

**KERATAN AKHBAR-AKHBAR TEMPATAN  
TARIKH: 21 OGOS 2014 (KHAMIS)**

<b>Bil</b>	<b>Tajuk</b>	<b>Akhbar</b>
1	INNO BIO builds skill development centre	The Malay Mail
2	Antara inovasi ilmu dan inovasi teknologi	Berita Harian
3	Kerjasama pintar universiti, industri perlu berterusan untuk rancakkan aktiviti pengkomersilan	Bernamea.com
4	ANGKASA nafi berlaku bulan berkembar dan Planet Marikh sebesar bumi pada 27 Ogos	Bernamea.com
5	Gloomy Friday Forecast	The Sun
6	Gempa Bumi sederhana melanda kawasan sempadan Iran-Iraq	Bernamea.com
7	Sustainable cities the answer to urban woes	New Straits Times
8	Deal flows on target, says MDeC	The Sun

**KERATAN AKHBAR**  
**THE MALAY MAIL (MONEY IN BRIEF) : MUKA SURAT 23**  
**TARIKH: 21 OGOS 2014 (KHAMIS)**

**INNO BIO builds skill  
development centre**

PUTRA NILAI — Minister of Science, Technology and Innovation Malaysia (MOSTI) Datuk Dr. Ewon Ebin paid a visit to Inno Bio Biopharmaceutical facilities located in Putra Nilai, Negeri Sembilan recently. Also present was MOSTI secretary general (science) Dr. Zulkifli Bin Mohamed Hashim. Impressed with the skills of molecular biologists, biochemical engineers and other experienced talents in Inno Bio, Datuk Ewon highlighted the important contributions of the company presently making strides in developing high-skilled manpower in Malaysia. "In MOSTI, we emphasise the importance of nurturing the sciences and bringing them to the market sustainably," Datuk Ewon said.

# Antara inovasi ilmu dan inovasi teknologi

## Penyelidikan negara dinilai semula dengan tiga matlamat

**N**egara perlu memperkasa keupayaan penyelidikan dan pembangunan (R&D) jika berhasrat untuk bersama negara maju dan bersaing bagi meningkatkan ekonomi warga dan kekayaan negara. Menyedari kepentingan ini, pada awal tahun 1990-an, kerajaan memperkenalkan dasar R&D dan mewujudkan dana kewangan melalui mekanisme 'Intensification of Research in Priority Areas' (IRPA).

Oleh kerana sejumlah besar penyelidik berada dalam persekitaran institusi pengajian tinggi awam (IPTA), kebanyakan dana itu disalurkan kepada penyelidik di universiti. Ketika itu, industri tidak mempunyai keupayaan menjalankan penyelidikan kerana masih bergantung kepada teknologi luar berikutan belum berupaya membangunkan teknologi watan sendiri.

Hari ini, dana R&D telah berkembang dan disalurkan melalui beberapa kementerian, terutama Kementerian Sains, Teknologi dan Inovasi (MOSTI) dan Kementerian Pendidikan Malaysia (KPM). Namun, dana terbanyak masih disalurkan kepada penyelidik di IPTA. Pewujudan lima buah Universiti Penyelidikan (RU) menyemarakkan lagi peranan universiti dalam melaksanakan dasar R&D negara.

Selepas hampir 20 tahun dasar R&D diperkenalkan, apakah kerajaan berupaya mengukir kejayaannya? Apakah kita telah mempunyai teknologi atau produk yang menjadi kebanggaan negara serta menempatkan Malaysia sebagai sebuah negara maju berasaskan teknologi tinggi atau sekurang-kurangnya, negara telah memiliki sejumlah industri yang menggunakan sepenuhnya pengetahuan dan teknologi watan bertaraf global?

### Nilai semula dasar R&D

Jika jawapan kepada soalan di atas adalah positif, kita boleh teruskan dasar sedia ada dan menunggu meraih kejayaan, tetapi jika jawabannya tidak memberangsangkan, kita harus menilai dasar R&D sedia ada dan segera berubah untuk menajjar kepada kepentingan mendesak negara - menjadi negara maju berpendapatan tinggi, dan berasaskan teknologi watan yang serba canggih.

