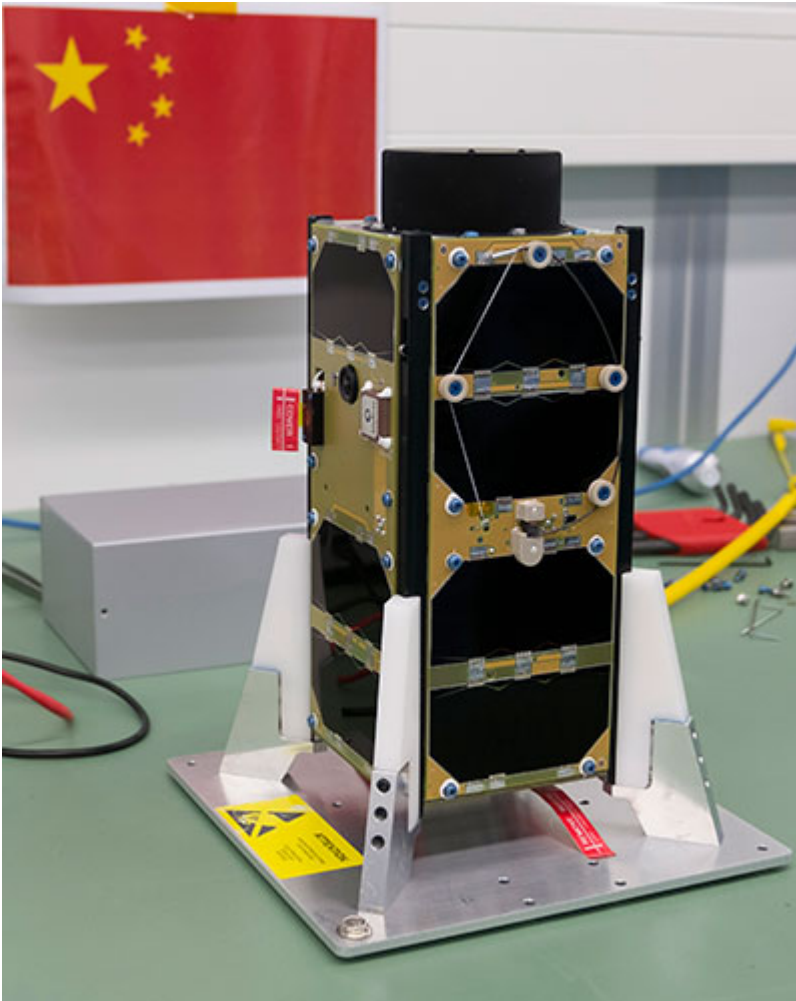


Harbin tech students send tiny satellite into orbit



LilacSat-1, a satellite developed by students at the Harbin Institute of Technology. [Photo/China Daily]

A nanosatellite made by students at the Harbin Institute of Technology was launched in the United States on Tuesday as part of a mission to the International Space Station.

The satellite, LilacSat-1, was on a Cygnus cargo spacecraft launched atop an Atlas 5 rocket from Cape Canaveral in Florida at 11:11 am, according to Wei Mingchuan, the 26-year-old team leader and a second-year PhD candidate in astronautics at the institute in Heilongjiang Province.

LilacSat-1 consists of two conjoined cube units, each with a side length of 10 centimeters. The 2-kilogram satellite will be deployed at a height of about 400 kilometers above the ground from the space station within three months of docking with the cargo craft. Docking is scheduled for Saturday.

In its three-month life span in orbit, the satellite will conduct investigations on Earth's mid-lower thermosphere, a section of the upper atmosphere about 200 to 400 kilometers above the ground.

“We will take measurements of the upper layers of the atmosphere using an ion-neutral mass spectrometer,” Wei said. “In addition, we have a new type of radio repeater to provide two-way communication resources to amateur radio operators, as well as a CMOS camera to take photos from space.”

