

## Newspaper Clips January 8, 2015

### **IIT-Delhi Faculty Forum Backs Director**

<http://www.ndtv.com/article/cities/iit-delhi-faculty-forum-backs-director-645106>

The faculty forum of IIT-Delhi has passed a resolution strongly backing its Director Raghunath Shevgaonkar in the wake of his resignation from the post a few days back citing some "unforeseen situations".

"We, the faculty forum of IIT Delhi, unanimously and unitedly extend our full support to our director. We vehemently protest the malicious allegations and the politicization of issues in the press and media," the forum said in its resolution, a copy of which was sent to President Pranab Mukherjee, the Visitor to the IITs.

The HRD Ministry is yet to accept Shevgaonkar's resignation even as the latter has gone on leave. In a mail last week to the faculty members and students of IIT-Delhi, he had said it was his last new year message as the Director of IIT-Delhi and that he was awaiting his relieving order.

Shevgaonkar, whose resignation had triggered a controversy, has attributed his decision to some "unforeseen situations".

"Towards the end of the year... some unforeseen situations developed and I had to decide to step down from my position," he had said. Shevgaonkar, however, did not elaborate on the factors that had led to his decision to quit.

A statement issued by IIT-Delhi right after the resignation had attributed the move to "personal reasons".

In his mail, Shevgaonkar had said there is a need to convey a positive image about the internal functioning of the institute to the outside world.

"Disagreement is an essential part of a healthy academic environment. However, care needs to be taken that the internal differences are not exploited by the outsiders to affect our functioning," he had said.

After his resignation kicked up a row, the Centre said it has appointed a committee to look into the legality of an MoU signed with Mauritius during Shevgaonkar's tenure for setting up of a campus there even as IIT said the pact had approvals from the government.

HRD Ministry officials have maintained that there was no pressure on Shevgaonkar to resign while IIT Delhi had said the resignation was "not connected to any other matter being reported in the press".

Certain media reports had claimed that Shevgaonkar was under pressure to approve a proposal for a cricket academy on the IIT campus and to clear dues of Rs. 70 lakh to former IIT professor and BJP leader Subramanian Swamy.

### **IIT-D faculty backs Shevgaonkar**

<http://indianexpress.com/article/india/india-others/iit-d-faculty-backs-shevgaonkar/>

While the HRD Ministry is yet to accept the resignation of IIT-Delhi Director Raghunath K Shevgaonkar, the institution's faculty is firmly backing the Director.

In a resolution following a general body meeting on Monday, IIT-Delhi's Faculty Forum said it "unanimously and unitedly" extends its "full support" to Shevgaonkar. "We vehemently protest the malicious allegations and

the politicisation of issues in the press and media,” the resolution, which was sent to President Pranab Mukherjee, stated. The President is the Visitor of all IITs.

Shevgaonkar’s resignation has triggered a controversy, with some reports suggesting that he quit after the Ministry allegedly pressured him to release salary dues of nearly Rs 70 lakh to former IIT-Delhi faculty and now BJP functionary Subramanian Swamy for the period between 1972 and 1991. The HRD ministry, while denying such reports, has set up an inquiry into IIT-Delhi’s MoU with Mauritius Research Council, claiming that it violates the IIT Act. Sources in the ministry have attributed Shevgaonkar’s resignation to an inquiry being set up in the matter.

IIT-Delhi had earlier sought to clarify its stand on the issue, explaining that there was no violation in setting up the centre in Mauritius. The IIT-Delhi faculty forum had come out in strong support of Shevgaonkar last week as well, urging him to withdraw his resignation.

- See more at: <http://indianexpress.com/article/india/india-others/iit-d-faculty-backs-shevgaonkar/#sthash.7FoPIMBg.dpuf>

## Dainik Jagran ND

### 08/01/2015 P-5

**इस्तीफा वापस लेने की मांग**  
 राज्य ब्यूरो, नई दिल्ली : भारतीय प्रौद्योगिकी संस्थान (आइआईटी) दिल्ली के शिक्षक पूर्व निदेशक आरके शिवगांवकर से इस्तीफा वापस लेने की मांग कर रहे हैं। इस संबंध में शिक्षकों ने एक प्रस्ताव भी पास किया है, जिसमें उल्लेख है कि वह शिवगांवकर के नेतृत्व में काम करना चाहते हैं, उनका व्यवहार शिक्षकों और छात्रों के अनुकूल है। एक शिक्षक का कहना है कि शिवगांवकर प्रतिष्ठित शिक्षाविदों में से है, सरकार को शैक्षणिक संस्थानों में इस तरह दखल नहीं देना चाहिए।

## 'Under construction' AICTE is now headless

<http://www.dnaindia.com/mumbai/report-under-construction-aicte-is-now-headless-2050580>

SS Mantha on Monday quit as chairman of the All-India Council of Technical Education, making the controversial apex body of technical education headless. Vice chairman of the council Avinash Pant has been given the charge for the time being.

### Why did he quit?

Mantha resigned because the ministry of human resources and development (MHRD) is said to have not approved extension of his tenure.

### What is Mantha saying?

He denied his departure has anything to do with the restructuring (of the council as planned by the Centre) or unhappiness of the (human resources) minister. "I have completed my tenure of three years and now I am back to my parent institution VJTI. There is no controversy at all."

### What has govt planned for the council?

The Smriti Irani-led ministry has decided to restructure the council owing to its "incompetence". It constituted a four-member review committee in October to "restructure and strengthen" the council as per the vision of the [BJP](#) government. The committee, headed by ex-secretary of MHRD MK Shaw will submit its report by March.

