## <u>Newspaper Clips</u> September 16-18, 2017

## September 18

# JEE ADVANCED 2018 TO BE HELD ON MAY 20; EXAM MIGHT GO ONLINE

HTTPS://NEWS.AGLASEM.COM/JEE-ADVANCED-2018-TO-BE-HELD-ON-MAY-20/

JAB has decided to conduct JEE Advanced on May 20, 2018. The examination may also be held online this year. JAB will confirm the exam mode in coming days.

In a recently held meeting at Indian Institute of Technology (IIT), Kanpur, the exam date for JEE Advanced 2018 has been finalized. As per the reports, the Joint Admission Board (JAB) has decided to conduct the exam on May 20, 2018. Even last year, the examination was held on the 3rd Sunday of the month.

The meet was on Sunday, September 17, 2017. It was headed by JEE Advanced Organising Chairman, Prof Shalabh, and JAB Chairman, Prof Indranil Manna. Prof Shalabh confirmed the exam date to the press. The dates will also be uploaded on the official website in due course of time.

This year, IIT-JEE will be organized by IIT Kanpur, with the assistance of South, West, East, North, Central, North-East, and North-Central Zonal IITs. Until now, the examination was held in pen and paper mode. However, due to the errors in the offline question paper and due to the possibility of malpractice, JAB is considering to change the mode of the exam to online.

"The online version of the test will make logistics easier and the evaluation process more accurate. It will also take care of security issues because there will be no scope for question paper leaks," said a senior official of MHRD.

The final decision regarding the pattern of the exam is expected to be taken in the coming 10 days. If the exam will be held online or computer based will also be determined then. If JEE Advanced goes online then the mistakes in the exam will definitely reduce.

Last year, the question paper had printing and translation errors. The students highlighted the matter in the court. After which, the SC directed IIT Madras to compensate candidates by awarding marks and submit an undertaking that the same will not repeat by IITs.

The online JEE Advanced will also allow quick and exact assessment of the answer sheet. The students will be able to know their score and merit within less duration. The printing costing of the exam will also drop. The students will be benefited the most, as they will be able to change their

answer which they cannot do once the bubble in OMR is circled. "Students were unable to correct their answers after bubbling the answers," said Bhaskar Ramamurthi, Director IIT Madras.

IITs have also disclosed that even in past they did consider going online with JEE Advanced but were not sure of organizing it effectively. Now that more than more than 2 lakh candidates take the examination one sitting, JAB is pondering to go online.

The initial step to appear for JEE Advanced is JEE Main. It is conducted by CBSE, in pen and paper and computer based mode in the month of April. Until now, only the top 2.2 lakh qualifiers of Main are allowed to appear for the Advanced examination. The registration for JEE Main will begin in December 2017 and for JEE Advanced the candidates will be able to apply in the month of April 2018.

## MSRDC asks IIT-Bombay to study impact of Metro construction on flyover

http://indianexpress.com/article/cities/mumbai/msrdc-asks-iit-bombay-to-study-impact-of-metroconstruction-on-flyover-4848445/

St Xavier's College may approach MMRCL to know if metro work would affect its building

The Maharashtra State Road Development Corporation (MSRDC) has approached IIT-Bombay to examine whether the construction of the Colaba-Bandra-Seepz Metro 3 would damage the Kalina-Valoka flyover. While the JN Petit Institute has moved the Bombay High Court and Siddharth College in Fort has also flagged the possibility of damage to their respective buildings, located close to the Metro 3 construction site, the MSRDC is looking into the possible damage to the 1.4 km Kalina-Valoka flyover.

"With JN Petit raising structural safety issues and other institutes also joining in, we felt it was necessary to study the impact of the Metro 3 construction on the flyover. The construction work has now moved very close to the flyover and we cannot risk its safety. We are awaiting IIT's report and then we will take a call," said Kiran Kurundkar, Joint MD, MSRDC.

