

Newspaper Clips May 31, 2016

Asian Age ND 31/05/2016 P-4

IIT-Powai students build 'fastest' electric racing car

**AGE CORRESPONDENT
MUMBAI, MAY 30**

The students of Indian Institute of Technology, Bombay (IIT-B) unveiled Orca, the fastest electric racing car made indigenously by a team of 74 students on Sunday. While the Orca team claims that the vehicle is the fastest in the world reaching speeds of 100 kilometer per hour in 3.4 seconds, they are still looking to put their claims to test as some of the international racing car manufacturers like Lamborghini and Porsche have turned down the institutes offer to pit their cars against the Orca. The team has requested car manufacturing biggies in India to participate in a head-to-head race to prove their claims and one of them has agreed.

Speaking about the



Orca and its ability to reach from 0-100 km/h faster than any other racing car in the world, Archit Sanadhya, a student and chief marketing officer, IIT Bombay Racing said, "The Orca is the outcome of eight years of research by successive student teams. The car has been made entirely by the students including the various parts like the chassis, electronics and the battery. Teams comprising of students from different departments worked on completing the car," said Sanadhya.

He added that while the testing showed the car had the capacity to reach 100 km/h in 3.4 seconds, it was not done in a head-to-head race. "We contacted Lamborghini and Porsche but they turned down our invitation to pit their fastest racing cars against ours as the costs involved in doing so was very high. We then approached one of our sponsors who has agreed to have a trial before the car is shipped to UK to participate in the Formula Student race in July 2016," said Sanadhya.

IIT-Kharagpur students design lab-on-a-chip with electrically increased liquid flow

<http://timesofindia.indiatimes.com/tech/tech-news/IIT-Kharagpur-students-design-lab-on-a-chip-with-electrically-increased-liquid-flow/articleshow/52501571.cms>



KOLKATA: A team of Indian researchers has shown how electric fields can be used to enhance peristalsis -- successive wave-like motions which helps you keep chewed food down and ferry it to your stomach -- in a finding which, they say, may act as a model for the design of lab-on-a-chip devices.

At the Microfluidics Laboratory of the Indian Institute of Technology -Kharagpur, researchers have envisaged exploring massive augmentation in peristaltic flow through on-chip control, by simply applying an external electric field.

"Such an advantageous mechanism has the potential to aid researchers in studying targeted drug delivery, augmenting biophysical fluid transport in human bodies, and observing and controlling chemical reaction and mixing in surface-modulated fluid flow environments," said Suman Chakraborty, leader of the Microfluidics Laboratory and head of the School of Medical Science and Technology .

Peristalsis refers to the mechanism of fluid transport by means of travelling waves along the surface of a flexible tube and the process is responsible for transport of chewed food through the human digestive tract where the surface movement is obtained by means of muscle relaxation and contraction.

Natural mechanisms and processes have been central in driving the study of on-chip devices which aim to mimic the same functionality, for example: A kidney filtration process or digestive system, on a miniature device .

MHRD's IIT PAL launch may be delayed, MOOC platform being considered

<http://www.pagalguy.com/articles/mhrds-iit-pal-launch-may-be-defered-mooc-platform-being-cons-43786415>



Last week, the Ministry of Human Resources Development had announced that it will soon launch an app, IIT PAL, to help engineering aspirants in their preparation for the Joint Entrance Examination.

The student community rejoiced at this initiative as the app was to be launched in two months' time and would have been available free of cost. The proposed app would have past 50 years' JEE question papers and video tutorials from IIT professors.

However, with newer amendments to the plan, it seems PAL launch may be delayed. Sources say that MHRD is now planning to rope in current year IIT students to prepare notes and study material for the app.

Aspirants who were earlier rejoicing at the initiative are now sceptical about the ministry's timelines for the launch. Arun Goyal, 2017 JEE aspirant from IITian's PACE, said, "It was quite ambitious on the Government's part to release the app by August. It is hard to compile so much data so soon."

However, the delay in launching the app is not what is bothering aspirants. The Ministry has now decided to launch the preparation material on its Massive Open Online Course (MOOC) platform in the form of open courses. This platform is available to foreign students as well. The aspirants are worried that the material published on MOOC in the form of courses might be paid and will limit the free benefits of the app.

