

# The Pyongyang Times

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## METAL

# Iron giant inaugurates coke-free process to make production Juche-based

A huge project for the construction of Juche iron making process including an oxygen blast furnace has successfully been completed at the Kim Chaek Iron and Steel Complex, a leading player in the country's metallurgical industry.

The workers of the complex built an oxygen blast furnace and a fluidized-bed gas generator, restored oxygen plants and put the operation of furnaces on a normal track at the same time to increase iron and steel output.

Those from the Chongjin Metal Construction Complex and the Equipment Assembly Complex completed the construction of a 15 000m<sup>3</sup>/h capacity oxygen plant, the heart of Juche iron production, ahead of schedule by working in a daring manner and carried out uphill tasks in the project.

Experts from Kim Chaek University of Technology, Chongjin University of Mining and Metallurgical Engineering, the State Academy of Sciences and other institutions broke new ground in coke-free iron making as they conducted a campaign to break through the cutting edge by relying on talents, and provided a firm technical guarantee for increased steel production.

An inaugural ceremony of the Juche iron production process

at the Kim Chaek Iron and Steel Complex took place on September 25.

It was attended by O Su Yong, vice-chairman of the Central Committee of the Workers' Party of Korea, Deputy Premier Kim Tok Hun, relevant officials, members of the February 17 team of scientists and technicians, officials and workers of the complex and those from relevant units.

O Su Yong conveyed a letter of thanks the WPK Central Committee sent to the workers, scientists, technicians and officials who rendered distinguished services in the project.

The letter said that a Juche iron production process based on local technology, fuel and materials 100 percent has been established at the large metallurgical industry base in the northern part of the country in the significant period when the DPRK celebrated its 70th anniversary as a grand festival of victors to delight and encourage the Korean people. The WPK Central Committee highly appreciated the workers, scientists, technicians and officials involved in the project for opening a bright prospect for the rapid development of the country's metallurgical industry by displaying an indomitable spirit.



The Kim Chaek Iron and Steel Complex has completed a coke-free production process that includes an oxygen blast furnace.

Kim Tok Hun made an inaugural speech, followed by other speeches.

The speakers said that the Supreme Leader gave precious instructions for the completion of the Juche iron production system at the Kim Chaek Iron and Steel Complex and solved all the problems arising in the project.

Cherishing deep in their minds the great trust and

benevolent love of Supreme Leader Kim Jong Un, they noted, the builders, scientists, technicians, volunteers as well as the workers of the complex gave full play to the spirit of self-reliance and self-development and devoted all their energy and intelligence to perform such a miracle and innovation of completing the gigantic project in a short time.

The successful completion

of the project made it possible to put an end to the coke-based iron production in the country, they added.

They called for continuously performing new miracles and innovations in the production of Juche iron, true to the leadership of the great Party, to give further impetus to the building of a powerful socialist country.

Compiled from KCNA

## COAL

# Production picks up in coal industry

Remarkable successes have been made in the coal industry sector with the drive for increased production to attain the goals

of the five-year strategy for national economic development gaining momentum.

The flames of new creations

flare up at coal mines in South Phyongan Province thanks to the patriotic devotion of young miners.



Glass production rises at the Taeon Friendship Glass Factory.

KIM JIN MYONG

Over 40 youth shock brigades have completed one to three years' economic plans ahead of schedule.

The Kim Hyok youth shock brigade in the Ryongdae Coal Mine under the Sunchon Area Youth Coal-mining Complex deployed the tunnelling equipment near coalfaces and introduced effective blasting methods to overfulfil the daily plan three or four times, thereby carrying out the economic plan for three years before others.

Nine youth shock brigades in the province, including the Cha Kwang Su youth shock brigade of the Inpho Youth Coal Mine and the Kim Jin youth shock brigade of the Songnam Youth Coal Mine under the Pukchang Area Youth Coal-mining Complex, have fulfilled the two years' economic plan.

They secured the coalfaces

twice as many as before, constantly reduced the drilling time and ensured rapid mucking so as to increase coal output.

The Kim Hyok youth shock brigade of the Hyongbong Coal Mine under the Tokchon Area Coal-mining Complex, the Kil Yong Jo youth shock brigade of the Kaechon Coal Mine under the Kaechon Area Coal-mining Complex, the Ri Su Bok youth shock brigade of the Myonghak Coal Mine under the Tukjang Area Coal-mining Complex and dozens of other shock brigades hit their annual targets by conducting an emulation drive for increased production.

The Ministry of Coal Industry and other units have rounded off the production of new equipment for coalface by the concerted efforts of scientists, technicians and workers.

By Ri Myong Jun PT



RESPONSE

# Pyongyang summit hailed at home and abroad

Foreign Minister Wang Yi on September 20 clarified the Chinese government's support for the September Pyongyang Joint Declaration.

Saying that good news came from the Korean peninsula on September 19, he noted that Chairman Kim Jong Un of the DPRK State Affairs Commission and south Korean President Moon Jae In signed the joint declaration and that it is good fortune for all people on the peninsula and a desire of the peoples of China and all other countries.

China warmly congratulates the Korean people on the adoption of the joint declaration and extends full support to it, he stressed.

The Russian government welcomed the results of the fifth inter-Korean summit talks in a press release issued by its Foreign Ministry on September 19.

Welcoming the agreements made at the Pyongyang summit, the statement referred to the fact that north and south of Korea in the September Pyongyang Joint Declaration confirmed their intention to make the Korean peninsula a peace zone and agreed to boost cooperation in the fields of politics, military, the economy and humanitarianism.