On Friday, acting on a petition by the Petit Institute, the HC directed the Mumbai Metro Rail Corporation Limited (MMRCL) not to carry out any excavation or tunneling in the area around the 119-year-old J N Petit Institute, Fort, for the next two weeks.

The MMRCL is working on the 33.5-km underground Colaba-Bandra-Seepz Metro Rail 3 line. The court appointed a three-member committee of structural engineers to carry out a survey of the area and submit a report in two weeks. The committee will comprise one member from IIT-Bombay and two other structural engineers recommended by the J N Petit Institute and the MMRCL.

After a decorative structure adorning a portion of the 119-year-old JN Petit building's roof fell down on August 25, the management raised concerns that it was a result of the constant vibrations from the ongoing excavation work for the metro on DN Road. The adjoining Siddharth College also raised

similar concerns after a portion of its false ceiling in the basement collapsed last month and it noticed several cracks in the building.

While St Xavier's College has not been affected, it also proposed to approach MMRCL to know if there would be any impact on its 150-year-old building due to the tunnelling work for the metro. On its way from Santacruz to the Domestic Airport, the Colaba-Bandra-SEEPZ metro corridor passes close to the Kalina-Vakola Flyover, which runs along the Western Express Highway. MMRCL officials could not be reached for comment.

### **BC, IIT Bombay partnership**

https://www.bc.edu/bc-web/bcnews/nation-world-society/social-work/bc-partnership-with-iitbombay.html

Boston College and the Indian Institute of Technology Bombay (IITB) have signed a memorandum of understanding, a first step in exploring a strategic partnership between the two institutions that could enhance research and evaluation, project development and implementation, coursework and field education, and knowledge sharing and dissemination.

The agreement presents an opportunity for BC and IITB to collaborate on providing clean renewable energy to improve the health, socioeconomic, and environmental outcomes in low resource areas of rural India.

Founded in 1958, the IITB is considered one of the top technical universities in the world and a leader in the field of engineering education and research.

"The multiplier effect of a BC partnership with the Indian Institute of Technology Bombay is significant," said BC School of Social Work Dean Gautam Yadama, who led the outreach efforts with IITB.

"BC School of Social Work is already collaborating with the IITB to examine the impact of deploying seven million solar lamps to rural households in India. With the IITB team, we have developed a systems analysis of what it takes to localize the production, distribution, and maintenance of solar technologies for the poor. Our partnership with IITB offers a powerful illustration of how universities can collaborate to liberate the productive capacities of poor households and communities."

Added DeLuca Professor of Biology Thomas Chiles, who also serves as vice provost for research and academic planning,

"Energy poverty represents a complex problem that requires multidisciplinary teams to identify solutions that can then be rapidly implemented on a timeframe of months instead of decades.

"Faculty from across BC in a variety of disciplines will work collaboratively with IITB to identify solutions to the problem of energy poverty in India. The research partnership will also provide experiential learning opportunities for both IITB and BC students to work in the field not only

assisting faculty in identifying solutions but also testing solutions 'in-country.'

The experience will provide students with the skills necessary to design potential solutions and to implement and iterate solutions in a human-centered and community-based design context."

Yadama and Chiles noted that the transdisciplinary approach to provide solutions is potentially scalable to other resource-poor regions of the world.

"Simply stated," concluded Chiles, "this memorandum of understanding embodies the type of research that Boston College envisions and seeks to foster in the future with the new Institute for Integrated Science and Society."

Copycats beware! New rules on the anvil for curbing academic plagiarism http://www.moneycontrol.com/news/trends/current-affairs-trends/copycats-beware-new-rules-onthe-anvil-for-curbing-academic-plagiarism-2390275.html

The draft UGC regulations will require institutes to install software to check whether submitted academic papers, assignments, and research works are devoid of plagiarism, the Business Standard reported.



Education regulatory body University Grants Commission (UGC) has drawn up new rules to curb plagiarism by students, teachers, and scholars in higher education institutes.