How and why is the Ministry planning to use two completely different mediums for publishing the study material is questionable?

Dainik Jagran ND 31/05/2016 P-11

आधुनिक तकनीक से भूकंप के झटकों में टिकी रहेंगी इमारत

विक्सन सिक्वोडिया, कानपुर

अल्प व सीमित संसाधनों से पांच मंजिला इमारत बनाने की सीमाबद्ध भूकंपरोधी भवन निर्माण की आधुनिक तकनीक आइआइटी प्रोफेसर दुर्गेश राय ने खोज ली है। भू-वैज्ञानिकों ने कानपुर, इफाल व सिक्किम में आए भूकंप के बाद वहां का भौगोलिक अध्ययन कर यह तकनीक विकसित की है। भूकंप में हुई

क्षति का जायजा लेने इफाल गए भू-वैज्ञानिकों ने पाया कि सरकारी इमारत को सबसे ज्यादा नुकसान हुआ है। जब उन्होंने सैंपल लेने के साथ मैपिंग की तो पता चला कि यह इमारतें षटिया तरीके से बनाई गई थीं। इफाल में आए भूकंप में जिन इमारतों को नुकसान हुआ, उनमें वूमंस मार्केट, एनआईटी बिल्डिंग व कोचिंग अपार्टमेंट जैसी सरकारी इमारतें शामिल हैं। फिर उन्होंने कानपुर की इमारतों का अध्ययन किया तो पाया कि कई इमारतें मानक के अनुरूप नहीं हैं। अध्ययन करने वाली टीम में आइआइटी कानपुर के प्रो. दुर्गेश राय, आइआइटी पटना के डॉ. वैभव सिंहल व आइआइटी के शोध छात्र शामिल थे।

• आइआइटी प्रोफेसर ने सीमाबद्ध भूकंपरोधी भवन की तकनीक खोजी

भूकंप झेलने के लिए तैयार नहीं इमारतें

प्रो. दुर्गेश राय ने बताया कि कानपुर शहर के अलग-अलग क्षेत्रों में बनी 30 मल्टीस्टोरी इमारतों के अध्ययन के बाद उन्होंने एक रिपोर्ट तैयार की है जिसमें यह बात सामने आई कि इनमें से कुछ इमारतें भूकंप के झटके झेलने के लिए तैयार नहीं हैं। अपने अध्ययन में उन्होंने पाया कि सिस्मिक जोन तीन में आने वाले इस शहर की इमारतों को सीमाबद्ध भूकंपरोधी बनाए जाने की जरूरत है। गुजरात स्थित आइआइटी गांधी नगर का परिसर, छात्रावास व फेकेल्टी बिल्डिंग इसी तकनीक से तैयार की गई हैं।

सीमाबद्ध इमारतें बनाने की तकनीक

- लंबी दीवारों को प्रत्येक 15 फीट की दूरी पर तिरछी दीवारों से जोड़ें
- जहां दीवारें समाप्त होती हैं या आपस में मिलती हैं वहां बंधक स्तंभ खड़े किए जाएं
- नींव पत्थर और कंक्रीट की बनाएं।
- प्रबलन के सरियों के आसपास चारों ओर दो इंच खाली स्पान छोड़ें, जिससे कंक्रीट इसमें ठीक से गुजर सके और सरिये भी पत्थरों से स्पर्श न करें।
- भूकंप पट्टी के सरिये को कालम में एक फीट लंबाई तक मोड़ें।
- भूकंपीय पट्टियों और स्तंभों में कंक्रीट एक साथ भरें।

इन बिंदुओं पर दी गई विस्तृत जानकारी आइआइटी ने इस तकनीक के लिए एक दिशा निर्देशिका तैयार की है जिसमें नींव, चिनाई, भूकंपी पट्टिकाएं, खिड़कियां व दरवाजे, कंक्रीट की छत, कंक्रीट स्लेब, छत, सामग्री परीक्षण के बारे में विस्तार से बताया गया है।

An effort to break the language barrier for students

<http://www.thehindu.com/todays-paper/tp-national/an-effort-to-break-the-language-barrier-for-students/article8647592.ece>

In a multi-lingual and multi-cultural country like India, the lack of knowledge of a particular language for a student often becomes an impediment to his or her learning and know-how of a subject or culture.