Russia has insisted on achieving progress in inter-Korean relations by means of dialogue and will contribute to developing their dialogue in the spirit of the documents they signed in future, it said. It hoped that all the relevant countries would work hard for the comprehensive and early settlement of the nuclear and other issues of the Korean peninsula in a political and diplomatic way.

The statement called on the US to take constructive measures in response to the DPRK in accordance with their June 12 joint statement.

On the same day, the Russian presidential press secretary in a press conference expressed support for the proactive and effective measures for the coordination of the Korean issue, adding Moscow welcomes the results of the Pyongyang summit.

According to south Korea's internet newspaper *Thongil News*, the Taejon headquarters of the South Committee for the Implementation of the June 15 Joint Declaration (June 15 South Committee) on September 20 held a press conference in front of the Taejon city office and called for terminating war and achieving peace, saying

the north and the south are the main force of reunification to usher in a new era of peaceful reunification in the Korean peninsula.

Yonhap News said that economic circles released comments all at once on September 19 in support of the historic September Pyongyang Joint Declaration.

The Federation of Korean Industries, Chamber of Commerce and Industry, Employers Federation and Traders Association of south Korea hailed the September joint declaration which signalled the leap forward for peace on the Korean peninsula and a new era of inter-Korean economic cooperation, expressing the willingness to proactively work together for the development of economic exchange and common prosperity.

Statements were also issued on September 20 by trade unions to support the joint declaration.

The Confederation of Democratic Trade Unions (Minjurochong) said it unconditionally welcomed the joint declaration which took a big step forward in advancing the implementation of the Panmunjom Declaration and inter-Korean relations onto a new height.

The Federation of Trade Unions (Hangukrochong) also hailed the decision made by the top leaders of the north and the south to achieve peace and prosperity on the peninsula despite the difficult situation.

South Koreans from all walks of life also give full support and welcome to the historic north-south summit meeting and talks and the joint declaration which opened a new chapter in the history of national reunification.

Compiled from KCNA

EXTRAVAGANZA

# Stunning performance, wonder of arts



RI KWANG SONG

A scene from *The Glorious Country*, the ongoing grand mass gymnastics and artistic performance, that raised its curtain in Pyongyang to mark the DPRK's 70th anniversary.

The grand mass gymnastics and artistic performance "The Glorious Country" which raised its curtain as part of celebrations of the 70th anniversary of the DPRK is running on at Pyongyang's iconic May Day Stadium.

It vividly depicts the features of the times with artistic scenes while reflecting the 70-year history of the DPRK in a work.

Grand mass gymnastics and artistic performance peculiar to the country is widely known to the world through "Arirang" which was registered in the Guinness World Records.

The ongoing performance is winning growing popularity at home and abroad as it unfolds fresher and more unique scenes this year on the basis of fine tradition and rich experience

carried on from "Arirang" which was extolled by the world as the greatest masterpiece in the 21st century and the acme of human culture.

A combination of mass gymnastics and artistic performance, it is a tremendous synthesis of famous Korean music and elegant dance, calisthenics and acrobatics, background stand, modern illuminations and showy stage settings.

Spectators get enchanted in no time by the ever-changing scenes of exquisite gymnastic movements performed by thousands in unison, superb stunts, background stand which seems to be operated by a computer and fantastic stage settings.

The performance representing

the rich emotion and vivid characteristics of the nation also shows the fervent aspirations of Koreans to make a history of reunification by their national efforts and the ardent wish of mankind to live in a peaceful new world, evoking positive response at home and abroad.

As the saying goes. "Seeing is believing". Spectators will get a new meaning of beauty, nobility, excitement and passion as they see the grand mass gymnastics and artistic performance which arouses renewed passion and mystery by dint of distinctive gymnastics and artistic rendition.

Pyongyang will welcome everyone who wants to see the show.

By Kim Ryong Jin PT

INSPECTION

# Premier inspects different units



KCNA

Premier Pak Pong Ju inspects the Samsong Cooperative Farm in Junghwa County, North Hwanghae Province.

Premier Pak Pong Ju, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea and vice-chairman of the DPRK State Affairs Commission, inspected the venue of the 45th national exhibition of agricultural machinery, the construction site for the establishment of the C1 chemical industry and the Samsong Cooperative Farm in Junghwa County.

Looking round the exhibition, he acquainted himself with the performance of the farm machines on display and called for increasing the proportion of farm work done by machines and scrupulously operating the

agricultural sci-tech learning space.

At the construction site for C1 chemical industry he instructed the relevant units to dynamically conduct the campaign for increased production in order to ensure a timely supply of equipment and materials necessary for the project.

The on-site consultative meeting referred to the need for officials to organize work and direct the important construction project in a responsible manner.

On the Samsong Cooperative Farm, he discussed measures to gather grain crops without any loss.

Compiled from KCNA



FULL REPORT

# Metal industry consolidated by dint of self-reliance and science and technology

Amid the dynamic drive to speed up the building of a self-supporting economic giant in the DPRK, a miracle has been worked—a massive construction project for completing the Juche-oriented iron- and steel-making system has been carried out in a little over a year in the revolutionary spirit of self-reliance.

This Juche-orientation project at the Kim Chaek Iron and Steel Complex was a large-scale task with an enormous workload, which involved the building of the largest-ever oxygen blast furnace in the country and other structures including a large oxygen plant and fluidized-bed gas generator and the improvement of the quality of iron and steel.

To this end, Supreme Leader Kim Jong Un specified the orientation and ways and dispatched powerful forces for guidance, design and construction and solved all problems arising in the project.

The employees of the complex

launched the project on March 19 2017.