### Why's Centre restructuring it?

The ministry believes the 1987-born AICTE hasn't been able to curb commercialisation of technical education and has also failed to ensure the standard of the sector.

### As per the MHRD order...

"There is a realisation that the council is finding it difficult to match the demand of private players in the field of technical education... there is a growing trend of commercialisation and the laid down norms and standards of the technical education are not fully implemented. The technical education sector needs to be reoriented and redefined in light of these difficulties, globalisation and competition in economy and research. Therefore, it is imperative... an urgent review of the AICTE is needed."

### What will the committee's tasks be?

The committee will have to evaluate the performance of the council, and analyse its functions, regulatory lapses, work [culture](#) etc. The committee will also suggest amendment in the AICTE Act, 1987, measures for restructure, effective methods to enhance quality education, curb commercialisation, regulation of private institutes, and internalisation of education among other things.

### What is AICTE?

It's the apex body for almost all professional [courses](#) in the country, including engineering, technology, management, MCA and pharmacy. It has over 4,600 institutes including engineering, pharmacy, IT, [architecture](#) and hotel management under its ambit.

### Its controversies

The council had invited the ire of the Supreme Court last year. SC revoked its power to regulate MBA and MCA education, ruling that these were not under purview of the council as per the law.

The body is also blamed for its "liberal approach" to approve [colleges](#) which led to mushrooming of private institutes across the country, lowering the quality of education. It has been dragged to court many times for its controversial approval and revoke process. Courts have nailed the regulator many times, imposing fine at least twice.

## Invoking Buddha and Gandhi, IIT prof pitches for a green India

<http://www.dnaindia.com/mumbai/report-invoking-buddha-and-gandhi-iit-prof-pitches-for-a-green-india-2050618>

The Indian Science [Congress](#) expressed concern over failure of Indian [scientists](#) and technological experts in developing cheaper and effective indigenous technologies, while also stressing the need for citizens' participation in protecting the environment.

Speaking at a plenary session at the concluding day of the science congress on Wednesday, Prof Shyam Asolekar, head of Centre of Environmental Science at IIT-B, rattled off staggering statistics on hazardous waste and the lack of home-grown solutions to drive home the point.

Over 9 million tonnes of poisonous noxious refuse is dumped every year by more than 30,000 industries. Besides, a significant amount of harmful rubbish is generated domestically, said Prof Asolekar. The waste includes lubricants, waste oils, chemicals, drugs, demolition debris of ships, bio-medical wastes, etc.

"Our experts have failed in developing an effective and cheaper indigenous technology to manage the hazardous waste. So, we have no other option but to rely on costly imported technologies and results in non-compliance of the stipulated rules."

The professor said that though several agencies and experts are working in the field of environmental protection, they are yet to focus on the real problems and their solutions. He said that a bulk of the dangerous substances can be utilized to produce energy as they have high calorific value.

Prof Asolekar also pointed out that not only industries but citizens also contribute a lot in generating hazardous waste. "Batteries of electronic toys, lithium batteries of watches, mobiles and other gadgets lead to a large amount of the waste which is categorised as the 'hazardous waste'.

Invoking [Gandhi](#) and Buddha, Prof Asolekar told the Congress and its young participants about Article 51 A (G) of India's Constitution – which states that it is the duty of every citizen to protect the natural environment, forests, lakes, rivers, wildlife and to have compassion towards living creature. "This is the only duty among so many rights our constitution has given to the Indian citizens and we must abide by it."

## Bhat appointed Jalandhar NIT director

<http://www.hindustantimes.com/punjab/jalandhar/bhat-appointed-jalandhar-nit-director/article1-1304375.aspx>

Inder Krishen Bhat has been appointed the director of Dr BR Ambedkar National Institute of Technology (NIT) here.

The union ministry of human resource development has appointed Bhat, director, Malaviya National Institute of Technology, Jaipur, to the post, without specifying his tenure. Bhat has been told to take over the charge from officiating director S Ghosh with immediate effect.

Bhat, who is likely to assume office on Friday, while listing out his priorities, said he would work on introducing special academic and research programmes at the institute.

“My priority will be both teaching and research. The exchange programme with foreign universities will also be worked out so that students excel in research projects,” he said, adding that he would strive to create international-level research environment on the campus.

When asked about the alleged irregularities on the campus, he said, “We will develop a roadmap to run the institute in a proper manner.”

Bhat already has the charge of NIT Jaipur and Indian Institute of Information Technology, Kota.

“I will ask the HRD ministry to issue an advertisement for a regular director for the Jalandhar institute as I am already occupied with two major positions,” Bhat said, adding that he would remain in this position for five to six months.

The ministry on Tuesday had issued orders that the services of earlier director SK Das had been terminated. Earlier, the board of governors had told Das to proceed on long leave following alleged discrepancies in the institute.

Millenium Post ND 08/01/2015 P-3

## Retired IIT-D professor's son commits suicide

### OUR CORRESPONDENT

**GURGAON:** The 27-year-old son of a retired IIT-Delhi professor allegedly killed himself by jumping off from the 13th floor of a residential building in Gurgaon's DLF Golf Course on Wednesday morning.

A suicide note was recovered from the deceased's room, identified as Sumedh Prasad. In the note, Sumedh reportedly apologised to his parents for not being able to stand up to their expectations. However, the exact reason has not been known yet, said police.

Sumedh was the son of Dr Surendra Prasad, retired IIT-D professor. They resided at an apartment in the second floor of Parsvnath Exotica in DLF Golf Course. Sumedh was a music teacher himself, said a source.