Plagiarism is known as the act of copying from existing original and published works of others.

The draft regulation from University Grants Commission (UGC) is called Promotion of Academic Integrity and Prevention of Plagiarism in Higher Education Institutes.

It will require institutes to install software to check whether submitted academic papers, assignments, and research works are devoid of plagiarism, the *Business Standard* reported.

The move will affect students across 760 universities. There are a total of 38,498 colleges and 12,276 autonomous institutes of higher education which come under UGC's ambit.

The rules, expected to be effective from September 30 onward, says that the higher education institutes need to submit all of its MPhil and PhD dissertations to Information and Library Network (INFLIBNET) as soft-copies.

After the degrees are awarded for the research works and thus, completion of respective courses, the works will be hosted on the e-repository called Shodh Ganga.

Failing to pass this plagiarism test could result in different levels of penalties — from the students losing credits to their registration being cancelled.

If proof of plagiarism is found post-awarding of degree or credit, the degree or credit will be suspended for an interim period while the Academic Misconduct Panel (AMP) looks into it and sends it to the Plagiarism Discipline Authority (PDA) for the final decision, according to the report.

The ultimate decision taken by the PDA will be obligatory for the scholar to follow.

The UGC rules also stipulate authors to vouch for the originality of their academic work by signing an undertaking claiming the same. Their respective guides or supervisors would have to sign another undertaking assuring the originality of the research work while giving their approvals.

The draft regulation is yet to be finalised as UGC is waiting for replies from all stakeholders, a Human Resource ministry official told *Business Standard*.

## September 17

### Ignou, another 4800 bodies lose FCRA licence

http://citytoday.news/iit-delhi-issues-clarification-over-fcra-issue/

NEW DELHI: The Union home ministry has cancelled the licence of 4,842 NGOs and organisations, including Indira Gandhi National Open University (Ignou) and Delhi's Guru Tegh Bahadur Khalsa College, under the Foreign Contribution Regulation Act for failing to file annual returns from 2010-11 to 2014-15 despite several reminders, sources in the ministry told TOI on Saturday.

It is mandatory for an NGO or an organisation that has been granted licence under FCRA to file returns of its foreign contribution receipts and expenditure records on an annual basis.

The Union home ministry scrapped FCRA registration of the 4,842 NGOs and organisations on August 8 this year after they did not file returns for a minimum three out of five years between 2010-11 and 2014-15.

It be recalled that it had in a similar exercise in 2015 cancelled the registration of 10,020 NGOs over

non-adherence to FCRA norms. The NGOs affected at the time included Delhi University, Jawaharlal Nehru University, IIT (Delhi), School of Planning & Architecture and Punjab University.

Incidentally, institutions formed under an Act or statute are exempt from mandatory FCRA registration and filing of annual returns. A 2011 home ministry notification exempted them on the ground that their accounts were anyway scrutinised and audited by CAG.

"JNU, IITs and Delhi University can therefore still receive foreign funding despite having lost their FCRA licence in 2015," said a home ministry official.

In May, around 18,500 NGOs that had not been regularly filing returns under FCRA over past 5 years, were given a one-time opportunity to give details of their income and expenses. No penalty was to be paid by the defaulters. While 12,537 NGOs reverted, around 5,922 did not bother to upload their returns.

The latter were served a notice in July, well after the extended deadline to file returns had expired, asking why their FCRA licence should not be cancelled over non-filing of annual returns.

While 950 NGOs responded to the notice, there was no word from the 4,842 organisations, leaving the home ministry no other option but to cancel FCRA registration of the latter. The remaining are under review. IGNOU and Guru Tegh Bahadur Khalsa College are the two prominent names in the cancelled list, an officer said adding that they had not filed annual returns for a single year between 2010-11 and 2014-15.

## September 16

### IIT Delhi issues clarification over FCRA issue

http://citytoday.news/iit-delhi-issues-clarification-over-fcra-issue/

IIT Delhi has issued clarification over the reports about non-submission of annual statement of returns on FCRA (Foreign Contribution Regulation Act).