The focus of the project was the building of the oxygen blast furnace. They carried on the work as they smashed passivism, conservatism and mysticism about technique, cherishing the fighting spirit of their forerunners who had demonstrated the mettle of Koreans by producing 270 000 tons of pig iron by dint of the production facility with a rated capacity of 190 000 tons in the period of the great Chollima advance.

The construction guidance team was formed with experienced and competent officials and technicians, and they carried out technical surveys of the furnace, held well over a hundred technical consultative meetings and drew thousands of sheets of blueprint in a matter of 45 days.

The installation of the dust collecting equipment was one of the knotty problems. Builders lifted up the waste-heat boiler

drum, the pivot of the oxygen blast furnace weighing dozens of tons, to the height of 42 metres by reinforcing bogie rollers of the crane car and moved a tower crane as far as hundreds of metres in 22 hours, thereby finishing the task as scheduled.

On September 5 2017, they blew up blast furnace No. 1 to do away with dependence on coke.

They assembled over ten facilities in a short period, including structures for furnace body, generator, dust collector and ventilation device, and compressor and ore yard, and completed the Korean-style oxygen blast furnace which is as huge as a steel works in 220 days.

At 1:00 a.m. on January 16 2018 the first Juche molten iron of the complex gushed out like lava and on February 17 Juche steel was made.

Innovation was also made at the construction site of the fluidized-bed gas generator

which was essential in establishing a rolled steel production system based on coal gas.

After the general test run of the gas generator was given on August 28, the first steel plate was produced with Juche molten iron, which meant the full realization of the Juche-orientation of iron and steel production based on local fuel and raw materials.

Science and technology gave powerful impetus to the Juche-orientation project.

Members of the February 17 team of scientists and technicians, who were dispatched to the complex, made various steel alloys at the oxygen converter and introduced a new smelting technique, thereby making it possible to improve steel quality.

Scientists, technicians, lecturers and researchers from educational and scientific institutions such as Kim Chaek University of Technology, Chongjin University of

Technology, Chongjin University of Mining and Metallurgical Engineering and the State Academy of Sciences positively introduced valuable research hits in cooperation with the workers of the complex.

Programs for the integrated automation systems of the project were developed, including the integrated automation system of the oxygen blast furnace and the PLC control system which monitors and controls the overall process of the large oxygen plant, and control rooms were built flawlessly.

Sincere assistance came from all across the country.

The completion of the project proved once again that no force can impede the Korean people who are storming toward the final victory of socialism on the strength of self-reliance and science and technology, rallying firmly behind the Workers' Party of Korea.

Compiled from KCNA



PHOTOS BY KCNA

The establishment of the Juche iron production process at the Kim Chaek Iron and Steel Complex opens up a bright prospect for the boost of the country's steel industry.

NATURAL MEDICINE

## Herbs favoured for its distinctive features

Despite the rapid development of modern medicine, many people are still attached to natural regimen.

Old Korean medical classics say that "regimen that follows natural law is the best tonic" and "herbs which are imbued with the ether of heaven and earth

have all the elements needed for the treatment of all diseases".

The Rogyang natural substance exhibition has recently opened in Phyongchon District, Pyongyang, to be crowded with customers.

They are most interested in its natural medicinal materials

which have widely been used by Koreans from olden times.

As they enter the exhibition hall, the fresh fragrance of pine resin and the healthy scents peculiar to herbs make them feel as if they are in the middle of a forest.

The hall deals in many kinds

of natural medicinal materials such as juniper branches, hempseeds, hazelnuts, acorns, stems and leaves of barrenwort, *Formes japonicus* and rowanberries.

"Generally, when any natural medicinal material or food is known to be effective against a certain disease, this means it contains certain substances for curing the malady," said the manager of the exhibition. "So we pay close attention to this point and conduct research into natural medicinal materials and then sell them to help people

take care of their health. After all, natural regimen is the key to health and youth."

The hall also provides consulting service to tell customers their physical constitution and condition. Assistants kindly inform them of natural medicinal materials and foods which are appropriate for their cases and explain them how to use them.

It is planning to increase the variety of its commodities and improve service.

By Chae Hyang Ok PT



## INDUSTRIAL DESIGN

# University shapes the future of industrial boom

Pyongyang University of Publishing and Printing Engineering makes a tangible contribution to the country's economic development by creating distinctive industrial designs.

This year alone, the university produced thousands of valuable designs including those for industrial and commercial sectors, those for decorating environment and buildings and signboard designs.

Lecturers and students focus on improving the practicality of designs and perfecting their forms and styles in line with the aesthetic sense of the times.

A typical example is the design of a new-type of trolley bus Mallima which was made in January this year.

The university also produced industrial designs for various

farm machines, mining and forestry equipment and a bullet train, which served as a source of inspiration for scientists and technicians. Especially, a new-type of forestry facility attracts the interest of experts as it is designed to enhance the convenience and efficiency in the transshipment of logs even on steep slopes.

The university also studies and introduces new means of representation into the field of industrial design.

Attention is paid to vividly showing the quality and characteristics of products while overcoming similarity and repetition in packaging and trademark design. Designers made the most of such formative means as point, line, surface, solid and colour to create lots of good designs including those

for satchels for schoolchildren, trademarks of the nutritious gruel powder made of germinated brown rice and chonggak kimchi (a kind of radish kimchi), and the packaging of Unhasu-brand hand-washing cream.

In the signboard design, various techniques of representation are employed to preserve the characteristic features of objects and reflect the national sentiment and the aesthetic sense of the times.