According to the police, the call was received around 7 am on Wednesday. Dr Surendra Prasad informed the police that he found the main door of the apartment locked when he woke up on Wednesday morning. On approaching his son's room, he found the note and soon heard a loud noise. He took



**In the suicide note, Sumedh reportedly apologised to his parents for not being able to stand up to their expectations**

a glance from the window and saw a gathering below his apartment. He immediately opened the main door with a duplicate key and rushed downstairs and found Sumedh lying in a pool of blood. It was the

security guard of the building who called the police.

Sumedh's mother is also a faculty member in a Delhi-based college and his brother works in the USA.

Sumedh was rushed to the hospital where he was

declared brought dead and his body was handed over to his family after the post-mortem examination, the police official investigating the case informed.

He further added that from preliminary investigation it appears that Sumedh had locked the main door, went to the 13th floor of the building and jumped off. A case has been registered at the Sushant Lok police station.

“Statements of Dr Prasad and his wife have been recorded and the case is being further investigated,” the official added.

# Son of former IIT-Delhi director kills self in Ggn

**RaoJaswantSingh**  
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**Gurgaon:** A 27-year-old fashion photographer climbed to the top floor of his apartment building on Golf Course Road in Gurgaon and jumped to death on Wednesday morning.

His father, former IIT-Delhi director Surendra Prasad, had woken up just minutes before his son took that fatal step around 7am. Finding the door of his son's room in their three-bedroom apartment at Parsvnath Exotica locked from outside, Prasad grew suspicious. He knocked on his son's bedroom door, but there was silence.

He returned with a duplicate set of keys and opened the door to find the room empty and a handwritten note that said, "I could not prove to be good son. Let me go." He had just rushed out of the second-floor flat to make inquiries about his son when he heard a thud.

His son, Sumedh, had jumped from the thirteenth floor and lay on the ground bleeding. The condominium security immediately called the ambulance and police. By the time the doctors arrived, Sumedh had passed away.

A photographer with a promising body of work and love for musical instruments, Sumedh, a family member said, hadn't shown any sign of the turmoil in his mind. "He liked to pursue his hob-

bies," a relative said. "Recently, he had started taking guitar lessons. His parents are devastated."

Sumedh's mother teaches at a college in Delhi. His brother works in the US.

A neighbour said Sumedh was a quiet boy and hardly interacted with others in the condominium.

"I just knew he was a photographer and music enthusiast. What happened is un-



**A photographer with a promising body of work and love for musical instruments, Sumedh, a family member said, hadn't shown any sign of the turmoil in his mind**

fortunate. His tragic death has left all of us shocked," the neighbour said.

A case of suicide has been registered at Sushant Lok police station. We have to probe what led to the suicide. It appears he was depressed. We have recorded the statements of Sumedh's parents," said the investigating officer.

Hindustan Times ND 08/01/2015 P-19

# IIT-KGP to hold talks on 'Make in India'

## HT Correspondent

■ [letters@hindustantimes.com](mailto:letters@hindustantimes.com)

**KOLKATA:** Premier engineering institution IIT Kharagpur (KGP) is hosting a series of sessions on 'Make in India', the new initiative of the Narendra Modi-led government.

From January 9-11, various departments of the institution will discuss how IIT-KGP can help realise the goal of 'Make in India – innovation, fabrication and entrepreneurship' with the help of its extensive alumni network.

This is the most recent endeavour of the institution towards nation building. Over



## ■ Helping build the nation

the past 65 years, IIT-KGP has produced some of the finest technocrats and engineers, who have contributed towards sectors like aviation, construction, mining, electronics, oil & gas, railways, etc. Many world-class students of IIT-KGP have taken part in the nation-building process as employers as well as employees.

By **Ayesha Arvind**  
in Mumbai

**IIT BOMBAY**—one of the premier institutes of the country—drew the ire of social media activists and its students after the authorities denied permission to organise a discussion on democracy and human rights violations in Kashmir earlier this week.

The students and some senior faculty members, who managed to make some last minute arrangements and hold the discussion in the campus, are now up in arms against the institute and launched an online protest against IIT's "attempts to stifle free speech".

### Protest

A lecture titled "Kashmir -The Blind Side of Indian Nationalism" was held at IIT Bombay on January 6 though Dean of Student Affairs Urjit Yajnik denied permission to them.

The lecture—"Can India's claim to be a democracy hold true if it uses non-democratic means, including coercion, to control the population of Kashmir? Why do so many people in Kashmir demand freedom from India?"—was delivered by Dibyesh Anand, a professor of International Relations and Politics at the University of Westminster, London. Students claimed that the dean denied permission owing to this particular topic.

The dean, however, maintained that he denied permission to the same because the students "did not follow due procedure."

Around a fortnight ago some students learnt that Professor Anand was visiting Mumbai and he was scheduled to hold a talk on Kashmir at the city-based Tata Institute of Social Sciences (TISS). On December 30 some students wrote to Dean Yajnik, seeking permission for a lecture by Professor Anand in the campus.

"The dean, however, was on leave at the time, so we met him on January 2. He did not seem very willing. After we pursued, he sent us to get a recommendation from a faculty member. Once we did that he denied us permission saying that we needed to come through a registered students' body. So we approached a registered body and managed to get its support. Still he rejected our request for the third time, saying that we weren't giving him adequate notice period," said one of the students.

Students say they contacted Professor Anand through Face-

The students have launched an online protest against IIT's "attempts to stifle free speech".