The clarification comes in the backdrop of reports that Centre has cancelled FCRA licenses of several well-known educational institutions, including Jawaharlal Nehru University, Delhi University, IIT Delhi and the Indian Council for Agrarian Research.

"This has reference to the newspaper reports about non-submission of annual statement of returns on FCRA. The newspapers have mentioned names of many academic institutions, including IIT Delhi. The Statutory Bodies created or established under the Central or State Act requiring to have their accounts compulsorily audited by the Comptroller and Auditor General of India is exempted from the operation of the provisions of the FCRA Act, 2010," said IIT Delhi in a statement.

The statement further added "This is applicable U/s 50 of the said Act. This was notified in the Gazette of India (Extraordinary) dated July 1, 2011, making the institutions like IITs (created by an Act of Parliament), exempted from filing returns, since they are covered under the annual Government Audit."

The IIT Delhi statement said that "Further for the sake of being on the better side, returns were being filed after the completion of Audit of the Institution (DGACE) by IIT Delhi. The filing of return is regular, under our FCRA Registration No. 231660101".

### IIT Delhi: First 'Industry Day' to be held on September 23

http://indiatoday.intoday.in/education/story/iit-delhi/1/1048574.html

The objective is to provide a common platform for the industry, academia and research community to come together to discuss the problems faced by the industry and form partnerships to create effective solutions.

The Indian Institute of Technology (IIT Delhi), a leading research institute in India, will organise its first 'Industry Day' meet with the theme 'Building a desirable ecosystem to link Industry, IIT Delhi, and Society' on September 23.

The objective is to provide a common platform for the industry, academia and research community to come together to discuss the problems faced by the industry and form partnerships to create effective solutions.

The event will bring together experts from the industry to discuss some prime issues concerning the relationship between industry and academia based on current societal requirement in the fields of Defence, Environment, Affordable Healthcare, Smart Cities, and Energy.

Here's what Prof. V. Ramgopal Rao, Director, IIT Delhi said:

Announcing the event, Prof. V Ramgopal Rao, Director - Indian Institute of Technology Delhi, said, "IIT Delhi has more than 2500 PhD students, over 500 faculty members, 2000 research publications and more than 100 patents are filed each year, and through this Industry Day, we want to strengthen the delivery part of our research ecosystem by collaborating with industries. "

"We want our research to be connected with the society with the help of industry and attempt to translate these technologies into real products. We hope that through this meet we can strengthen our ties with industry and create some tangible benefits for industry, IIT Delhi and the society at large," he said.

The premier institute has been working actively with the Industry over past several decades and has collaborated on more than 350 industrial projects with over 130 corporates in the last five years. This event aims to build on the strong relationship that IIT Delhi already enjoys with the industry and to further amplify it.

Over 200 industry experts such as Kumar Mangalam Birla, Chairman - BOG; Dr V K Saraswat, Member - NITI Aayog; Manpreet Singh, Director - KPMG; Dr Maharaj Kishan Bhan, Former Secretary

- DBT, GOI; Dr. Sanjay Singh, CEO, Gennova Pharmaceuticals; Dipakshi Mehandru, Policy Advocacy and Government Affairs, DELL, are expected to attend the daylong event where faculty and students will showcase their ongoing work and technology available for transfer.

The major attributes of the Industry Day are the talks by key-note speakers exploring avenues of possible fusion pertaining to research and consultancy, as well as a panel discussion to find plausible solutions to bridge corporate expectation with academic training.

All the interested participants can register themselves by visiting: http://corprel.iitd.ac.in/registration.html

#### Indo-Japan Collaboration expands to scale up research to translations

http://www.business-standard.com/article/news-cm/indo-japan-collaboration-expands-to-scale-upresearch-to-translations-117091401325\_1.html

Department of Biotechnology (DBT), Ministry of Science & Technology, announced the expansion of its first joint International laboratory with National Institute of Advanced Industrial Science & Technology (AIST) Japan named as DBT-AIST International Laboratory for Advanced Biomedicine (DAILAB) to DAICENTER by signing a contract on September 13, 2017.