Mari kita teliti sekitaran IPTA, apakah fungsi utamanya dan sejauh manakah keupayaannya? Universiti adalah institusi pengajian tinggi yang peranan utamanya menghasilkan tenaga mahir pelbagai disiplin ilmu dan sektor pembangunan untuk keperluan tenaga kerja mahir negara dan global.

Untuk membolehkan peranan ini dijalankan secara berkesan, universiti perlu mempunyai ilmu pelbagai bidang ilmu dan teknologi, dan kepakarannya disalurkan kepada pembangunan pelajar. Justeru, mereka perlu terus meneroka dan memperluaskan kepakaran melalui penyelidikan, terutamanya penyelidikan fundamental.

Sememangnya, IPTA juga mempunyai pelbagai peranan, termasuk penerokaan dalam pembangunan teknologi serta pemindahan ilmu kepada industri dan masyarakat. Tetapi ia adalah peranan tambahan yang tidak mungkin dapat dilaksanakan sepenuh masa

dan dengan keberkesanan yang tinggi.

Dalam sekitaran universiti juga, kecemerlangan dan keserjanaan diukur oleh rakan kesepakaran melalui kerja dan hasilan akademik, khususnya penerbitan ilmiah dalam jurnal berimpak tinggi.

Negara perlu membezakan keperluan menjalankan penyelidikan fundamental (FR) dengan kepentingan memperkasa R&D. Walaupun ada kaitan rapat, tetapi pada prinsipnya kedua-dua bentuk penyelidikan ini mempunyai matlamat dan hala tuju berbeza.

### Matlamat jangka panjang

FR mempunyai matlamat jangka panjang menyediakan sumber manusia pakar melalui penerokaan ilmu baharu dan memperluas keupayaan teknologi yang bakal menjadi sumber 'kemahiran, keilmuan dan keserjanaan' untuk persediaan masa hadapan bangsa maju. R&D pula adalah penyelidikan guna dan pembangunan bagi membolehkan 'kemahiran dan produk baharu' dihasilkan untuk memperkaya inovasi teknologi yang mampu memacu keupayaan bersaing dan melonjak kekayaan negara.

Dari perspektif ini, adalah wajar jika dasar penyelidikan negara dinilai semula dengan menumpu kepada tiga matlamat penyelidikan berikut:

● Penyelidikan fundamental untuk pembangunan (FR-Pembangunan) bertujuan mengukuhkan keupayaan tenaga penyelidik mahir (ahli akademik), membangun bakal penyelidik mahir (pelajar Sarjana dan PhD) dan menghasilkan ilmu baharu (penerbitan berkualiti). Dana FR seeloknya disalurkan terus ke IPTA (seperti dana operasi) dan dipantau melalui sistem pengurusan KPM;

● Penyelidikan fundamental berimpak tinggi (FR-Impak Tinggi) adalah penyelidikan jangka panjang berasaskan matlamat dan hala tuju pembangunan sains negara. Dana penyelidikan ini boleh disalurkan kepada 'kumpulan penyelidik cemerlang' dalam sekitaran institusi penyelidikan universiti, kerajaan atau swasta melalui bidaan dan diurus oleh badan tidak berkepentingan seperti Yayasan Sains Negara; dan

● R&D bertujuan menjalankan penyelidikan guna dan pembangunan bagi menghasilkan inovasi teknologi yang sangat diharapkan kerajaan bagi meningkatkan keupayaan bersaing negara. Dalam konteks ini, dasar mewujudkan banyak 'institusi R&D' dalam pelbagai sekitaran (industri, agensi kerajaan dan universiti) untuk memenuhi 'lompong teknologi negara' perlu diberikan perhatian. Di sinilah bakat penyelidik mahir berkelulusan PhD ditempatkan. Agensi memperkasa R&D di bawah naungan MOSTI perlu diperkukuhkan untuk melaksanakan peranan ini.

Pada masa ini, R&D negara telah ditafsirkan secara berbeza oleh pelbagai agensi dan akhirnya kurang mendatangkan manfaat. Jika negara mengharapkan inovasi teknologi yang mampu menjana kekayaan negara, IPTA pula menasarkannya penerbitan berimpak tinggi sebagai petanda pencapaian dan industri masih sibuk dengan mengukuhkan teknologi luaran sebagai pendekatan terbaik meraih keuntungan. Inikah suasana penyelidikan negara yang diinginkan?