## ALL ABOUT THE K-DEBATE

- Lecture titled "Kashmir—The Blind Side of Indian Nationalism" was held at IIT Bombay on January 6
- Event held even after the Dean of Student Affairs Urjit Yajnik denied them permission
- Students say Yajnik kept denying them permission for the lecture on frivolous reasons even after repeated requests
- Lecture was delivered by Dibyesh Anand, a professor of International Relations and Politics at the University of Westminster, London

# Kashmir fire rages in IIT Bombay

Students of the institute wanted a lecture by Prof Dibyesh Anand even after repeated denials from Dean of Student Affairs Urjit Yajnik

book and as soon as he agreed to deliver the lecture, they wrote to Dean Yajnik. However, between January 2 and January 5, the dean rejected their demand thrice, citing three different reasons.

The students then spoke to some of the senior faculty members who, in turn, tried to convince Dean Yajnik but could not manage to do it. They then launched an online petition and sought the help of over 100 students, faculty members and alumni, who demanded that the lecture be held. Dean Yajnik, however, questioned the relevance of the subject for engineering students.

"He kept on making frivolous excuses. Finally when some IIT students of an informal body—the Progressive and Democratic Students' Collective—went to seek his nod on January 5, the dean said he believed the ultimate pillar of democracy was Parliament and if Parliament questioned him on how the students held a debate on violence in Kashmir, he would be unable to give an answer," a member of the collective said. Following this, some of the collective members approached the Department of Humanities and Social Sciences that agreed to organise the lecture as its "departmental event".

For such events, the Dean's consent was not required. Dean Yajnik could not be contacted despite making repeated attempts by MAIL TODAY.

**“The dean was on leave at the time, so we met him on January 2. He did not seem very willing. After we pursued, he sent us to get a recommendation from a faculty member. Once we did that he denied us permission saying that we needed to come through a registered students' body... He kept on making frivolous excuses.”**

— AN IIT BOMBAY STUDENT



Times of India ND 08/01/2015 P-17

# New IIMs grapple with land acquisition, faculty crunch

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**Bengaluru:** The Indian Institute of Management-Ranchi was established in 2010, along with five other IIMs, raising the hopes of lakhs of students aspiring to study in premier institutions. Four years later the institute functions out of two floors of a building, with no permanent campus.

Infact, none of the six IIMs announced by the HRD ministry has a campus.

Land—acquiring about 200 acres—is the biggest challenge. “Getting so

## IIM-Bangalore hikes fees by 10%

IIM-Bangalore has increased the fees for its flagship post-graduate programme (PGP) from Rs 17 lakh to Rs 18.7 lakh, being the costliest among the IIMs. The fees have been increased after two years.

IIM-Ahmedabad has also increased the fees by 11% for three of its programmes for the next academic year. TNN

much land is not a joke,” said Anindya Sen, director, IIM-Ranchi. “The new gov-

ernment has promised to give us land. We don't plan to increase seats due to the space crunch.”

While IIM-Rohtak just received a change of land use certificate for commercial purpose, IIM-Udaipur's case is caught in a legal problem.

“Choosing land with rail and air connectivity, and industrial proximity is important. It also affects the availability of faculty. Most of their spouses work and schools for their children are a major factor,” said P Rameshan, director, IIM-Rohtak.

Most new IIMs are yet to fill up all their faculty posi-

tions. While IIM-Trichy has 19 faculty members, IIM-Ranchi has 12. The teacher-student ratio prescribed for an IIM is 1:10. “When we started, we didn't have a single faculty,” said B S Sahay, IIM-Raipur Placement, unlike at older IIMs, does not wholly depend on the size of the compensation package. “I cannot ask a company to visit my campus twice for different sets of placements. Along with the difficult economy, the location and tag of being a new IIM make placements difficult,” said Gautam Sinha, director, IIM-Kashipur.

Economic Times ND 08/01/2015 P-2

# HRD to Draft New Language Policy for Education Sector

17-member committee headed by Kapil Kapoor to look into contentious issues

Ritika.Chopra@timesgroup.com

**New Delhi:** Having learnt from the controversy that erupted over replacing German with Sanskrit in the Kendriya Vidyalayas in the middle of the school year, the Union human resource development ministry is set to draft a fresh language policy for the education sector.

A 17-member committee headed by Kapil Kapoor, former pro-vice chancellor of Jawaharlal Nehru University, will look into contentious issues such as establishing a link language (read common language) for educational purposes besides promoting classical tongues such as Sanskrit, Tamil and Telugu. There are, in all, six languages that have the 'classical' status.

The panel's broader brief includes reviewing the three-language formula, advise on use of international languages, examine the efficacy of government's current initiatives for promotion of various languages including tribal tongues, suggesting ways for preservation and restoration of extinct and near-extinct languages and drawing a road map for protecting and promoting cultural and linguistic diversity.

As per government sources, the panel will be notified in the next few weeks. It will submit its report in under a year. This will be posted at my.gov.in for feedback from states and the general public, following which it will go to Parliament for approval.

This is the first time in almost three decades that the government is revisiting the role of language as the

medium of education. The three-language formula prescribed by the National Education Policy of 1986 was a reiteration of what was enshrined in the country's first education policy in 1968. As per the three-language formula, students of

classes six to eight in Hindi-speaking states study a south Indian language apart from Hindi and English. And in non-Hindi speaking states, children should learn a regional language along with Hindi and English. This formula, the government recently admitted in the Lok Sabha, has failed due to improper implementation. English, subsequently, has emerged as the major link language.

Although the terms of reference for the panel don't explicitly say so, sources told ET that the panel, apart from reviewing the three-language formula, would also examine the pre-eminent role of English in school and higher education. “There is a strong demand for providing higher education in Indian languages as well and that should be looked into,” said an HRD ministry official.