DIACENTRE expands the scope of the collaboration to focused research activities with several institutions in India and other Asian countries like Sri-Lanka, Indonesia, Thailand at a Mission mode. It will also provide a platform for translation of research of leads emerging from the bi-lateral co-operations in collaboration with the Industry and opportunity for training of young scientists.

It will involve continued research, training and innovative networking programs enrolling DAILAB@AIST and its Six SISTERs (Satellite International Institutes for Special Training Education and Research). DAICENTER will focus to connect academia to industry and network innovation to entrepreneurship promoting S&T relationship of the two countries.

Signing the contract to extend the collaborations, Prof. K. VijayRaghavan, Secretary, DBT commented that India and Japan have lots to share in Science on complementary basis and merge experience to education for the next generations and bring their research outcomes to needs of society worldwide. He added that while Japan stands out with the expertise of its scientists in areas like stem cell research, India can offer its young science brains that can be trained to use this expertise to bring about solutions for diseases.

The collaboration so far has created long lasting networks helped accelerate drug discovery, identified anti-cancer properties of traditional plants like Aswagandha, brought out high quality joint research publications. We will look forward to more research leads and translations, said Dr Ryoji Chubachi, President, AIST.

Speaking about the benefits of the collaboration to India, Dr Madhan Mohan, Advisor DBT said, Japan has advanced expertise in areas like stem cells, we expect our young researchers to learn from them and use this to work on applying them to tackle diseases like sickle cell Anaemia which are specific to India.

Setting up a DBT lab in the University of Kyoto and an AIST lab in IIT Delhi & another in the Regional Centre for Biotechnology has given a truly international character to the collaboration. While DBT has spent for the infrastructure for the AIST lab at IIT and RCB, University of Kyoto maintains it. On the other hand the infrastructure of the DBT lab in AIST Tsukuba was established by Japan and maintained by DBT.

The DBT-AIST collaboration which started in 2007 has seen a gradual strengthening of ties and has produced high quality research leads over the years.

Tracing the build-up of the DBT-AIST Collaboration

#### (i) DBT~ INDIA -AIST~ JAPAN COOPERATION

The Department of Biotechnology(DBT), Ministry of Science and Technology, Govt. of India has concluded a comprehensive Memorandum of Understanding (MoU) with the National Institute of Advanced Industrial Science & Technology (AIST), Japan on February 12, 2007 under the Joint Statement towards India-Japan Strategic and Global Partnership, signed by the Prime Ministers of India and Japan in December 2006. The MoU enrolled five years of successful bilateral research collaborating in the field of Bioinformatics and Biomedicine and joint workshops all both ends. Eight themes of projects focusing mainly on drugs /therapeutics for diseases like cancer have been supported.

#### (ii) DBT-AIST INTERNATIONAL LABORATORY FOR ADVANCED BIOMEDICINE (DAILAB)

MoU was renewed for second term (2012-2017) along with an establishment of a joint laboratory DAILAB (DBT-AIST International Laboratory for Advance Biomedicine) at Biomedical Research Institute (BMRI), Tsukuba campus of AIST, Japan on Oct 3, 2013. DAILB is the first International laboratory in Life Sciences & Biotechnology of the two institutions. The recurring budget for DAILAB is supported by DBT, while the non-recurring budget is supported by AIST president's special budget. Goals of DAILAB are to (i) conduct joint basic to applied research on disease prevention and therapeutics for increasing the quality of life (with focus on old age), (ii) offer research training to young International studies, (iii) networking among researchers for fundamental and cutting edge research, and (iv) endeavour global frontage of both the institutions. Signing and Opening Ceremony of DAILAB@BRI by AIST President, Dr. R. Chubachi and DBT Secretary, Prof. K. VijayRaghavan was held on Oct 3, 2013 at AIST, Tsukuba in the presence of dignitaries including the DBT delegates. The occasion was also graced by the presence of Her Excellency Ms. Deepa Gopalan Wadhwa, Ambassador of India to Japan.