In the trademark design of the popular apple-flavoured drink produced at the Kumkhop General Foodstuff Factory for Sportspeople, letters are arranged in a formative way and a red apple and green leaf are depicted against the white background to give a deep impression of the sweet fragrance and refreshing taste of the drink. And in the trademark designs of Kkotmangul-brand nutritious powdered milk, soya milk and nutritious powdered tomato products of the Pyongyang Children's Foodstuff Factory, comic pictures and calligraphy are used to represent optimism and children's mind in keeping with the features of the products intended for children.

Drawing on such success, lecturers and students of the university are furthering research to enhance the practicality and aesthetics of industrial design and develop multimedia and costume arts in line with the modern trend.



PAK KWANG HUN / THE PYONGYANG TIMES

Students work on industrial designs at Pyongyang University of Publishing and Printing Engineering.

By Choe Kwang Jin PT

## SYMPOSIUM

# Event focuses on seed and nutrition in greenhouse farming

A national symposium on greenhouse vegetable seed production and vegetable nutrition in the DPRK took place at the Pyongyang Vegetable Science Institute under the Academy of Agricultural Science (AAS) on September 26-27 under the co-sponsorship of the AAS and the European Union Programme Support Units in Pyongyang.

It brought together officials from the State Commission of Science and Technology, Ministry of Agriculture, AAS, Pyongyang Agricultural College of Kim Il Sung University, and scientists, experts and field officials from vegetable research and production units in the country including the cooperative farms in South Phyongan and North and South Hwanghae provinces.

"Under the growing concern of the state for the production of vegetable seed in recent

years, the research into it and its application have been activated and their vitality proves effective," Jo Nam Sok, vice-president of the AAS and director of the Pyongyang Vegetable Science Institute, said as he addressed the meeting.

Lars Dueerkop, country director of EUPS Unit 4, introduced the achievements made in the past by his unit in implementing the vegetable, legume and grass seed project in collaboration with the DPRK.

The meeting dealt with the successes and experiences gained in the efforts to produce vegetable seed, boost vegetable output, prevent damage by blight and harmful insects, and improve and maintain the soil fertility of greenhouses, as well as in research into the nutritive value of vegetables and their processing.

On the sidelines of the

symposium, the participants visited the Pyongyang Vegetable Science Institute of the Academy of Agricultural Science.

By Kil Chung Il PT



PAK CHANG BOK / THE PYONGYANG TIMES

A national symposium on greenhouse vegetable seed production and vegetable nutrition held in Pyongyang.

By Jong Hwa Sun PT

## HEALTHCARE

# Cutting a niche in angiographic field

Myomata and adenomyoses can be cured without cutting open the abdomen.

It has become possible in the country since the angiography department was set up seven years ago at the Pyongyang Maternity Hospital, which the local women affectionately call "our home".

It is mainly attributed to department chief Ri Myong Hye (pictured).

She was originally an abdominal surgeon at the Kim Man Yu Hospital. After working there for 20 years she was transferred to the maternity hospital in 2006.

One day she felt deep sympathy for a woman. That day the front of the main gate of the hospital were crowded with new mothers who were to leave the hospital with babies in their arms along with their families and relatives. Ri happened to see a gloomy woman looking at the crowds with envy and asked her why. The patient told her that she was to undergo an extirpation diagnosed with hysteromyoma.

This meant she could never be pregnant. Seeing the weeping woman feeling hopeless about motherhood, Ri made up her mind to cope with the matter.

Ri is known as a woman of enterprising, pioneering spirit.

When other women hesitated to be abdominal surgeon in the past, she was the first to be the one and later saved many lives and earned the nickname of "scalpel lover".

In the course of studying the world's latest research findings on myomata, she came across a piece of information about the worldwide application of a uterine artery embolization to the treatment of women's diseases.

The blood vessel intervention is to insert a fine tube into the relevant artery, inject an embolic substance through the tube to obstruct the related blood



vessel and stop blood supply and thereby reduce or eliminate myomata. Its merits are that it puts less burden on patients as it requires only the sticking of the needle in the skin and they recuperate quickly after the intervention.

It was still a fresh field in the country, but Ri determinedly set to acquiring the advanced operation method with confidence and pioneering spirit.

She studied the causes of myomata, adenomyoses and other diseases and strived to complete relevant methods of injecting embolic substances in keeping with the constitution of local women.

She succeeded in the first intervention a year later and completely cured dozens of cases later.

The success drew the attention of the maternity hospital as well as patients, and lots of gynaecologists and obstetricians buckled down to acquiring the technique.

Collaboration with those doctors facilitated the on-time finding of patients and helped increase the efficiency of operation.

In cooperation with the members of her department, she developed the therapy based on angiography at the gynaecological department into an academic discipline and put it on a scientific basis in keeping with the local conditions to raise the curing efficiency to over 88 percent.

Since the establishment of the angiography department, it has given embolotherapy to over 1 500 patients and at least 140 of them could become mothers.

The medical workers of the department proceeded to succeed in uterine artery embolization for those with postpartum bleeding and ectopic pregnancy. They are now working to widen the application of gynaecological blood vessel intervention.

"I volunteered to work in this field and I'm now obsessed with this job. I'm relieved of all fatigue as I see myomata dwindling and new mothers happily embracing babies in their arms," said Ri Myong Hye.



## CELEBRATION

# Education powerhouse celebrates 70th anniversary with pride

## University trains numerous well-skilled engineers

Kim Chaek University of Technology celebrated its 70th anniversary on September 27.

At the time of its inauguration on September 27 1948, it was named Pyongyang College of Technology.

Later it was named after Kim Chaek, an anti-Japanese war veteran who pioneered the building of the country's industry, and then promoted to a university.