The language debate in India has always been a contentious one and the government's latest move could possibly spark a political controversy, given that Tamil Nadu and other states have previously opposed any attempts at the imposition of Hindi. Educationists, however, agree there is a need to revisit the language policy in education, but for different reasons.

## Attempting a Change

**OTHER PANEL MEMBERS:** Ex-DU professor & all-India president of Sanskrit Bharati, **Chand Kiran Saluja**; IIT-BHU director **Rajeev Sangal**; IIM Bangalore professor

**B Mahadevan**; director of the Vivekanand Kendra Institute of Culture, Guwahati, **Deepak Kumar Barthakur**; Tamil scholar **D Gnanasundaram**; director of Kendriya Hindi Sansthan, Agra, professor **Mohan**

**CHAND KIRAN SALUJA**

“The majority of our population lives in villages and most of them cannot be part of the country's progress because they are not proficient in English. When the Right to Education Act encourages use of mother tongue as the medium of education up to class V, then why should this not be extended all the way up to higher education?”

Times of India ND  
08/01/2015 P-17

## 6 new IIMs granted mentorship, clarifies HRD

TIMES NEWS NETWORK

**New Delhi:** The human resource development ministry has clarified that it has assigned mentorship to six new IIMs and that land allotment for these institutes is being pursued with state governments where the campuses will be located.

Reacting to a TOI news report—"6 IIMs yet to take off as HRD drags feet on land, mentors", the HRD ministry said the decision on mentorships was taken on October 28 last year and this has been conveyed to the state governments on November 5, 2014.

"It is incorrect to state that the HRD ministry is undecided over the mentorship of the upcoming IIMs," the ministry said.

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**The HRD ministry said the call on mentorships was taken on October 28 last year and this has been conveyed to state governments**

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The ministry said it is in close touch with state governments to finalize shortlisted sites. "The ministry of HRD is prepared to commence academic activities of these IIMs from the forthcoming academic session if state governments allot land timely as mentor IIMs have already been finalized," the ministry said.

**TOI correspondent responds:** The TOI report does not state that the ministry is undecided and the report even detailed the mentor IIM.

The report said that mentor IIMs have not got further directions. With regard to the ministry stating that mentor IIMs had been send a communication in November, the institutes told TOI that they are yet to receive further directions.

As regards the land issue, the report does not dwell on it.

# Nasa finds 8 new planets in 'life zone'

## Touts Two Of Them As Most Earth-Like

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**London:** Nasa's Kepler space telescope has found eight planets in the so-called Goldilocks zone of their stars, just at the right distance to contain liquid water and, possibly, life.

Two of them have been touted as most Earth-like — Kepler-438b and Kepler-442b — which are orbiting red dwarf stars that are smaller and cooler than our Sun. Kepler-438b circles its star every 35 days while Kepler-442b completes one orbit every 112 days.

With a diameter just 12% bigger than Earth, Kepler-438b has a 70% chance of being rocky, according to scientists. Kepler-442b is about one-third larger than Earth but still has a 60% chance of being rocky.



**STELLAR FIND:** An artist's conception of an Earth-like planet orbiting an evolved star that has formed a stunning 'planetary nebula'

Kepler-438b receives about 40% more light than Earth. In comparison, Venus gets twice as much solar radiation as Earth. As a result, the team calculates that it has a 70% likelihood of being in

the habitable zone of its star. Kepler-442b receives about two-thirds as much light as Earth. Scientists give it a 97% chance of being in the habitable zone. This doubles the number of small planets (less than twice the diameter of Earth) believed to be in the habitable zone of their parent stars.

"Most of these planets have a good chance of being rocky like Earth," said lead author Guillermo Torres of the Harvard-Smithsonian Center for Astrophysics (CfA). To be in the habitable zone, an exoplanet must receive about as much sunlight as Earth. Too much sunlight, and any water would boil away as steam. Too little, and water will freeze solid. "We don't know for sure whether any of the planets in our sample are truly habitable," said second author David Kipping of the CfA. "All we can say is that they're promising candidates."

Prior to this, the two most Earth-like planets known were Kepler-186f, which is 1.1 times the size of Earth and receives 32% as

much light and Kepler-62f, which is 1.4 times the size of Earth and gets 41% as much light. The newly found planets are distant enough to make additional observations challenging. Kepler-438b is located 470 light years from Earth while the more distant Kepler-442b is 1,100 light-years away.

The team studied planetary candidates first identified by Nasa's Kepler mission. All of the planets were too small to confirm by measuring their masses. Instead, the team validated them by using a computer program called BLENDER to determine that they are statistically likely to be planets. After the BLENDER analysis, the team spent another year gathering follow-up observations in the form of high-resolution spectroscopy, adaptive optics imaging and speckle interferometry to thoroughly characterize the systems. This revealed that four of the new finds are in multiple-star systems. But the companion stars are distant and don't significantly influence them.

# NASA's Kepler marks 1,000th exoplanet discovery

## SPECIAL CORRESPONDENT

NASA's Kepler Space Telescope to date has offered scientists an assortment of more than 4,000 candidate planets for further study — the 1,000th of which was recently verified. This was achieved by continuously monitoring more than 150,000 stars beyond our solar system. The range of distances from the host star where liquid water might exist on the surface of an orbiting planet are known as the habitable zones. Three of the newly-validated planets are located in their distant suns' habitable zone. Of the three, two are likely made of rock, like Earth.