Establishment of DAILAB has made significant progress not only in research projects (evident by their publications), but also been carrying out training and education of young scholars from India. In order to accelerate research education, training and productivity, 6 SISTER (Satellite Institute for Special Training in Education and Research)-DAILABs have been set up. These include Regional Center for Biotechnology (RCB), Faridabad, IIT-Delhi (Dec. 10, 2015), University of Sri Jaywardenepura (Sri Lanka) (April 19, 2016), Manipal University (Aug., 4, 2016), Sikkim University (Oct. 26, 2016) and IIT Guwahati (May 8, 2017). These labs are actively collaborating and aim to become an OPEN INNOVATION HUB in Asia in the field of Biomedicine. DAILAB has been a successful model for India-Japan S&T partnership. Six different types of training programs (STAR, CAF CAFPLUS,

PIKNKIH, JUKU and DOSTI) have been conducted regularly in association with DAILABs and other institutions and have engaged and inspired large number of Indian students.

#### (iii) DAILAB TO DAICENTER

In last three years, DAILAB has become a role model of India-Japan S&T co-operation and has helped thousands of students in several ways. DBT in cooperation with AIST is scheduled to expand DAILAB to DAICENTER from September/October 2017. DAICENTER involves (i) new research projects on Translational and Environmental Research including Big Data in Biomedicine, (ii) new programs for educating and inspiring youth for science careers and (iii) new connectivity/bridge between universities-research institutes-industries at both ends to inspire innovation, application and industrialization of research for the benefit of society.

(iv) DBT~INDIA - KYOTO UNIVERSITY~JAPAN COOPERATION ON STEM CELL TECHNOLOGY IN HUMAN DISEASE

The Department of Biotechnology has implemented an Indo-Japan cooperative program on Accelerating the application of stem cell technology in human disease with four participating institutions from India, and the Centre for iPS Cell Research and Application (CiRA), Kyoto University, Japan as international partner. The aim of the program is to develop infrastructure and the expertise for India to be a competitive force in the field of regenerative medicine and induced pluripotent stem cell biology. The focus of the collaboration is on developing treatments for sickle cell anemia, ?- thalassemia and brain disorders and creating haplobank relevant to Indian population.

(III) SIGNING OF MOU AND JOINT RESEARCH CONTRACT (JRC) BETWEEN DBT AND AIST, JAPAN:

A comprehensive MoU and JRC between DBT (India) and AIST (Japan), for the next five year period, was signed by Prof. K. VijayRaghavan, Secretary, DBT (India) and Dr. Ryoji Chubachi, President, AIST (Japan) as part of India-Japan Summit 2017.

# Research students in India need better grants; financial security essential to prevent brain drain

<u>http://www.firstpost.com/india/research-students-in-india-need-better-grants-financial-security-essential-to-prevent-brain-drain-4050165.html</u>

Last month, the central government created a buzz with its announcement that it would provide Rs 70,000 as monthly fellowship to researchers doing their PhDs from IITs or the Indian Institute of Science (IISc). This amount is currently Rs 25,000 per month. The idea behind this steep pay hike is to give meritorious students an extra incentive to not leave the country to pursue lucrative jobs with MNCs.

As part of Prime Minister Narendra Modi's research fellowship scheme, only 2,000 research students would benefit. And while this is good news for the ones selected, it does raise pertinent questions about the fate of other research students enrolled in MPhil and PhD programmes in other universities or other disciplines.