←  
**PROF EMERITUS  
IBRAHIM KOMOO**



### Penulis

ialah Prof Emeritus, Naib Canselor  
Universiti Malaysia Terengganu (UMT)



## **Kerjasama Pintar Universiti, Industri Perlu Berterusan Untuk Rancakkan Aktiviti Pengkomersilan**

BATU PAHAT, 20 Ogos (Bernama) -- Kerjasama pintar antara universiti tempatan dan peserta industri perlu berterusan bagi memastikan hasil penyelidikan dan pembangunan (R&D) menepati kehendak pasaran dan mempunyai potensi untuk dikomersilkan, kata Naib Canselor Universiti Tun Hussein Onn Malaysia (UTHM) Prof Datuk Dr Mohd Noh Dalimin.

Beliau berkata menerusi jaringan industri yang berterusan antara kedua pihak, pihak universiti dapat memahami kehendak dan keperluan pasaran sekaligus merancakkan aktiviti pengkomersilan dalam negara.

"Produk R&D dan kepakaran teknikal kita bukan sahaja diguna pakai di dalam negara bahkan mendapat pengiktirafan dari negara luar. Ini terbukti dengan penggunaan kepakaran syarikat-syarikat kita di luar negara," kata beliau kepada pemberita selepas perasmian 'UTHM-Industry Open Day' di sini Rabu.

Terdahulu, [Timbalan Menteri Sains, Teknologi dan Inovasi Datuk Dr Abu Bakar Mohamad Diah](#) dalam ucapannya berkata masih ada produk R&D yang tidak menepati kehendak, seperti tidak asli dan akhirnya gagal dikomersilkan.

Kerjasama pintar boleh memberi manfaat kepada pihak universiti dan swasta bagi memastikan hasil R&D yang dikeluarkan betul-betul bermanfaat dan berkualiti tinggi.

Beliau berkata kerjasama pintar antara universiti dengan agensi luar telahpun menjadi amalan di negara-negara maju seperti Amerika Syarikat, United Kingdom dan Jepun.

Dengan terjalannya kerjasama seperti ini, ia dapat mempergiatkan aktiviti penyelidikan dan inovasi yang mana sudah pastinya memberi manfaat kepada masyarakat bersama, kata beliau.

[Teks ucapan beliau dibacakan oleh Timbalan Ketua Setiausaha \(Dasar\) Kementerian Sains, Teknologi dan Inovasi \(MOSTI\) Datuk Dr. Mohd Azhar Yahaya, yang turut merasmikan majlis itu.](#)

Dalam majlis yang sama, UTHM turut menandatangani memorandum persefahaman dengan tujuh syarikat swasta dan agensi luar dalam usaha meningkatkan lagi jaringan kerjasama dengan pihak industri.

Tujuh pihak tersebut ialah University College of Technology Sarawak (UCTS), Elvira Systems Sdn Bhd, DreamEDGE Sdn Bhd, Salutary Avenue Manufacturing Services Sdn Bhd, Technology Education Leader Sdn Bhd, Hewlett Packard (M) Sdn Bhd, Scomi Rail Bhd dan Institut Keselamatan dan Kesihatan Pekerjaan Kebangsaan (NIOSH).



## Angkasa Nafi Berlaku Bulan Berkembar Dan Planet Marikh Sebesar Bumi Pada 27 Ogos

KUALA LUMPUR, 20 Ogos (Bernama) -- [Agensi Angkasa Negara \(ANGKASA\)](#) hari ini menafikan dakwaan kononnya planet Marikh akan membesar seperti bulan dan kemunculan bulan berkembar pada Rabu depan (27 Ogos), seperti yang tersebar di laman sosial dan khidmat pesanan ringkas.

Menurut kenyataan ANGKASA, jarak planet Marikh adalah stabil pada orbitnya pada malam berkenaan iaitu 201.69 juta kilometer atau 125.28 juta batu dari bumi, dan bukannya 34.65 juta batu seperti yang telah disebarkan itu.

Pada jarak itu, planet Marikh hanya akan kelihatan seperti sebuah bintang merah di langit malam dan ia akan terbenam sekitar jam 12 tengah malam, dan oleh yang demikian ia tidak lagi kelihatan selepas daripada waktu itu.

Bulan pada malam itu berada pada fasa anak bulan dan bukannya bulan penuh.