However, those days could soon be past as students will now have the resources to read any language in any script through any language interface.

Moreover, now they will also be able to search for one language text in another language as well as get meanings in different languages. Learning new languages, through cross-lingual grammar books and transliteration will also become a much easier process.

All this becomes possible with the multilingual 'Bharatavani' portal and app, which were launched by Union Human Resource Development Minister Smriti Irani at the Babasaheb Bhimrao Ambedkar University here.

The first knowledge portal of its kind in India, which focusses on becoming a single-point source for multiple language learning content and technology, *www.bharatavani.in* is being termed as a treasure trove of knowledge and India's indigenous cultures.

The project is in line with the Ministry's "efforts to not only ensure universalisation of education but also towards creation of a knowledge society in a digital age." The Central Institute of Indian Languages at Mysuru will implement the project for the MHRD.

National integration

The project aims at fostering national integration. Its goal is to "bring together the people under one portal, to bridge the digital and language divide, with the idea to publish and involve people in the Open Knowledge movement," the Ministry said in a statement.

Flipkart row: IIM-A prof says students free to look at options

<http://timesofindia.indiatimes.com/city/ahmedabad/Flipkart-row-IIM-A-prof-says-students-free-to-look-at-options/articleshow/52512992.cms>

Ahmedabad: As the deadlock between Flipkart and IIM-A continues over compensation offered by the company for deferring joining dates of students hired from campus, IIM-A faculty expressed that the concerned students are no more bound to wait for Flipkart, but are free to look for alternative employers.

Vijaya Sherry Chand, professor at Ravi J. Matthai Centre for Educational Innovation at IIM-A, stated in an email reply to Tol on Monday, "In the event that a firm delays the date of joining, students are free to look for alternative opportunities."

Earlier, the institute had said, "Flipkart has been a trusted recruiter, and we are facing such a situation for the first time. We are certain that this matter can be sorted out satisfactorily."

Recently, Flipkart deferred the joining dates of 18 hired students from June to December and proposed a compensation

of Rs1.50 lakh to each for postponing joining dates. Following the incident, IIM-A authority wrote a strong-worded letter to the company, and asked them to increase the compensation.

However, the institute chose not to divulge other details on the issue.

Meanwhile, Flipkart issued a statement saying, "Regret to share that the matter is confidential and we will not be able to divulge any information pertaining to this."

This was after both-- the institute and the company-- remained stuck in their stands and failed to progress on the issue.

Business Standard ND 31/05/2016

P-1

'Paytm to have ₹1-lakh cr GMV by 2018'

VIJAY SHEKHAR SHARMA, founder and chief executive of One97 Communications, which runs Paytm, spoke to Nivedita Mookerji on the group's payments bank plans, funding and valuation in e-commerce and its biggest investor Alibaba's India foray. Edited excerpts:

Q&A

VIJAY SHEKHAR SHARMA
CEO, Paytm

Do you see this as a challenging time for fundraising in e-commerce?
I can say it's not difficult for us. There's more demand (to invest) than we can handle, there's more incoming request than there was previously. And we have said more 'no' than 'yes'.

When is your next round of funding?
We don't need money now. We have enough money for current operations. People have been making offers and benchmarking prices, while we are saying 'not yet'....

Has your company experienced a valuation markdown like some others?
The offers that we have received are many times over our expected valuation. We are in the business to build money, not to raise money.

What would you peg Paytm's valuation at?
We are not in the market for fundraising, so I cannot give a number yet.

Why do you think valuations in some leading e-commerce companies such as Flipkart have been marked down?
Valuation is typically based on expectation of a business but it is not a single depiction of a company. A markdown could be because of market conditions and demand at a certain point. It may not be a true reflection of a company's intrinsic value. I think the valuation talk is overrated. Founders and entrepreneurs should build intrinsically value-led companies, so that if you are not there, people will miss you hell of a lot. For instance, if Amazon is not

STRAIGHT TALK

ON ALIBABA
They are giving us the ammunition — tech, resources, money as we demand and as we need

ON GMV VS CUSTOMER SATISFACTION
Those who were chasing GMV were dumb from Day One

ON CAMPUS HIRING
We can pick up another 100 from IITs, IIMs, XLRI, if given a choice

ON PAYMENTS BANK
We want to build India's first Aadhaar-only bank

hired. So, we can pick up another 100 — given a choice — from IITs, IIMs, XLRI and others soon. This is in addition to recent 45 campus placements.