Currently, very few research students across disciplines are recipients of a full-time fellowship. This is because the pass percentage in National Eligibility Test (NET) is barely 4-5 percent annually. Out of this small group, only the top 15 percent are eligible to avail junior research fellowships. So, on an estimate, around 1,500 people get this fellowship every year. Compared to the thousands of students who are enrolled in research programmes or aspire to get enrolled, this is a very small number.titute of Science in Bengaluru. Image courtesy: Wikimedia commons

Most of the badly-hit students are from humanities. While science and commerce students get various employment options once they are done with their post-graduation due to better availability of technical and skill-based jobs in the market, students from humanities are left with very few choices.

By the time, a person is done with his/her post-graduation, s/he is around 23-24 years of age. By this time, one would need to seriously start trying to become financially independent, and not be a liability on their families. For humanities students, the situation is again much worse; most of them either are preparing for governmental competitive exams like UPSC, SSC, banking, state PSC exams, etc, or the NET or State Eligibility Test, in order to become eligible for the post of university lecturers. A small minority would take up jobs in the NGO sector, think-tanks or in journalism.

The crux of the matter is that everyone is looking for some financial security. Coming back to the point above — that many students of humanities do aspire to get enrolled as research students — this is why they appear for the NET, in the hope that they would make the cut for a Junior Research Fellowship. Since most of them don't get any fellowships, a large proportion of these students tend to ignore their research in order to focus on competitive exams. Many of them even leave their research to join government jobs which pays them and makes them financially secure. Even those who do get fellowships are often lured to become lecturers or teach as ad-hoc faculty in colleges which pay more than double the amount than they'd get in fellowship.

This has four implications. Firstly, many aspiring research students don't actually get enrolled in MPhil and PhD, because they don't see financial security there, because the Non-Net Fellowship given to research students in general stands at a pairty Rs 5,000 per month. In fact, at many universities, even this is not given.

Secondly, research students who do get enrolled in MPhil/PhD programmes are always on the lookout for financial security, either by constantly preparing for competitive government exams or for NET/JRF, so that either they become eligible for college lecturership, or they get Rs 25,000 per month as fellowship.

The third implication is that candidates who do clear the NET but fail to make the cut for JRF keep giving the exam repeatedly, till the time they crack it, or they eventually become a permanent teaching faculty at some college.

And finally, even those candidates who do get JRF keep looking for positions as permanent faculties in colleges and universities, because it would pay more than double the amount than they'd get at fellowships.

But in none of these four circumstances can students be fully devoted to their research, which is necessary to produce good results. One can argue that in the fourth case, the students can give full attention to their research, considering that they are receiving a full-time fellowship. But again, as in the case with IIT students who are lured to attractive MNC jobs, the situation with these fellows is the same. This is essentially because people in general want to be more financially secure than they are at present.

The ideal solution would be to provide each and every research student with a fellowship amount which makes one financially secure. Furthermore, those who are receiving JRFs and other fellowships should also be provided with incentives, so that they are not lured by jobs in universities as ad-hoc or permanent lecturers. The incentives could be like what has been done in the case of students from IITs and IISC.

However, the possibility of providing Rs 70,000 as fellowship to every research student would be unrealistic. What could instead be done is to select students from universities which have proven themselves consistent in their research work. And with the HRD ministry coming out with rankings of universities across streams, this selection process becomes easier. Students from universities who make this could be provided with more incentives, like increasing their fellowship amounts. This will create additional incentives to other universities and departments which couldn't make the cut. It would also create a healthy competition among universities to strive for better, in order to get more incentives from the government.

To sum up, every research student in India needs to be given a scholarship, fellowship, or a decent monthly amount which makes one financially secure and lets one concentrate on his/her research work whole-heartedly. Scarcity of funds is the one reason why despite producing so many doctoral researchers, India lacks quality research.

A good step has already been taken for IIT and IISc research students, but would the government do the same with other streams, like humanities, or would these students continue to be children of a lesser God? Only time will tell.