Bulan juga akan terbenam awal pada hari tersebut iaitu sekitar 8.30 malam dan ia tidak lagi kelihatan pada 12 malam seperti yang digembar-gemburkan.

-- BERNAMA

**KERATAN AKHBAR  
THE SUN (BRIEFS) : MUKA SURAT 02  
TARIKH: 21 OGOS 2014 (KHAMIS)**

**GLOOMY FRIDAY FORECAST**

**PETALING JAYA:** The Meteorological Department has predicted gloomy weather tomorrow morning. With tomorrow declared a national day of mourning with the arrival of the first batch of 20 MH17 victims' remains, even the heavens will weep as slight rainfall has been forecast for the coastal areas of Malacca, Negri Sembilan and Johor in the morning. By afternoon, thunderstorm is forecast in Kuala Lumpur, which can go on until late evening.

BERITA ONLINE  
BERNAMA.COM  
TARIKH: 21 OGOS 2014 (KHAMIS)



## Gempa Bumi Sederhana Melanda Kawasan Sempadan Iran-Iraq

KUALA LUMPUR, 20 Ogos (Bernama) -- Gempa bumi sederhana berukuran 5.3 skala Richter melanda kawasan sempadan Iran-Iraq, pagi ini.

Jabatan Meteorologi berkata dalam satu kenyataan Rabu, gempa bumi itu berlaku kira-kira 176 km timur laut Kermanshah, Iran dan 6,132 km barat laut Langkawi, Kedah.

Gempa bumi itu bagaimanapun tidak menyebabkan ancaman tsunami, katanya.

-- BERNAMA

## Sustainable cities the answer to urban woes

**STRATEGY:** Innovation, integration of processes key to managing megacities

**T**HE world's urban areas are growing. So are their problems. Rural urban migration is set to be a major challenge.

How will cities cope with the housing pressure of a growing urban populace?

How will cities manage the complex mobility demand? The build-up of waste can be daunting. How can they be efficiently disposed of, or better still, harnessed as a resource?

Many in the developed world are already engaged in regular discourses to look for the right technological answers. The Academy of Sciences Malaysia recently completed a study under its Megascience Flagship, looking at some of the key infrastructure issues 50 years from now. How can we achieve sustainable growth?

Many are aware that scientists are busy investigating how cities can develop with sustainability.

Many believe the clever use of information and communications

technology can help. Many may not realise it but, today, already more than half of all the people live in cities. And, it has not shown any sign of stopping.

In Germany, the proportion has reached 74 per cent. It has been reported that megacities like Tokyo and Mexico City have long surpassed the 10 million mark.

Therefore, any effort to build sustainable economies has to begin in the cities.

There are certainly many approaches. But many believe what is missing is a strategy to connect all these individual efforts into an overall design. Coordination is undoubtedly the biggest challenge. There are cities already some ways ahead of others in practising sustainability. Most are in the developed economies.

Cities in the developing world may not look at sustainability as high priority. They may regret it as the costs to start doing it now may be much lower than to delay.



**Dr Ahmad Ibrahim**  
is CEO of the  
Academy of  
Sciences Malaysia



The financial district of Singapore. The city-state is purifying large quantities of waste water to alleviate its drinking water problem. Reuters pic

Copenhagen, for example, had begun constructing a district-wide heating network decades ago.

Since then, 98 per cent of all the buildings there are being heated

with environmentally friendly energy. For our country, we may want to look at a district-wide air-conditioning network using more sustainable energy.

The city-state of Singapore is another example. It purifies large quantities of waste water to alleviate its drinking water problem.

→ Continued next page

## KL can take a leaf from megacities

→ From Page 14

Tokyo, on the other hand, has in place a specialised logistics system. Lorries there do not head for every individual shop, but instead, drop off their cargo at small logistics centres. This reduces traffic and, therefore, improves productivity.

Germany is one country that has been introducing innovative ideas to manage cities in a sustainable way. Berlin, for example, has organised numerous innovation projects. Kuala Lumpur may want to take a leaf from the innovations that have changed Berlin.

There, the online platform "infrest" went live on the Internet a year ago. Every company can now easily check where conduits for water, sewer, power and telephone lines run in the city and where sections of streets are supposed to be excavated for repair work.

The advantages are obvious. Previously, it could happen that construction workers would dig a hole where their colleagues had just filled one in. This must sound familiar to Kuala Lumpur folk. The lack of coordination not only consumes resources but also costs money. Not to mention the inconvenience to road users.

