

ReNEWS

JUNE 2012

ReNEWS

NEWSLETTER OF
RESEARCH SCHOLARS

Editorial Notes

Hello All,

Another issue of ReNEWS comes out with the hope of getting good articles from Research scholars. But the wait seems to continue. Anyways this newsletter is an excellent medium for me to let you know what has happened, is going on and the future activities related to Research in our institute, so I shall continue with it. Also a new addition the editorial board is Oswald (MS Mechanical). Welcoming him on board and hoping to see a slow but a steady increase in the participation of scholars in this initiative.....

Have you converted from MS to PhD? Then there is good news for you. Now, a scholar who has converted from MS to PhD can avail institute funding to attend international conferences, twice. Hoping this piece of news brings smiles on many faces!

How many times have we ended up searching for things which are right next to us? Our institute is a large place with many departments, workshops and labs spread out through the campus. It is often we tend to miss out on some labs or workshops just because we are not aware of it. From this issue we will be starting a new section called “News you can Use”. In this section we will try to bring out the many labs and facilities in our institute, some know and other lost in a

cluster of information. In this issue we bring to you the Central Glass Blowing Section. We are very thankful to Mr. Narasingh for his patient explanation of the facilities at CGBS. Hope this information helps at least a section of Research Scholars who are not familiar with it.

Also present in this month's newsletter is a brief write up of the new website for research scholars, a write up about "Takling Demos to School", and a write up on the talk given Dr. M. A. Atmanand (Director, National Institute of Ocean Technology). The last section contains info about things slated in the coming month. Important among them are discussion related to the raise in stipend and LaTeX workshop.

Lastly requesting all of you for articles for this newsletter. Your contributions need not be limited to scientific articles. You can even write about your experiences at an international conference or share some awesome pics you have taken there. Or you can send it some funny cartoons or rages. We will publish all of it



Ishita Kumar

Research Affairs Secretary

Contents

News you can Use – Central Glass Blowing Section	Page 4
Taking Demos to Schools	Page 6
Talk by Dr M. A. Atmanand	Page 6
Building Research Portal	Page 7
Meet to Address Stipend Issues	Page 9
Latex Workshop	Page 10
Talk on Intellectual Property Rights	Page 11

News you can Use:-Central Glass Blowing Section

I'm sure many of us will remember the burettes, pipettes, glass beakers, conical flasks and many other things that we used in the chemistry lab classes that we had had in our +2 days and also in the first year of engineering. Have you ever wondered how those are done? Or do you need to perform some experiments with complicated flows in pipes while visualizing it? Search no more head straight to the Central Glass Blowing Section of the institute.

Located in one quite corridor of the Humanities and Science Building is the Central Glass Blowing Section. What seems like any other ordinary room from outside comes alive inside with buzzing sound of the flame coming out of the gas torch. Working with deft hands on glass tubes is Mr Narasingh. The way he alternates between heating the glass, blowing into the tubes, bending them into various shapes is simply artistic. This section was started in the year 1972 with a workforce of nine employees. Though it is down to only one person today it is still running strong.

So what are the things that can be done in this place? One can get many type condensers that include coil condensers, double coil condensers and bulb condensers. Also done here are vacuum set ups and vacuum sealing. Silvering and machining of the quartz tubing is also carried out here. Equipment present here includes a lathe, furnace, cutting machine and surface grinding machine.

There services of this section are currently used by mostly the research scholars and students of the Chemistry, Chemical, Physics and Biotechnology departments. Even students from Mechanical and Civil departments have glass work done in this section.

So how does one get work done here? Head straight to the glass section and fill up the work order form and send it along with the required drawing. Like other labs and workshops in institute there is no service charge for the students here also.

Central Glass Blowing Section

Chairman: Dr. S Sankararaman

Staff: Mr. K S Narasinga Rao (Tech. Supdt.)

Mr. P Chandran (Sr. Tech.)

Location: HSB 122

Phone: +91 (44) 2257 4214

Section: +91 (44) 2257 5391



From left to right. Mr Narasingh working in full concentration. A coil condenser. Setup to study the two-phase flow distribution in minichannel arrays.

Taking Demos to the Schools

15 June, 2012

Many scholars from Electrical Engineering department are members of the Optical Society of America (OSA). These scholars are very active in many activities of OSA. Recently they organized a visit to Vanavani School, where they took optics to the school kids and taught them through small demos and stories. Ms. Rekha Thomas, a MS Scholar in EE Dept., headed the team. They demonstrated 2D Grating, Total Internal Reflection and Optical fibre, Polarizers, LCD, Silicon Wafer, Periscope, Polarization of Waves, 3D Projector to these school kids. It definitely was a great experience for the school kids learning through demos. Also a big round of applause to these enthusiastic scholars who took the initiative to take their knowledge out of their lab.

Talk by Dr. M. A. Atmanand

27 June, 2012

A talk on “Deep Sea Technologies” by Dr. M. A. Atmanand had been arranged on 27 June, 2012. Dr. M. A. Atmanand is currently the Director of NIOT. His experience added flavour to the talk. He touched up on many aspects of Mechanical, Electrical and Civil Engineering and demonstrated the need for having interdisciplinary

knowledge to build systems for deep sea explorations. He also stressed that the knowledge of basic physics and mathematics is the need of the hour. He spoke about the need for deep sea explorations. Various systems, sub systems developed and, the mathematical modeling involved in their development, have been dealt with during the talk. The speaker ended the talk by throwing an open invitation to the students of IIT M to do projects in NIOT and to visit NIOT just to have a look at the various systems. The talk was interesting and interactive, both at the same time.