# IIT Roorkee part of a Joint Collaborative Programme with Foundation of Science & Technology, Portugal

<u>http://indiaeducationdiary.in/iit-roorkee-part-joint-collaborative-programme-foundation-science-technology-portugal/</u>

Roorkee: On the invitation from the Ministry of Science, Technology & Higher Education, Govt. of Portugal, Indian Institute of Technology Roorkee along with IIT Madras & IIT Gandhinagar recently visited Portugal to explore opportunities for academic and research collaborations and to sign an MOU for the same. The delegation visited some of the leading universities, institutes, and research centers of excellence in Portugal including the Faculty of Sciences and Technology – Coimbra University; Science and Technology Park from Porto University; Aveiro University and the Engineering School – Minho University among others. The visit to these institutes was followed by a Memorandum of Understanding (MoU) which was signed between the three IITs and the Portuguese Foundation for Science and Technology (FCT). The MOU was exchanged during a ceremony in the presence of India's Prime Minister Shri. Narendra Modi and Portugal's Prime Minister António Costa. Speaking about the international collaboration, Prof. Chaturvedi, Director, IIT Roorkee, said, "We are privileged to be part of this international collaborative group and look forward to joining hands with our international counterparts for interdisciplinary research work. We are sure that this will be a great learning experience for researchers from both sides and the combined effort will yield results and will help in addressing various issues related to society in a scientific manner."

Some of the key highlights of the MOU are:

- Joint Doctoral training and research
- Joint action on Undergraduate engineering education
- Collaborative Interdisciplinary Research Projects
- Joint research on "India-Portugal Contemporary Issues of Technical Change"
- Joint development of interdisciplinary master programs as well as specialized master programs
- Joint organization of technical workshops, seminars, study tours and training sessions

The activities referred under this Memorandum of Understanding (MOU) will be financed with funds allocated under the budgets made available as per the agreement between Portuguese and Indian Funding Agencies. These will be subject to the conditions under the agreement as enumerated in Terms of Reference (ToR) for this MoU between the Department of Science and Technology (DST) of the Ministry of Science and Technology of the Government of India and the Portuguese Foundation for Science and Technology (FCT). For this purpose, a joint fund of 4 Million Euros has been established by both the governments on equal contribution basis. A Portuguese delegation would visit all the three IITs by the end of 2017 followed by the launch of the first "Call for Joint R&D Proposals" under this MOU. The joint R&D proposals would be submitted to both FCT and DST.

### IIT Madras Professor selected for C.N.R. Rao National Prize

http://indiaeducationdiary.in/iit-madras-professor-selected-c-n-r-rao-national-prize/



Chennai: A Professor from Indian Institute of Technology Madras has been selected for the prestigious C.N.R. Rao National Prize for research in Chemical Sciences.

Dr. M.V. Sangaranarayanan, Professor, Department of Chemistry, IIT Madras, was selected for this award, instituted by the C.N.R. Rao Educational Foundation for the promotion of Chemical Research in India.

The award is constituted by the Chemical Research Society of India, a professional body that promotes and facilitates research and education in all branches of chemistry. The award has been presented in recognition of his following contributions:

 (i)theory of electron transfer processes at various interfaces using thermodynamic and statistical mechanical models for de-mystifying a large class of experimental observations
(ii)applications of conducting polymers to electrochemical supercapacitors and biosensors

Prof. M.V. Sangaranarayanan along with his research group has been analysing various fundamental questions on the thermodynamic and microscopic analysis of electrochemical systems. Further, statistical mechanical modelling of electrical double layer, non-equilibrium thermodynamics of charge transport processes, supercapacitors, and biosensors among are his other significant contributions.

Prof. Sangaranarayanan has co-authored two textbooks in physical chemistry and published nearly 120 papers in International Journals.

Speaking about the contributions leading to the award Prof. M.V. Sangaranarayanan, Department of Chemistry, IIT Madras, said, "The theoretical and experimental studies on charge transfer processes in electrochemical systems constitute the most challenging field of research. A variety of sophisticated theoretical techniques in conjunction with diverse electrochemical experiments has provided significant breakthroughs in the studies conducted by my research group at IIT Madras".