What's the employee strength and outlook?
It's around 4,500 now, up from 3,500 last year. We have hired more than 200 in technology and business teams this year. Within one year of launching payments bank, the employee strength will be 5,000.

What's your thought on companies shifting from gross merchandise value (GMV) of products sold on a platform to customer satisfaction metrics?
Those who were chasing GMV were dumb from Day One. It was not a number to chase. Their math was not right.

What are the financial goals for the group?
By April 2018, we should have a transaction GMV of ₹1 lakh crore, up from ₹20,000 crore now.

Currently, what's the Alibaba play for Paytm?
They are the most important and incredible partners for us. We continue to leverage each others' capability. They also bring us money, surprisingly (laughs).

Illustration: Binay Singh

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still last us three to four years. There has to be tremendous reason to raise money or if someone is selling.

Are you looking at phasing out e-commerce or any other segment over time?

E-commerce is an incredible asset for us, like Amazon Web Services. It is a profitable asset in our business book. It is also critical for access to merchants. As for phasing out, the recharge business may come down in percentage terms in the total transaction pie. It is 25 per cent now and may be down to 5-7 per cent in one year.

How will you rank the segments within the group, in terms of profitability potential?

Financial services will be on top followed by commerce, treasury and payment. Wallet or payment is last because we want to incentivise merchants and consumers. That should remain sustainable rather than looking for profit.

When are you launching the payments bank and how much will you invest?

We will launch by Diwali and will invest around ₹300 crore to begin with. Reserve Bank of India (RBI) has mandated an investment of ₹150 crore.

How many bank branches are you looking at and which regions do you want to go into first?

We are not aggressive on branches. Maybe one or two, while focusing more on business correspondents. We want to

begin with Northeast and central India as they are the toughest. If we solve the tough places, we will be able to solve the rest.

There are concerns around the business model of payments bank and whether they can be profitable.

It is a totally profitable business model. Profitability is not a distant dream. No mark has been decided by the board. The idea is to make sure you are prudent enough and start making money.

What about profitability in your e-commerce business?

We are among the rare e-commerce companies to have started making money. We are technically profitable.

In payments bank, what will be your acquisition cost of a customer?

We are setting it at \$1, including know-your-customer (KYC). Currently, the group's acquisition cost of a customer is \$2. We have to keep it low.

Are there any regulatory challenges in banking?

Not now, unless roadblocks come later. In KYC, we are talking to the regulator to understand the rules... We want to build India's first Aadhaar-only bank.

Is it a concern that three banking licences have dropped out?

Not at all. People have to discover their business models. Ours is sorted. We may bring a new banking business to the world along with RBI.

Ashoka tree holds hope for cancer cure

<http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/ashoka-tree-holds-hope-for-cancer-cure/article8669716.ece>

An IISc. team has reported finding an anti-cancer compound in the tree.

Fungus to treat a dreadful disease like cancer? It is possible. Research over the years has thrown up surprises that nature has in store, one of the most remarkable being Paclitaxel (marketed as Taxol), a chemical compound from the bark of a Pacific Yew tree (*Taxus brevifolia*). But the difficulty in extracting the compound as well as concerns over the entire tree being cut for the purpose pushed scientists to look for alternatives.

Closer home, a team from the biochemistry lab at the Indian Institute of Science (IISc), Bangalore has been working on identification and extraction of natural compounds of pharmaceutical value found in well-known medicinal plants and

their endophytic fungi for over a decade. At first, they stumbled upon Taxol-producing endophytic fungus growing from the aseptic cuttings of the Chinese yew shrub. The team recently reported finding an anti-cancer compound (Cholestanol glucoside), isolated from an endophytic fungus in the Ashoka tree (*Saraca asoca*).