Building Research Portal

Time & information are the crucial elements in most of our lives and this holds especially true when it come to the researcher. A research scholar at IIT Madras ends up spending more time on collecting the information. As a solution to that, a research portal (on the IIT M domain) is proposed to be created which will serve as a one – stop destination for all the research scholars to find the necessary information.

A broad view on the various features of the proposed research portal is given below:

1. Profile Pages for all the research scholars: This will have the details of the research scholars, like their name,

department, guide's name, publications, etc., spread across various departments. This will help a scholar during placement, wherein they can just give the link of this official profile page in their resume. This will also help two scholars connect each other in a better way.

2. Lab Facilities in various departments: This will have the departmental wise lab facilities available for the research scholars from various departments along with the details of the concerned for that particular facility. This will enable any research scholar to utilize the existing facilities more effectively.

3. Administrative Procedures: This will have all the administrative procedures, like enrolment details, funding procedures to attend a conference, thesis submission, etc., that are required for a research scholar from the day he/she joins the institute to the day he/she leaves.

4. Forum: A forum which will provide a platform to post a question and allows the others to view the question and reply back. It should be purely academic.

5. Dynamic News: This will have scrolling news and will have everyday feeds, like talks, seminars etc., of the day.

6. Static News: This will have news that has to be put up for some time, like housing allotment status.

Meet to Address Stipend Issues

Based on some of the serious issues raised by some of the scholars regarding the inadequacy of the stipend being given, following points has been formulated:

1. Stipend should be based on marital status
 - a. Marriage is likelihood for the PhD age group
 - b. Mostly the spouse is a dependent
 - c. Financial strain is the most likely reason for poor performance/drop outs
 - d. Accommodation is not sufficiently available on campus - at least takes 3 semesters
 - e. Chennai is a metro city being among the highest rent cities (Taxation also considers this)
 - f. All reputed international educational institutions pay stipend according to the marital status
 - g. Stipend is in anyway not proportional to Inflation
2. Stipend of PhD students' needs to be increased
 - a. IIT Gandhinagar offers higher stipend - upto 35K
 - b. Stipend is in anyway not proportional to Inflation
 - c. Salary of a lecturer in private college (\leq ME) is double than stipend
 - d. Age group of PhD (23 - 30) requires higher responsibility towards family (IIT is India's best institute, so they need to cater to this aspect)
3. Stipend of MS students

a. Students are still dependent on parents to pay their student expenses despite clearing the best exam in India

b. Stipend is in anyway not proportional to Inflation

4. Another point that needs to be considered is regarding the medical facilities. They should be extended to the dependents of the scholar too; maybe they insurance premium could be increased.

To have a broad consensus on the same, a meet has been called to involve all those scholars who want to share their opinion on stipend for a discussion. If you want to participate in the discussion and raise your valuable points, please come to **HSB 133 on 3 July, 2012 at 4:00 PM.**

Latex Workshop

The latex workshop is being organized for the research scholars with the help of Dean (Academic Courses), K. Ramamurthy. An initial registration form for the same has been sent out and the scholars registered in whopping numbers, with 463 scholars registering for the workshop. The workshop is going to be held in the month of July in the batches of 50 students each. These batches would be formed based on their joining year, with those joined earlier being given first preference. All the students who registered would be covered in various batches. Each batch will have a 3 day workshop. Since, the workshop is being outsourced; the

scholars who wish to attend the workshop will be charged a nominal fee of Rs. 300. Hoping this workshop would add value to the scholar's life!

Talk on Intellectual Property Rights

A talk will be organized on “Intellectual Property Rights”, tentatively sometime in the first week of July. The talk is intended to create the basic awareness among anyone would require information regarding the intellectual property rights.

The speaker is Shri Srikanth, who is currently practicing as Associate in the office of Smt. K.PARAMESHWARI, Senior Panel Counsel for Central Government, attending matters related to civil, criminal, service and IPR cases. The speaker is a Graduate from IIT Kharagpur, in three-year LLB program (2006-09) with specialization in Intellectual Property Law. He has worked as an Associate in a law firm in Mumbai attending various IPR matters like Patents, Trademarks, Design, Copyright, issues involving Copyright and Trademarks in Cyberspace and issues related to Information Technology (from December 2010 till January 2012).

In Patents, the speaker has conducted prior-art search, drafted patents, filed, prosecuted and responded to Office action of Patents before Intellectual Property Office

(India), Intellectual Property Appellate Board (IPAB), European Patent Office, US Patent and Trademark Office and WIPO. In Trademark, he filed Trademark application, prosecution before Trademark Registry and assisted litigation related to Trademark matters before Bombay High Court and Delhi High Court. His practice also includes industrial design and trademark filing and prosecution.

Any issues/problems of a research scholar related to academics or housing can be raised either by sending an e-mail to ras@smail.iitm.ac.in or calling on 09444005772.