Nanosatellites are small satellites that weigh between 1 and 10 kg, according to the team.

Lifted along with LilacSat-1 were 27 other nanosatellites of the QB50 project, a European Union-funded miniaturized satellite constellation created by students in more than 20 countries.

“This project is the very first international, real-time, coordinated study of thermosphere phenomena,” said Davide Masutti, QB50 project manager at the Von Karman Institute, a scientific organization based in Belgium.

Wei said the data retrieved by LilacSat-1 would be shared by the science community and amateurs, as the programs will be released as open-source and require no special tools.

[Chinese scientist receives 2017 Vega Medal in Stockholm](#)



Swedish King Carl XVI Gustaf (L, front) poses with Chinese scientist Yao Tandong (R, front) after awarding 2017 Vega Medal to Yao at the Royal Palace of Stockholm, capital of Sweden, on April 19, 2017. [Photo/Xinhua]

Chinese scientist Yao Tandong received 2017 Vega Medal in Stockholm on Wednesday, recognizing his contributions to research on glaciers and the environment on the Tibetan Plateau.

Swedish King Carl XVI Gustaf awarded 2017 Vega Medal to Prof. Yao at the Royal Palace of Stockholm on Wednesday afternoon, and congratulated him personally for his outstanding achievements.

Sten Hagberg, chairman of Swedish Society for Anthropology and Geography (SSAG) said that Yao's "basic researches on 'the Third Pole', monsoon and glaciers" are crucial to the understanding of the process of climate change. "His researches also concerns more than two billion population, it is a global topic", Hagberg added.

Earlier, SSAG announced Professor Yao as 2017 Vega Medal laureate, for his outstanding contributions to glacier research and to the society at large.

His research focuses on glaciers and environment on the Tibetan Plateau, especially within the cryospheric research field.

Yao is internationally acknowledged as one of the most accomplished scientists in the field of cryospheric study. He has led several research programs – often together with American, French, German and Japanese scientists – in the last 20 years.

One of his later works shows that global warming, as causing the decline of glaciers on the Tibetan Plateau, interact with Indian monsoon winds and westerly winds. The research program Third Pole Environment (TPE) which is led by Professor Yao, has become internationally significant.

China gets tougher with officials' personal information declaration

China has published stricter regulations on officials' personal information declarations, requiring them to report to the Communist Party of China (CPC) their personal and family assets and investments, marital status and overseas travel, among others.

The rules, jointly issued by the General Office of the CPC Central Committee and the General Office of the State Council, are a further attempt to curb corruption.

According to the revised regulation on leading cadres' personal information declarations, officials at deputy county level or above are required to report information, including their marital status, overseas travel, criminal records, wages and other earnings, family properties, stocks, funds,

insurance and other investment.

The revised rule has specified verification of such reports, including the methods and the sampling rate for random checks. The rate for random verification has been increased to one in 10.

Punishments have been stipulated for false declarations and deliberate concealment of personal information.

The report of personal information is an important assessment of loyalty to the Party and commitment to the CPC code of conduct. It should be linked to promotion by Party committees and departments, the Organization Department of the Central Committee of the CPC said in a statement.

More than 9,100 officials have been overlooked for promotion after they were found to have concealed personal information, while 124,800 have been punished for making false declarations.

Stipulating the consequences of false declarations and concealment is a clear warning to officials and is crucial for the mechanism, according to the statement.

It called on CPC committees at various levels to implement the rules strictly and treat it as an important political mission of strengthening Party self-governance.

In addition, it also urged leading officials to be loyal and honest, and put themselves under organizational supervision in accordance with the rules.

Strengthening the Integrity of Australian Citizenship

The Turnbull Government will strengthen Australian citizenship by putting Australian values at the heart of citizenship processes and requirements.

Our reforms will ensure applicants are competent in English, have been a permanent resident for at least four years and commit to embracing Australian values.