Two of the newly validated planets are named Ke-

pler-438b and Kepler-442b. Kepler-438b, 475 light-years away, is 12 per cent bigger than Earth and orbits its star once every 35.2 days. Kepler-442b, 1,100 light-years away, is 33 per cent bigger than Earth and orbits its star once every 112 days.

They both are less than 1.5 times the diameter of Earth orbiting stars smaller and cooler than our Sun, making the habitable zone closer to their parent star, in the direction of the constellation Lyra.

"Each result from the planet-hunting Kepler mission's treasure trove of data takes us another step closer to answering the question of whether we are alone in the universe," said John Grunsfeld, associate administrator of NASA's Science Mission Directorate. The Kepler team



Three of the newly-validated planets are in habitable zones.

— PHOTO: AFP

has raised the candidate count to 4,175 with the detection of 554 more planet candidates from Kepler observations conducted May 2009 to April 2013. Eight of these new candidates are between one to two times the size of Earth, and orbit in

their sun's habitable zone.

Of these eight, six orbit stars that are similar to our Sun in size and temperature. All candidates require follow-up observations and analysis to verify they are actual planets. "Kepler collected data for four years — long enough that we can now tease out the Earth-size candidates in one Earth-year orbits," said Fergal Mullally, Kepler scientist who led the analysis of a new candidate catalogue.

Scientists are also working on the next catalogue release of Kepler's four-year data set. The analysis will include the final month of data collected by the mission and will be conducted using software that is more sensitive to the tiny telltale signatures of small Earth-size planets than software used in the past.

## Business Line ND 08/01/2015 P-5

# More jobs for B-schoolers this year

9 out of 10 employers planning to hire more management graduates

**CHETNA MEHRA**

New Delhi, January 7

The hiring outlook holds steady this year with 72 per cent of employers, as compared to 69 per cent last year, expecting to hire MBAs in 2015, according to the Graduate Management Admission Council's (GMAC) year-end poll of employers.

Around nine out of 10 employers planning to hire business graduates expect to maintain or increase the number of job openings compared with 2014, says the survey.

For instance, Vodafone India has ramped-up hiring and will hire four times more management graduates than last year. "This year, we shall take onboard more than 130 trainees from the top 15 busi-

ness schools and 40 from IITs," said Ashok Ramchandran, Director, Human Resources, Vodafone India. "We also intend to offer a package that would be approximately 15 per cent more than last year at business schools."

In 2014, the company had hired around 30 students from the IIMs and a similar number from the IITs. The telecom service provider has already made 29 pre-placement offers (PPOs) this year.

Vodafone has hired 292 trainees from several B-schools since 2010 for its management training programme called Discover.

These management trainees from IIMs, XLRI, MDI, IIFT and so on are offered positions related to technology,

sales and marketing, supply-chain management, human resources, legal and finance across India.

The Godrej conglomerate also plans to hire 10-12 per cent more management graduates in 2015, as compared to last year.

"A significant increase of almost 100 per cent in campus recruitment particularly for Godrej Properties validates our vision," said Sumit Mitra, Head, Group Human Resources and Corporate Services, Godrej Industries Ltd and Associate Companies.

## Trainee to employee

Over the past two years, Godrej has increasingly focused on awarding PPOs to successful summer interns. "In 2014, 70 per cent of our management trainees were recruited through internships, while in 2015, close to 100 per cent of

the batch will comprise PPO holders," said Mitra.

Godrej recruits from Indian B-schools for roles in sales and marketing, supply chain, and human resources. The company is also looking at offering unique roles in digital marketing and design this year.

The employers' survey by GMAC also revealed 96 per cent of employers worldwide concurred that MBA-hires create value for their companies. "The solid job prospects for B-school talent seen over the past several years, gives prospective students good reason to consider pursuing these degrees as part of a strategy to drive their career goals," said Rebecca Estrada Worthington, GMAC's Survey Research Manager in a press note.

Around 169 employers from 33 countries took part in the survey in late 2014.

Hindu ND 08/01/2015 P-15

# Scientists find promising new antibiotic

The bacterium, *Eleftheria terrae*, yielded an entirely new sort of antibiotic

N. GOPAL RAJ

Using a novel technique to culture soil bacteria that previously could not be grown in the laboratory, a team of U.S. scientists has isolated a promising new antibiotic to which resistance may not develop easily.

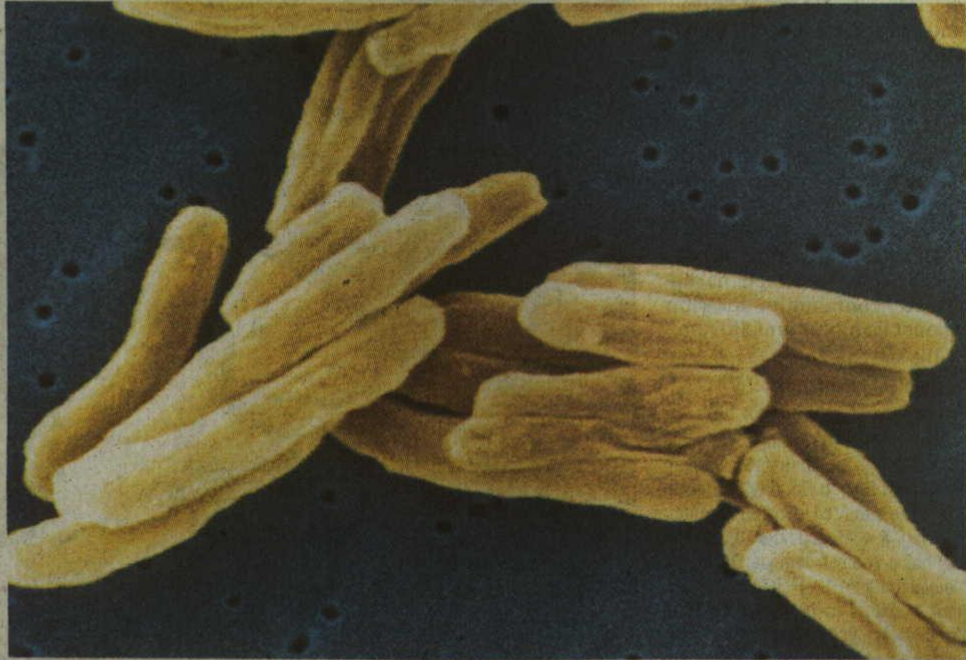
The research, published this week in *Nature*, comes at a time when there is growing alarm both at the spread of antibiotic-resistant microbes and the failure to find new classes of antibiotics in recent decades.