From the period of a new Korea building through the years of the Fatherland Liberation War and post-war reconstruction to the time of socialist construction, the university produced lots of talented sci-tech personnel possessed of profound knowledge and contributed to developing the country's science and technology and stepping up economic construction.

In the new century the university has spearheaded the information industrial revolution.

It newly compiled education programmes, updated the content of sci-tech education and increased the proportion of IT in the education of technological subjects in its effort to innovate education, and furnished itself with an e-library and multifunctional gymnasium in its endeavour to boost educational conditions.

For the first time in the country, its lecturers and researchers developed the UHP steel-making technique, Juche iron production method, highly efficient operation system of hydropower station, integrated control system of production line and such high-tech equipment as numerically controlled wire

cut electro-discharge machine and high-precision survey instrument.

At present the university works to improve its educational system and to bring up to advanced standards basic education, design education and education in simulation and practical training.

It promotes students' experiments and practical work as it closely combines education and scientific research and has led the country in making education IT-based by establishing a real-time teaching management system.

It channels efforts into research to develop technologies with a world-

class competitive edge in such core, basic technologies as IT and nanotechnology and such fields as new materials and energy, space technology and ocean engineering so as to fulfil its role as a pacesetter and engine in the building of a powerful country with a knowledge-based economy.

Its teaching staff consists of celebrated veteran scholars like 20 academicians and candidate academicians, hundreds of professors and PhDs and promising lecturers.

It strives to improve education to be on a par with the world's prestigious universities.

By Jong Sun Bok PT



JON SON IL

Kim Chaek University of Technology trains technical personnel for the country's economic growth and sci-tech development.

## Party Central Committee sends congratulations to university

The Central Committee sent a congratulatory message to the lecturers and students of the university upon its 70th birthday.

The WPK Central Committee, in the message, described the university as a powerhouse of the country's scientific and technological education which was born and developed under the far-reaching plan and warm care of President Kim Il Sung and Chairman Kim Jong Il, and a university of merits which

has contributed to putting the national economy on Juche, modern, IT and scientific basis.

The 70-year history of the university records the feats performed by its teaching staff who have trained many competent scientific and technological personnel true to the Party's line and policies, established new subjects in keeping with the global trend of scientific and educational development and the characteristics of the

university of technology, and proactively introduced the education of genius in engineering and continuous education systems to drastically boost the quality of scientific and technological education, it said.

The university students have conducted study competitions upholding the study-first slogan, thus increasing the ranks of classes of honour students and university students' scientific search prize winners, it stated, adding

## Online education stimulates national sci-tech drive

Online Education College of Kim Chaek University of Technology gave the first lecture eight years ago, and online education has ever since aroused growing interest and zeal of working people across the country.

In the DPRK distance education provides many people with enough education opportunities for free. Through the online education network everyone can choose a special study subject according to their aptitudes and hobbies and have lectures from experienced lecturers.

The college of the technology university has played a pacesetter role in the online education field

while generalizing its successes across the country and has now become an online education base in the domain of engineering.

It makes constant efforts to improve teaching content and method in line with the requirements of developing times so as to actively contribute to raising the standards of learning of working people.

It works to establish various new types of online education system with the main focus put on tailoring education to practical needs at production sites.

It designs curriculums so that working people can choose subjects that are badly needed in their specific types of occupation and works out teaching plans in keeping with their site conditions.

The college has also been successful in providing students with better learning environment by drawing on past experience.

It developed a new real-time question-and-answer system to meet the needs of students in keeping with the increasing volume of communications and has introduced an efficient study assistance program that analyses students' learning process.

It has also applied an online exam system which recognizes examinees, environment and voices so as to ensure a fair and objective assessment of their abilities. It helps fire the students' zeal for study.

In the course of expanding the means and scope of education the college established an online education system based on a mobile communication network, with the result that the number of its students have shown an explosive increase.

Thousands of working people enrol on the distance education course every year and even scientists, technicians and lecturers join the online system.

Many workers of the Pyongyang Kim Jong Suk Silk Mill, Hwanghae Iron and Steel Complex, Chollima Steel Complex and other industrial establishments learn various areas of technology at the college.

As they consolidate what they learn through online education at their industrial establishments, students acquire latest technologies and become able to skilfully handle sophisticated equipment and play a leading role in the operation of their establishments and technical innovation as well.

they have fully demonstrated the ability and honour of the university at international internet programming contests and national competitions and exhibitions of university students.

The WPK Central Committee highly praised the entire teaching staff of the university who have been devoting themselves to education and scientific research, cherishing deep in their minds a high sense of responsibility for the prosperity of the country and the future, as well as its students who are preparing themselves to be revolutionary, technical personnel who would shoulder the rosy future of an economic giant.

Compiled from KCNA

By Pang Un Ju PT



## TOURISM

## Digital transformation of tourism

September 27 is World Tourism Day.

The day was designated at the third general meeting of the World Tourism Organization held in Spain in 1979.

The organization works to make tourism promote economic and cultural development in countries and international understanding and contribute to peace and prosperity and arranges a variety of events to mark the day, including photo contest and tourism prize-giving.

At present, tourism is one of the largest industries worldwide and the main source of income of many countries. A survey conducted by the World Tourism Organization shows that spending on travel and tourism accounts for about 11 percent of the world's gross output value.

"Tourism and Digital Transformation" is the theme for this year's World Tourism Day.

There is no doubt that IT industry which has exerted tremendous influence on people's life, more specifically digitization, has given great impetus to the development of tourism.