The potential

“The fungus has to be isolated from the plant, algae or the source. We culture the fungus and see if it has anti-cancer properties before fermenting it,” explained C. Jayabaskaran, Professor, Department of Biochemistry, IISc. The compound produced by the fungus has to be purified and undergo pre-clinical and clinical tests.

Though available in several plants and trees, Prof. Jayabaskaran said they have to be approved by the FDA. Different kinds of fungus are said to treat different types of cancer.

“We are trying to coordinate with some industries,” he added, referring to efforts to translate the findings into industry-level production.

New UGC notification puts teacher aspirants in a fix

<http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/new-ugc-notification-puts-teacher-aspirants-in-a-fix/article8669838.ece>

Those who were awarded PhD before 2009 are at a disadvantage

The latest UGC notification amending its regulations prescribing minimum qualifications for appointment of teachers in universities and colleges has put teacher aspirants who were awarded a PhD degree prior to 2009 in a fix.

The apex regulatory body for higher education in 2010 came up with the UGC on Minimum Qualifications for Appointment of Teachers and Other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education Regulations.

It exempted candidates who were awarded a PhD degree in compliance with the provisions of its regulations of 2009, from passing the National Eligibility Test or State Eligibility Test (NET/SLET/SET) for appointment of Assistant Professor or equivalent positions in universities and colleges.

However, on May 4 this year, the UGC notified a third amendment to its 2010 Regulations. As per this, teacher-aspirant candidates who had registered for the award of PhD programme prior to 2009 shall be exempted from clearing the NET/SLET, subject to five conditions.

“Two of these conditions are controversial. One, the UGC has said that the PhD degree-holders must have published two research papers out of which at least one in a refereed journal from out of his/her Ph D work.

Two, the candidate must have presented two papers at seminars/conferences from out of his/her PhD work,” says Prof. C. R. Ravi, Principal, A.M. Jain College, Chennai, who has been championing the cause of the pre-2009 Ph D holders who do not have a NET certificate.

Putting the clock back

“At the time when the candidates completed Ph D there was no such requirement to get their doctoral degrees. To insist on such candidates to fulfil these conditions retrospectively would amount to requiring such PhD holders to put the clock back,” he points out.

According to him, if the amended UGC regulations are implemented, it would adversely affect such candidates from taking up jobs in a State university and government/aided college.

“Even teachers working in government/aided colleges who vie for promotional posts like principals would face an uphill task as their earlier qualification of PhD would not conform to these regulations,” Mr. Ravi said, seeking a review of the amendment.

They have been exempted from taking the national eligibility test only if they meet five conditions

UGC told to roll back teachers' increased workload

<http://timesofindia.indiatimes.com/city/delhi/UGC-told-to-roll-back-teachers-increased-workload/articleshow/52503430.cms>

New Delhi, May 26 (IANS) Acting on complaints from teachers, the human resource development ministry on Thursday directed the University Grants Commission (UGC) to quash its recently revised regulations mandating higher working hours for academicians.

"The ministry has reviewed the recent amendment to the UGC (Minimum qualifications for appointment of teachers and other academic staff in universities and colleges and measures for the maintenance of standards in higher education) Regulations, 2010.

"Consequent on the review, the ministry has issued a direction to the UGC to undertake amendments in the Regulations. There will be no increase in the workload of teachers, after the amendments, in comparison with the workload prescribed earlier," said a HRD ministry statement.

It said that the direct teaching-learning hours to be devoted by assistant professors (16 hours) and associate professors/professors (14 hours) too will remain unchanged.

The guidelines issued by the UGC earlier this month had increased teaching hours by two hours for each category. Under the new guidelines, an assistant professor was required to teach 18 hours a week instead of 16 hours, while an associate professor was required to put in 16 hours instead of 14.

"Teachers are encouraged to work with students, beyond the structure of classroom teaching. Indicatively, this could entail mentoring, guiding and counselling students.

"Teachers were required to allocate six additional hours per week, beyond the direct teaching-learning hours, on research. These hours can now be also utilised for tutorials/remedial classes/seminars/administrative responsibilities/innovation and updating of course contents," it added.

