

## SCIENTIST OF THE MONTH:



### **BION J.ARNOLD (1861-1942):**

Bion Joseph Arnold is remembered as "father of the third rail", a pioneer in electrical engineering, and an urban mass transportation expert who helped design new yorks interborough rapid transit subway system. He also served as a lieutenant colonel during World War 1 in the Aviation Section of the Signal Corps.

He was born in Casnovia, Michigan on august 14, 1861.The subway opened in 1904, proved to be more popular than envisioned. By 1908, a system designed for a maximum of 600,000 passengers per day was being used by 800,000. He solved the problem by placing automatic speed control devices on the trains themselves, so that more trains could be run during each hour.

After graduating from Hillsdale College in Michigan and the University of Nebraska-Lincoln in 1897, Arnold set up his own company in Chicago at a time when rail roads were converting their power sources from steam to electricity. Arnold was president of the American Institute of Electrical Engineers (AIEE )from 1903 to 1904.He was transferred to the regular army as a lieutenant colonel in the Aviation Section of the Signal Corps.He was assigned to aircraft equipment production in Washington, DC. He died on January 29, 1942.

## **POLARIS**

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### **EDITOR'S VOICE:AN EFFECTIVE AND LOW COST SOLUTION FOR STORING SOLAR ENERGY**

How can we store solar energy for period when the sun doesn't shine? One solution is to convert it into hydrogen through water electrolysis. The idea is to use the electrical current produced by a solar panel to 'split' water molecules into hydrogen and oxygen. Clean hydrogen can then be stored away for future use to produce electricity on demand, or even as a fuel.The approach taken by EPFL and CSEM researchers is to combine components that have already proven effective in industry in order to develop a robust and effective system. Their prototype is made up of three interconnected, new-generation, crystalline silicon solar cells attached to an electrolysis system that does not rely on rare metals.

The device is able to convert solar energy into hydrogen at a rate of 14.2%, and has already been run for more than 100 hours straight under test conditions. In terms of performance, this is a world record for silicon solar cells and for hydrogen production without using rare metals. It also offers a high level of stability.



#### **CONTENTS:**




Editor's voice	Page1
Student' activities	Page2
Seminar's upcoming events	Page3
Scientist of the month	page4

(MR.RAMINI.PUNYAVATHI)  
Asst.Professor

## STUDENT'S ACTIVITIES:

The Department of Electrical and Electronics had a reason to celebrate after the declaration of JNTUK University Exam Results. Hearty congratulation to all the toppers of III Year students for putting in fabulous performance at the semester Exams. The effort and dedication of these students have drawn state level recognition not only for the Department of Electrical and Electronics Engineering but also for the KKR&KSR Institute of Technology & Sciences. Let this considered as a source of inspiration to the entire students of the department and an impetus to excellence. A big thumbs to all the faculty members who prepared the students for such a success.

### III YEAR TOPPERS

YEAR	NAME OF STUDENT	PERCENTAGE (%)	PHOTO
III	K. ISAAC MATHEW	85.33	
	M. LAKSHMI MOUNIKA	81.60	
	T. VEERA MANI KANTA GOPI	80.80	

- **Mr.M. Naveen Kumar of First year M.Tech had secured a percentage of 76.00% in recent I semester results.**

## SEMINARS:

- A seminar on **“ADVANCED WIND POWER SYSTEMS”** was conducted for final year EEE students on 6<sup>th</sup> august 2016. The seminar was addressed by Dr .Y .S. Kishore Babu



## UPCOMING EVENTS:

- Five day workshop from 13<sup>th</sup> September to 17<sup>th</sup> September on **PLC AND SCADA** to Third year EEE students.
- Workshop on **AUTO CAD ELECTRICAL MODULE** from 26<sup>th</sup> September to 30<sup>th</sup> September to Second year EEE students.
- Industrial visit to Third year EEE students is on 24<sup>th</sup> September 2016.
- A seminar for Second and Third year EEE Students on 23<sup>rd</sup> September.