Not only on the internet but also by dint of interactive satellite TV and other mobile communication devices, people can get access to

data about tourist resorts including their geographical information like location, landscape and climate, such amenities as hotels, restaurants and shops, such accessible routes as air, overland and sea and social customs and culture of the site as well.

The introduction of the information technology into tourism is classified mainly into the three spheres of transport, reservation and popular goods, and the data collected through this is promptly provided to tourists.

Such tourist information is constantly updated and increased according to demand. Therefore, it can be said that the development of tourism depends on how well the data is managed and how conveniently and quickly it is provided to tourists.

At present, the major challenge in stepping up the building of IT-based tourism is to make all transport means of tourism IT-based, to develop and introduce advanced communication networks to provide tourists with the direct channels of travel agencies and to develop and promote more popular goods.

When countries and enterprises strive to make success in putting tourism on IT basis, the world will get closer to all.

By Ri Sang Il PT

## DESTINATION

## Mt Kumgang magnet for tourists

Korea is blessed with many scenic spots for its rich natural beauty.

Among them, Mt Kumgang is one of the celebrated mountains in Korea and the world.

Introducing a Korean proverb that you should not talk about the beauty of mountains and rivers before you see Mt Kumgang, a foreign news agency said that it will be better to see it rather than hearing about it hundreds of times.

An increasing number of local and foreign tourists come to the mountain for sightseeing every year as it is endowed with all beauties of noted mountains, especially the beauty of mountains, valleys, forests, waterfalls, sea and legends.

The Kumgangs International Travel Company was inaugurated in 2011 to cater for the needs of tourists and offer diverse forms of service to them.

According to Kwon Yong Hun, director of the company, the predecessor of the company was the Kumgangs International General Tourism Corporation which was established in 1988.

Embracing Kumgangs, Oegumgang, Kosongang and other luxury hotels and many public service amenities, the company offers a variety of themed tours, namely mountaineering, boating, sea bathing, angling and hot-spring cure.

Mountaineering tourism is most popular with tourists.

Its course includes

the tours of masculine Outer Kumgang, feminine Inner Kumgang and Sea Kumgang with beautiful lake and sea views. Over 12 000 sky-kissing jagged peaks in natural forests, rocks of fantastic shapes, gemlike clear water meandering round cliffs and rocks, numerous waterfalls which cascade unfolding rainbows, diverse fauna and flora and thick foliage satisfy the taste of mountaineers.

Especially, Sea Kumgang in the East Sea of Korea draws particular interest of visitors for its unique beauty.

In the area, there are many scenic attractions including Lagoon Samil with a legend which goes that once upon a time a king spent three days there, fascinated by its scenery, though he planned a day's trip. And the area is a good habitat of fishes as hot and cold water crosses there. Tourists can enjoy sea bathing, boating and angling.

Bathing at the Kumgangs

spa is very alluring.

A mineral silica spring containing radium, the spa is colourless, clear and foamy, and its temperature is 37~44°C. It is effective for the treatment of heart trouble, hypertension, rheumatoid arthritis and other diseases.

The period of tour is diverse according to demands, but is mainly three nights and four days, or four nights and five days.

After it initiated the first Rason-Mt Kumgang international tourism in 2011 by ship, it organized several rounds of visa-free tour of Mt Kumgang through the East Sea of Korea.

"Our company is going to arrange ecological sightseeing at Mt Kumgang with rich biodiversity favourable for the habitation of migratory and non-migratory birds," said Kwon Yong Hun.

By Han Jong Ho PT



The unique coastal beauty of Mt Kumgang attracts many people from at home and abroad.

## APP

## Close guide to Korean cuisine

"The cookery application enables me to make tastier foods with the same materials and brings more pleasure to my family. As my culinary skill improves, I find cooking more interesting."

"It is better to prepare dishes following the cooks in the app step by step than to do so reading cookbooks."

These are the feedback from the housewives who use Cookery World 1.0, a culinary data browsing application for smartphones.

This app has recently been developed by the Sojae Culinary IT Exchange Centre under the Cooks Association of Korea.

The centre inputs culinary information in its database to provide information service through the national network.

The database includes the recipes for all Korean dishes, cookery-related common sense, experience, techniques and theories, foreign dishes and cooking equipment, and a separate list containing multimedia

presentations concerning national and foreign dishes as well.

The list is very convenient and helpful to housewives who want to enrich their dining tables by preparing various foods with limited ingredients. When a user selects any materials the app tells them the dishes that can be made with them and the cooking methods.

The centre's Korea Dishes website (www.cooks.org.kp) deals with the long-standing food culture of the Korean nation, famous Korean cuisines, and domestic cooking festivals and contests held on different occasions and other activities conducted by the national cooks association.

An Song Il, director of the centre who is also a key developer of the app, said that they have developed the application for smartphones as well as multimedia presentations for DVD to provide more convenience to users, while compiling books.

By Kim Kum Myong PT

## SURVEY

## Water bird population grows

The Biodiversity Institute of the State Academy of Sciences has recently conducted a routine survey of water birds at migrant bird sanctuaries in the east and west coastal areas of the DPRK.

According to Ri Chung Song, a researcher of the institute, the survey proved that several migrants sanctuaries on the east and west coasts play an important role in protecting the diversity of water fowls in Korea and the rest of the world as their good stopovers.

Various endangered species of water birds were observed in the reserves.

White-fronted geese, mute and whooper swans, *Anas falcata*, white egrets and red-crested cranes make a regular stopover in the Kumgangs biosphere reserve in spring and autumn, with their number estimated to reach over one percent of their total number in the region.