Australia is an immigration nation. We are the most successful multicultural society in the world. More than 130,000 people from around 210 countries are invited to become Australian citizens each year. We welcome the contribution, opportunities and energy they bring to our community.

Membership of the Australian family is a privilege and should be granted to those who support our values, respect our laws and want to work hard by integrating and contributing to an even better Australia.

Citizenship is at the heart of our national identity. It is the foundation of our democracy. We must ensure that our citizenship program is conducted in our national interest. The reforms will include:

- Requiring all applicants to pass a stand-alone English test, involving reading, writing, listening and speaking;
- Requiring applicants to have lived in Australia as a permanent resident for at least four years (instead of one year at present);
- Strengthening the citizenship test itself with new and more meaningful questions that assess an applicant's understanding of – and commitment to – our shared values and responsibilities;
- Requiring applicants to show the steps they have taken to integrate into and contribute to the Australian community. Examples would include evidence of employment, membership of community organisations and school enrolment for all eligible children.
- Limiting the number of times an applicant can fail the citizenship test to three (at present there is no limit to the number of times an applicant can fail the test);
- Introducing an automatic fail for applicants who cheat during the citizenship test.

In our democracy, the most important title is “Australian citizen”. Citizenship brings with it great privileges and responsibilities and so deserves respect and commitment from those who seek it, as well as those who are granted it.

Those who choose to become Australian citizens are making a solemn commitment to our democracy, to our way of life. And that commitment, made by 5 million since 1949, has helped secure and enrich our nation.

English language proficiency is essential for economic participation. It promotes integration into the Australian community and social cohesion. Relevant exemptions will apply, such as for permanent or enduring incapacity and for those under 16 years of age.

Any conduct that is inconsistent with Australian values will be considered as part of this process. For example, criminal activity, including violence against women and children, involvement in gangs or organised crime, is thoroughly inconsistent with Australian values.

These changes have been informed by the feedback received from the National Consultation on Citizenship, conducted by Senator the Hon Concetta Fierravanti-Wells and the Hon Philip Ruddock MP in 2015 and the 2016 Productivity Commission Report Migrant Intake into Australia.

The new requirements will apply to all new applications for Australian citizenship.

Gas Supply

The Turnbull Government is repairing gas markets, making sure more and more affordable gas is delivered to Australian homes and businesses.

The Prime Minister, Deputy Prime Minister and Ministers Frydenberg, Canavan and Sinodinos today met with gas industry executives and the Australian Energy Market Operator (AEMO) Chief Executive, to work through both the short term and long term challenges facing households and business in getting access to gas at reasonable prices.

The meeting heard that that the industry, including pipeline operators and generators, with AEMO, have developed a framework to make sure gas is delivered at times of peak electricity demand to prevent blackouts. The arrangement will be in place by 1 October this year well in time to prepare for the next summer.

The gas industry has also revised supply and production figures which, subject to further study by AEMO, will help address projected shortfalls.

The meeting also discussed the agreement of the COAG Energy Council to accelerate gas market and pipeline reforms with rollout to commence from 1 July 2017. The meeting further noted the critical role of the states and territories in enabling gas exploration and development.

To verify the progress in gas supply, the Treasurer has today directed the ACCC to establish a monitoring regime by using its inquiry powers to compel the gas industry to provide information, to underpin a new transparency in the gas market to the benefit of consumers.

This new measure will shine a light on transactions with the Australian gas market and help it operate more fairly and efficiently.

This work will run over three years, with regular public reporting, and will give the ACCC and market participants a complete picture of the gas market. It will increase transparency, facilitate competition and ensure the gas market is operating well.

While this progress is encouraging a lot more needs to be done.

The Government remains concerned that the east coast export LNG operators have not yet clearly articulated how Australian households and business will get adequate supply at reasonable prices.

The Government has asked the exporters to provide further information, in the context of possible regulatory options to address the short term market issues.