During the 'golden age of antibiotics' from about 1940 to around 1960, scientists were able to find a number of new drugs by carefully screening soil bacteria, looking for anti-microbial activity. However, they were able to examine only bacteria that could be grown in the laboratory and more than 99 per cent of the bacterial species in the soil resisted such efforts, with the result that such leads eventually petered out.

Dr. Kim Lewis, director of the Antimicrobial Discovery Center at the Northeastern University in the U.S., and colleagues used an 'isolation chip' (iChip) developed at the university to culture previously uncultivable soil bacteria.

This chip has a larger number of tiny chambers to hold individual bacterial cells. Covered with semi-permeable membranes, the chip could be then placed in the soil, allowing vital nutrients and growth factors to diffuse into its chambers.

With the iChip, the scientists could grow 10,000 bacterial strains. The extract from one such bacterium, provisionally named *Eleftheria*



**EFFECTIVE:** Even when the the TB bacterium *Mycobacterium tuberculosis*, was grown in the presence of low doses of the antibiotic, drug-resistant mutants could not be found. - PHOTO: AP

*terrae*, yielded an entirely new sort of antibiotic, teixobactin.

Laboratory tests showed that this molecule was effective against many human pathogens, including drug-resistant ones, that come in the category of gram-positive bacteria.

The drug was "exquisitely active" against a number of hard-to-deal-with bugs, said Dr. Lewis during a press briefing. It might also offer a single-drug therapy for tuberculosis, which currently required prolonged treatment with a multi-drug combination.

Teixobactin worked by binding to highly conserved precursors that bacteria used to build their cell walls, according to Tanja Schneider of the University of Bonn in Germany, one of the co-au-

thors of the *Nature* paper, whose team worked on the drug's mode of action.

Even when the susceptible forms of the bacterium *Staphylococcus aureus* and the one that causes tuberculosis, *Mycobacterium tuberculosis*, were grown in the presence of low doses of the antibiotic, drug-resistant mutants could not be found.

Nor did such mutants evolve after *S. aureus* cultures were repeatedly exposed to sub-lethal doses of the antibiotic over several days.

It could be that resistance was less likely to develop against antibiotics that targeted precursors for cell wall synthesis, observed Gerard Wright of McMaster University, Canada, in a commentary published in the same journal.

When, on the other hand,

the antibiotic acted on bacterial proteins, genes for those proteins could mutate and produce resistance.

Resistance against vancomycin, which too binds to cell-wall precursors, did not emerge in the clinic till almost four decades after its discovery, he pointed out. Such resistance came about through genes for a self-protective mechanism used by vancomycin-producing bacteria getting transferred to pathogenic strains.

The bacterium producing teixobactin, on the other hand, was protected by an outer membrane, and so there was no self-resistance mechanism that could be passed on, he noted.

The drug could be ready to go into clinical trials two years from now, according to Dr. Lewis.

## Two IIT grads hit a Purplle patch with beauty ecommerce, bag series A funding

Yesterday, we [wrote](#) about how niche ecommerce companies like [Lenskart](#), furniture etailer [Urban Ladder](#), and jewelry estore [Bluestone](#) have been coming up fast in India, as people get more comfortable buying a variety of products online. Now, another niche player, [Purplle](#) has raised an undisclosed amount in series A funding from IvyCap Ventures. This ecommerce site focuses on the beauty and grooming vertical.

Purplle was founded by Indian Institute of Technology (IIT) grads Manish Taneja and Rahul Dash.

Taneja grew up in Faridabad, near Delhi, and went to IIT Delhi for Bachelor's and Master's degrees, while Dash grew up in Bhubaneswar in the state of Orissa and went to IIT Kharagpur and then to Indian Institute of Management (IIM) Ahmedabad. The two were flatmates when Taneja was working with private equity firm Fidelity, which involved evaluating and investing in consumer tech businesses, while Dash was toying with an online furniture marketplace idea. "We used to discuss these business models all the time and that's how Purplle germinated. We worked on it for six months before quitting and starting up," Manish Taneja tells *Tech in Asia*.