More than 25 000 water birds of 106 kinds inhabit the sanctuary on an annual average. Among them are 16 endangered species of the world like red-crested crane, *Numenius madagascariensis* and *Calidris tenuirostris*.

Every year nearly 86 000 water fowls make a short stay in the Orangchon migrants

sanctuary in Orang County, North Hamgyong Province, where 12 endangered species like red-crested crane and white-naped crane have been observed.

The September 18 reservoir migrants sanctuary is the habitat of over 25 000 water birds.

The reserve is known as one of the areas that are rich in the diversity of birds as there are at least 20 endangered species like *Grus leucogeranus*, black-faced spoonbill, stork and *Calidris tenuirostris*.

It was ascertained that about 12 000 water birds fly into the Kangryong migrants sanctuary in the east of Kangryong County, South Hwanghae Province, on an annual average and more than 50 000 make a regular stopover in the Sindo migrants sanctuary in the westernmost point of the Korean peninsula.

Compiled from KCNA



## REACTION

# Pyongyang summit brings a new turning point to inter-Korean relations

The historic Pyongyang summit meeting and September Pyongyang Joint Declaration are eliciting enthusiastic responses from the international community as well as Koreans at home and abroad.

As to the meeting of the top leaders of the north and south of Korea, south Koreans expressed their excitement, saying "it is an indescribably impressive meeting", "it is a thrilling historic day" and "it is yet more surprising that three rounds of inter-Korean summits have been held in less than five months since April".

Political parties and figures, regional organizations and businessmen of south Korea gave voice to their willingness to take an active part in inter-Korean exchanges and collaboration as they wholeheartedly supported and welcomed the Pyongyang summit.

The Ulsan mayor said that the spring at Panmunjom led to the autumn in Pyongyang and the recent summit would accelerate the peaceful reunification of Korea. And the Kwangju mayor said

Kwangju citizens would put their heads together and join hearts to implement the September Pyongyang Joint Declaration and the effort to make a new history in the Korean peninsula should be continued uninterruptedly without any setback.

A dynamic by which to jump over national division has been provided through the inter-Korean summit meeting and talks, the chairman of the Confederation of Democratic Trade Unions said.

The Central Committee of the Anti-imperialist National Democratic Front praised the pains taken by Supreme Leader Kim Jong Un as a "great exploit" that would go down in history as he took broadminded measures successively with compatriotism and generosity to bring about fruitful results in the implementation of the Panmunjom Declaration and adopted the September Pyongyang Joint Declaration to provide a powerful driving force that would accelerate the pace of the fellow countrymen who are eager to create a peaceful, thriving future of the Korean peninsula

and achieve independent reunification.

The General Association of Korean Residents in Japan and the General Association of Koreans in China stated that the top leaders listened to each other's opinion on crucial pending issues openheartedly without formality and pattern and had a candid conversation, describing the Pyongyang summit as another historic occasion that opened a new chapter for the development of inter-Korean relations and national reunification and the Pyongyang joint declaration as a new milestone for fully and faithfully implementing the Panmunjom Declaration in order to hasten the development of the ties, usher in a new golden age of national reconciliation and unity, peace and prosperity and make the Korean peninsula a peaceful land free from nuclear weapons and threat.

The Chinese Foreign Minister on September 20 clarified the government's stand of supporting the September Pyongyang Joint Declaration and the Russian

Foreign Ministry issued a press release on September 19 to welcome the results of the Pyongyang summit, call on all the relevant countries to strive to solve nuclear and other issues on the peninsula comprehensively and as early as possible and urge the US to take constructive measures in response to the DPRK in accordance with their June 12 joint statement.

The new road of inter-Korean rapprochement which was opened in spring when all living things come to life again has got broader thanks to the historic Pyongyang summit and the adoption of the joint declaration in autumn when all crops ripen.

Indeed, the fifth inter-Korean summit in Pyongyang marked another important occasion in further speeding up the development of north-south ties and opening up a new era of peace, prosperity and reunification on the Korean peninsula on the basis of the Panmunjom Declaration and the spirit of By Our Nation Itself.

By Kim Rye Yong PT

## JAPAN

# Defence spending on rise causes concern

It has been made public that the Japanese defence ministry asked for more defence expenditure for the 2019 budget.

It demanded 5 298.6 billion yen, which is a 2.1 percent rise over the initial budget for 2018.

Vigilance against growing military expenditure is on the rise at home and abroad as the military is focusing on increasing defence spending in disregard of Japan's tough financial situation.

Its defence spending has hit the record high every year since the advent of the Abe regime in 2013.

Most of the spending is directed to purchasing US-made military hardware including the ground-based missile defence system Aegis Ashore, stealth fighter F-35A and tilt rotor aircraft Osprey.

In the meantime, Japan pushes ahead with a project to revise the defence programme and corresponding midterm defence programme within the year.

On September 3, prime minister Abe told senior officers

of the Self-Defence Forces that they should rid themselves of the mind to complete the new defence capability in 10 or 15 years, which is a revelation of his intention to hasten the defence adjustment earlier than previously.

It is not hard to guess what Japan seeks in increased

defence spending.

Japan's present view on the past can be seen as the most conservative.

Abe has never shown any sincere attitude of soul-searching over the wrongdoings committed by militaristic Japan during the past six years since he took

power, but recklessly worked to embellish the past and build a military power.

Overseas operation and military exercises of the SDF become more frequent on different pretexts. Even now that the surrounding regional situation has turned to peace and stability, Japan expands defence spending on the excuse of coping with "threat". Such moves are arousing growing apprehensions of the international community.