It is a fact that when laying cables, the biggest cost is the construction work. Imagine the savings if the work is better coordinated. Already we have seen signs of Kuala Lumpur bursting at the seams. This is not just due to rural-urban migration, but also as a result of the increasing flow of immigrants.

City transport, though still not as chaotic as busy Jakarta and Bangkok, may be heading that way if solutions are not put in place early. The Mass Rapid Transit system should bring some relief.

The situation is especially serious whenever it rains. There is still no solution to flash flooding. Dealing with the massive volume of garbage is another challenge for Kuala Lumpur.

Landfills take up too much land while incineration, which is supposed to be the optimal solution, faces a lot of opposition from environmental non-governmental organisations.

As is the case with the other megacities of the world, Kuala Lumpur desperately needs good research to help in its planning. One common approach is to deploy systems analysis, which would integrate all the processes of managing Kuala Lumpur into one. Only then can the city grow with sustainability.



# Deal flows on target, says MDeC

> RM100m more via MSC Malaysia InnoTech@Startups platform this year

BY EVA YEONG  
sunbiz@thesundaily.com

**KUALA LUMPUR:** Multimedia Development Corp Sdn Bhd (MDeC) is on track to achieve its target of an additional RM100 million in deal flows through its MSC Malaysia InnoTech@Startups platform this year, said its innovation capital division director Dr Karl Ng.

"We've seen a lot of deal flows that have gone through this platform. Since 2008 until last year, we actually facilitated RM200 million worth of deal flows from this platform. This year alone our target is to hit an additional RM100 million, to make it to RM300 million," he told reporters at a media briefing yesterday.

Ng said MSC Malaysia InnoTech@Startups is an investment platform created by MDeC in 2008 to bring investors and startup companies together for them to match their requirements and secure investments.

It also aims to promote closer collaboration between Malaysian and regional startups as many local startups are looking to expand into global and regional markets.

"There are a lot of the issues when it comes to moving to these countries. Even though we are in Southeast Asia, there are a lot of differences in terms of language, processes, governance and regulations. So it is important for them to know someone local to help them, to be their partner in implementation or at least, to provide them the right direction, who to talk to when they enter such markets," said Ng.

"At the same time, what we want is for investors to work together with other investors, to syndicate and to invest jointly with startups. This year, MSC Malaysia InnoTech@Startups is focused on regional and local investors and startups.

"We have a total of 40 investors this year which is one of the largest we have ever assembled so far, and we also have more than 28 startups where majority of them are from Malaysia. But we also have startups coming from other countries like Brunei, Singapore, Indonesia and Thailand, among others," he added.

Ng said syndication between local and foreign investors is

increasing, which will add value as these investors will be able to provide coaching and mentoring to help startups grow at the early stages.

"Investors are also syndicating with others to tap on other investors' expertise in certain vertical sectors as well as country-specific areas. We are beginning to see a lot of syndication happening, not just in Malaysia but across the whole region, to tap on each other's expertise," he added.

Malaysia Venture Capital Management Bhd CEO Jamaludin Bujang said such platforms are good for investors as they provide them with better access to deal

flows and enable them to network with fellow investors.

"The way venture capitalists work is by having a large network so that we can share resources, investments and ideas. This is a good platform for venture capitalists like us," he said.

According to him, startup companies are growing both in number and quality, compared with five to six years ago.

"There are a lot of companies related to the internet, there are a lot of foreign technologies that we are also bringing here. We've seen this growing trend since at least three to four years ago," he said, adding that interest from foreign

investors is also growing, including those from Singapore and Hong Kong.

Malaysian Venture Capital & Private Equity Association chairman Amin Shafie said the incubators and accelerators help to filter the startup companies and mentor these companies at an earlier stage before they meet the venture capitals.

"At that time, you'll see that the presentations are a lot more polished, the maturity in terms of thought that has gone through the business plan that they plan to propose, is there. The change has been quite drastic for the past couple of years," he said.



ZULKIFLI ERSAL/THESUN

From left: Ng, Jamaludin, Tableapp co-founder Benson Chang, Malaysia Venture Capital & Private Equity Association chairman Amin Shafie and Krezvi CEO Benny Fajarai after the media briefing yesterday.