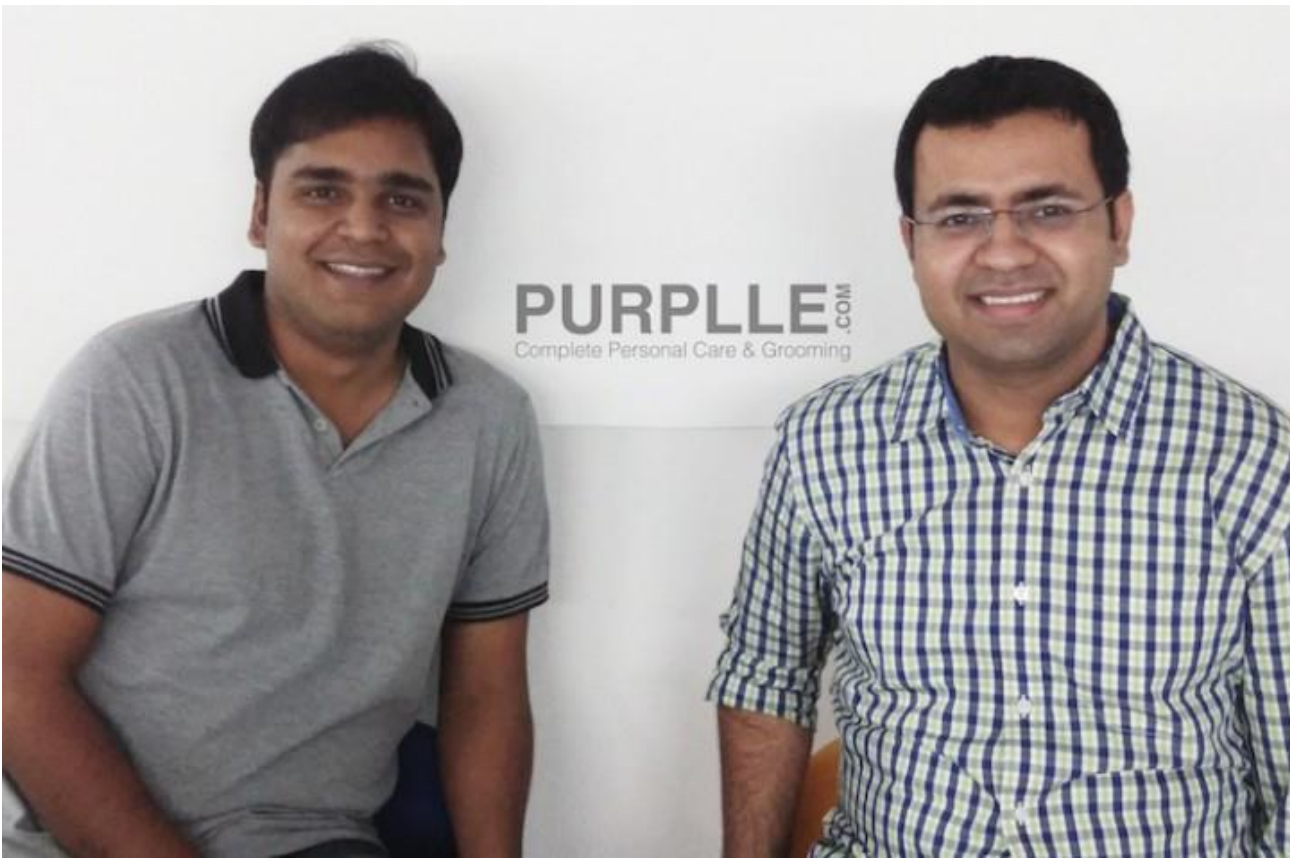
The duo launched Purplle from Mumbai in 2011, and soon bagged seed funding from Blume Ventures, Mumbai Angels, and Chennai Angels. Now, with fresh funds, they're poised to scale up rapidly this year.

Besides buying products on Purplle, users can also compare products based on several parameters, including ratings, colors, and prices. Also, you can compare salons and spas in your neighborhood based on reviews, pictures, and distance from your location. Purplle's first mobile app will be out in a few weeks. It will have a different app for salons. That will be released next month, Taneja tells us.

More and more Indian shoppers are now loosening purse strings online. And as ecommerce is gaining momentum, great design, photos, and curation are turning out to be key influencers in the buying decision. Purplle wants to get that right.

Taneja says his team made a lot of mistakes initially with images and content on the site but learned from them. "Now, we are very focused on simple design. Pictures make a big difference. Our design team checks every image before it goes live on the platform," he says.

He is building a "full-fledged content management system" to avoid design mistakes in future.



### Solution-oriented and hyperlocal

Purple already has a few strong competitors. Beauty ecommerce portal [Nykaa](#), founded by an investment banker-turned-entrepreneur Falguni Nayar, Mumbai-based [BeautyKafe](#), and Birchbox-style [FabBag](#) are a few. Apart from these vertical-focused companies, broader ecommerce marketplaces like Flipkart, Amazon, and Snapdeal too offer a wide range of beauty and grooming products.

With such fierce competition, it is hard to stand out, but Taneja believes Purple's focus gives it an edge over others. "Having a wide range of products is not a solution to all needs of customers. It only serves the customers who are well-informed and know what they want to buy. For others, there is a lot of value in discovery and curation. We think we will do this better because of our razor sharp focus on this category," he says.

We believe the exact consumer pain point [in beauty ecommerce] is not access, quick delivery, or catalog of products or services but how a consumer connects to the right product or service personalized for him/her. Purple.com enables this discovery. The key insight we drew from customer behavior on the site was that customers wanted solutions to their problems. They did not want a particular product or a particular service. We believe we are addressing this in a hyperlocal manner.

Taneja says Purple has a million monthly active users and has tie-ups with more than 7,000 salons, spas, and skin and hair care stores across Mumbai. It plans to find 50,000 partners across 30 Indian cities and end this year with GMV (gross merchandize value) of US\$30 to 40 million.

What excites him and Dash most about scaling Purple is the quintessential thrill of starting up – "the ability to build something bottom up." Born to middle class parents who held jobs with India's public sector enterprises, "both of us never believed that we could come this far in our endeavor," Taneja says. "With our current scale and resources, we are all the more excited to make it big."