UGC asks institutions to follow radioactive material norms

<http://timesofindia.indiatimes.com/city/delhi/UGC-asks-institutions-to-follow-radioactive-material-norms/articleshow/52509134.cms>

New Delhi, May 30: University Grants Commission (UGC) has asked varsities to form a special committee to maintain a centralised inventory of radiation sources as the AERB has reported that several higher education institutions do not abide by the guidelines related to usage and disposal of radioactive and other hazardous materials.

UGC has also asked Registrars of Universities to transmit the consolidated list of radiation sources in their possession to AERB by August 2016.

In a letter to Vice Chancellors, UGC secretary Jaspal S Sandhu referred to guidelines for Universities, research institutions and colleges for procurement, storage, usage and disposal of Radioactive and other hazardous materials or chemicals.

"However, it has been reported by Atomic Energy Regulatory Board (AERB) that many institutions of higher education in the country do not abide by the standard operating procedures outlined in the UGC guidelines and AERB regulations," the letter said.

The letter added that "reportedly", higher education institutions in the country possess hazardous radiation sources which fall within level 1 to level 5 categories of activity.

The letter said that AERB had informed that many institutions do not regularly provide the complete status of possession of radiation sources.

"Even when it is submitted, it is sent piecemeal and not in consolidated form," the letter by the senior UGC official added.

Sandhu, in the letter requested institutions to register themselves on a web based licensing system, put by AERA for this purpose.

He also sought that committees be formed to maintain inventory and asked Registrars to transmit the consolidated list of radiation sources in their possession to AERB by August 2016.

Hindu ND 31/05/2016 p-16

IIT graduate leads drive to get Asian-Americans to vote

VARGHESE K. GEORGE

WASHINGTON: Asian-Americans have the lowest level of participation among all ethnic groups in U.S. politics, and an initiative led by Shekar Narasimhan, an alumnus of Indian Institute of Technology (IIT)-Delhi, has been trying to change that.

Launched four months ago, the Asian-American and Pacific Islanders (AAPI) Victory Fund has a grand vision overall but modest objectives for the current election cycle — reach out to as many members of the community as possible in six States where a few thousand votes can make the difference.

“If we manage to increase the voter participation of Asians in these six states — Ohio, Virginia, Nevada, North Carolina, Colorado and Florida — by just five percentage from the last cycle, we will be the margin of victory,” explained Mr. Narasimhan.

Low voter turnout

AAPI population in the U.S. is 19.4 million, according to calculations based on the 2012 census. Of this, 13-14 million are eligible to vote, but only 56 per cent of them are registered. In the last election cycle, only 3.9 million voted.

“Only half of them, which is much below other communities in terms of participation. The primary reason is that nobody reaches out to



Shekar Narasimhan

them,” said Mr. Narasimhan.

A recent survey of AAPI population bears this out. It found that Asian-Americans are the least likely to be contacted by a political party or community organisations. AAPI Victory Fund seeks to change the situation, and gradually make the community an influential voice in American policymaking.

Mr. Narasimhan says within his first years in the U.S., he realised that “much like [in] India, influence mattered”. After a management degree from the University of Pittsburgh, he began working on a rural planning project in Kentucky, and his role required him to coordinate with the federal administration in Washington.

“I realised it mattered who is in power, it is really important to know who is in charge, and who took decisions,” he said, explaining the beginning of this involvement with U.S. politics.

AAPI Fund is not into funding candidates or par-

Group headed by Shekar Narasimhan is reaching out to community members in six States

ties, but focused entirely on increasing the community’s participation in politics, through a three-stage process. The first is to get them to register as voters. The second is to persuade them. “We are getting people trained to talk to their local communities on issues that matter to them,” Mr. Narasimhan said. For instance, there are four lakh Indians in the U.S. without proper documentation and the debate on immigration reforms will have a huge impact on them. The third stage is to get them out to vote on November 8.

The campaign is focused on 23 counties within the six States where Asian communities are primarily concentrated. It has contacted 73,000 eligible voters in the last 90 days and 4,000 of them have already registered to vote. The target this year is to add 10,000 new voters.

The campaign hopes to have stickers on thousands of cars on November 8 that says, ‘I am Asian. I voted’. “That is when parties will take note and want to know what the community wants. This is a place where there are too many competing demands and unless you make your case, you will not be heard,” said Mr. Narasimhan.