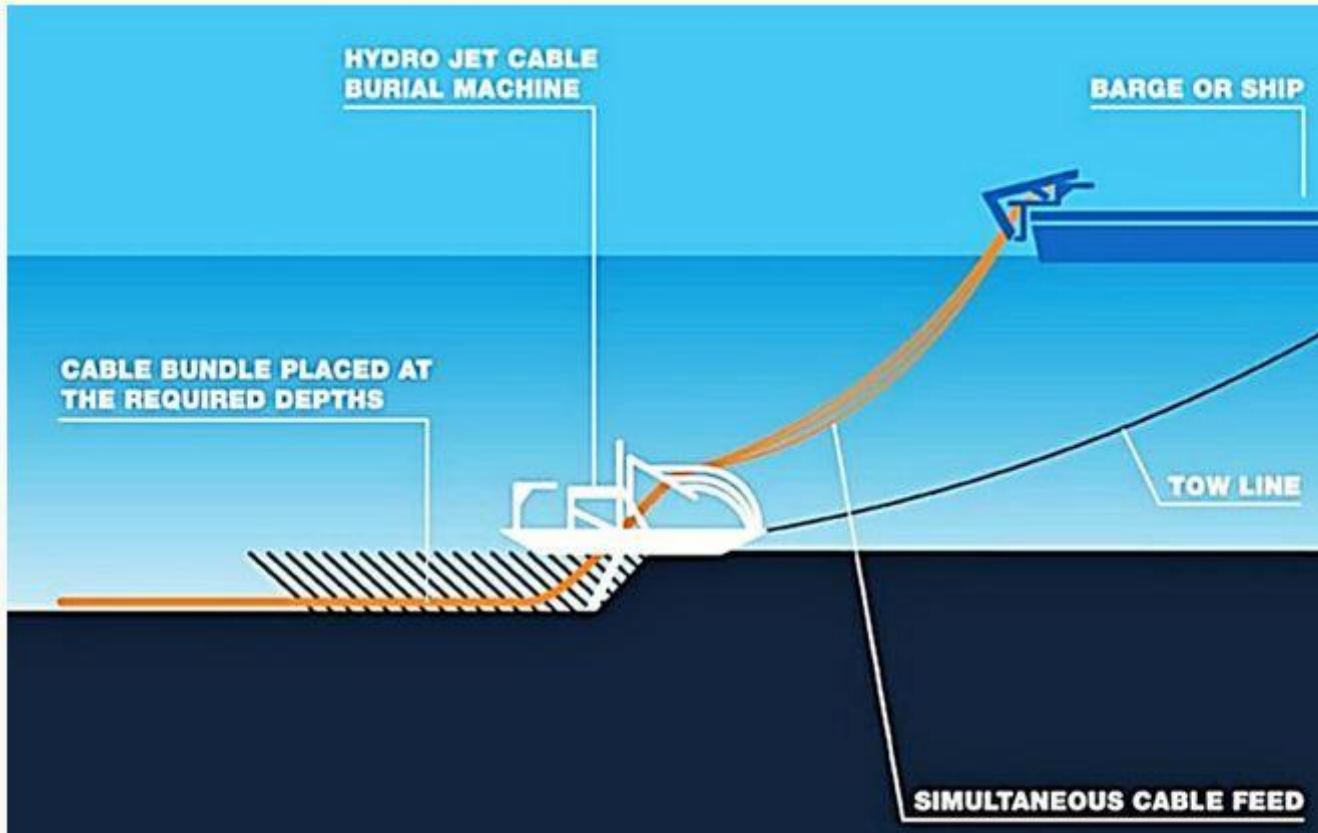
The complexity of laying down the cable requires a coordinated work of many specialists in different fields. Path selection is done by power system engineers together with marine specialists. The survey is performed by geologists, geophysicists and oceanographers.

Laying the cable on the seafloor is executed by **special structures engineers**.

One day external colloquium conducted on 17th February 2018, titled "Solar PV System Design" by Dr.Suresh .H. Jangamshetti, BEC Bagalkot



The vessel represents just a part of the required gear needed for laying down the cable. It carries the cable and stands for the command centre. But once the cable is in the water other submersible equipment performs the task of settling the cable on its path.



The work is done with the help of acoustic instruments such as **echo-sounders** and accurate **Global Positioning System (GPS)** and **differential GPS**. The ROVs dig the trench in which the transmission cable is laid fix the cable on the right route and cover the cable with sediment. Burying the cable in the seabed is a slowly and costly operation but it is paid back by its reliability and extended lifetime.



*Ganesh 8<sup>th</sup> sem*

## "Nature" Is What We See

All nature has a feeling: woods, fields, brooks  
Are life eternal:

and in silence they  
Speak happiness beyond the reach of books;  
There's nothing mortal in them;

their decay  
Is the green life of change; to pass away  
And come again in blooms revived.  
Its birth was heaven, eternal it its stay,  
And with the sun and moon shall still abide  
Beneath their day and night and heaven wide.

"You cannot shake  
hands with a clenched  
fist.."

Two days work shop "practical  
personality transformation  
workshop using NLP science"  
20<sup>th</sup> to 21<sup>st</sup> April, 2018 by  
Sampoorn Singh



## The Fish

ALTHOUGH you hide in the ebb and flow  
Of the pale tide when the moon has set,  
The people of coming days will know  
About the casting out of my net,  
And how you have leaped times out of mind  
Over the little silver cords,  
And think that you were hard and unkind,  
And blame you with many bitter words.



## For Details Contact

Nauraspur Bagalkot Road, Vijaypur (Vijayapura) 586109, KARNATAKA. (INDIA)  
Website: [siet.secab.org](http://siet.secab.org), e-mail: [secab\\_siet@secab.org](mailto:secab_siet@secab.org) phone: 08352-278912, 276425  
cell: +91 9513314007, 9880674370, 9986085198, 8904146113