By Choe Yong Nam PT



## ISRAEL

# Zionists toughen stance on Palestinians

The Israeli parliament has recently adopted the "Jewish national state law" which legalizes the policy of racial discrimination.

The law stipulates that Quds is the historical motherland and national state of the Jews and Hebrew is their official language.

It made legal not to use Arabic which has been spoken as an official language together with Hebrew in Israel where nearly 20 percent of its population is made up of Arabs.

It is an act of extreme racial discrimination against the international law and a declaration of war against Palestinians striving to set up an independent state.

Palestinian President Mahmud Abbas released a statement to strongly denounce Israel which adopted the controversial law, saying such a trick could not check the just struggle of the Palestinians to build a sovereign state.

The foreign ministries of Egypt and Iran, the League of Arab States and the Islamic Education Science and Culture Organization appealed to the international community to reject it as they denounced it as a reckless racist act of Israel.

The Zionists, who unilaterally set up the "state of Israel" on the land of Palestine, cooked up various draconian laws to exclude ethnic minorities including the Palestinians and realize their wild ambition for territorial expansion during the past seven decades.

The Israeli parliament passed a "bill on unified Jerusalem (Quds)", which recognizes the whole area of Quds as an inseparable part of its territory, early this year in a bid to completely seize control of Quds.

In May, the Israeli high court decided to dissolve the Bedouin community of Palestine in east Quds. The Israeli soldiers and policemen began to forcibly destroy Palestinian dwellings and public buildings in the community in early July.

When enraged Palestinians launched massive demonstrations to defend their territory, Israeli troops harshly cracked down on them, firing tear gas and rubber and live bullets at random, injuring many protesters and giving rise to international denunciation against Israel.

However, Israel is behaving quite arrogantly as it is patronized by the US.

The US has so far given positive material and diplomatic support to Israel's Zionist moves behind the scene.

Late last year, US issued a presidential executive order to move its embassy in Tel Aviv to Quds and held its inaugural ceremony on May 14 in Quds to mark the founding day of Israel despite opposition of the international community.

All these acts fuelled Israel's outrageous ambition for territorial expansion and belligerence.

The reality demands the international community cement unity and solidarity to foil the scheme of Israel which is running amuck backed by the US.

By Song Jong Ho PT



## ICH

# Legend tells about founder of ancient kingdom

Legend of Jumong is a story about the birth and childhood of King Tongmyong, founding father of Koguryo which earned fame as the power in the East from 277 BC to AD 668, and the process of founding a country.

Jumong means a "master archer" in Puyo language at that time and it was the childhood name of King Tongmyong who was an extraordinary marksman with bow and arrow.

The "History of King Tongmyong" in *Kusamguksa* (a history book on Three Ancient Kingdoms) gives the most detailed account of the founding father. Though the book does not exist at present, Ri Kyu Bo, a renowned poet in the period of Koryo (918-1392), gave a vivid representation of him in the epic "Part of King Tongmyong" on the basis of the book.

According to the legend, Jumong's father was Haemosu, son of the emperor in heaven, and his mother was Ryuhwa, daughter of Habaek (Dragon King).

After wedding Haemosu,

Ryuhwa incurred the anger of her father and lived in exile, before staying at the royal palace of Puyo. She became pregnant after getting the sun in her bosom and laid an egg from her left armpit. Regarding it as a strange phenomenon, Puyo's King Kumwa ordered his subordinates to throw away the egg to the stable, but horses did not tread on it. The egg was removed to the heart of a deep mountain, but animals took care of it.

The king could not but return it to Ryuhwa. Finally, a boy was born with a resonant cry and his grit and frame seemed extraordinary.

Jumong developed talent and wisdom.

At the time King Kumwa had seven sons and they tried to kill Jumong, driven by jealousy at his unrivalled talent and valour and strength.

With an ambition to build a country in the south, Jumong left Puyo together with his friends including Oi, Mari and Hyoppo.

At Modungok his party got acquainted with Jaesa, Mukko

and Mugol and entrusted them with tasks according to their talents. When they arrived around the Stream of Jolbon which is Huanren of Liaoning Province in China at present, they saw fertile land and steep mountains and rivers around it, set it as the capital, named the country Koguryo and surnamed himself Ko. At the time Jumong was 22 years old.

Many people came to his country to be his subjects.

In September of the 19th year after he took the throne, King Jumong ascended to heaven and did not come back. At the time he was 40 years old.

The crown prince buried his father's bead whip in Mt Ryong.

The story in "Part of King Tongmyong" containing much legendary content was later recorded in *Samguksagi* (Chronicles of the Three Kingdoms) to be handed down. It was also put on some Chinese history books and widely spread to neighbouring countries.

By Jong Tang Song PT

## MARATHON

# Amateur runners enjoy a try in Pyongyang

The 2018 Autumn Amateur Marathon took place in Pyongyang on September 23.

Divided into marathon, half marathon, 10 km and 5 km races, the event drew lots of amateur runners from the DPRK, China, the Netherlands, Mexico, Belgium, Sweden, Singapore and other countries.

Men and women runners started from Mangyongdae

Schoolchildren's Palace and ran along streets in high spirits.

Working people and students cheered the runners along the route as they waved their hands and applauded.

Those who entered the rankings were given certificates.

Compiled from KCNA



KCNA

The 2018 Autumn Amateur Marathon starts at the Mangyongdae Schoolchildren's Palace in Pyongyang.

## SCENIC ATTRACTION

# Mt Kuwol, celebrated mountain of Korea

Mt Kuwol rising 954 metres above sea level in the northwest of South Hwanghae Province is a celebrated mountain widely known since old times.

It forms the backbone in the Kuwol Mountains which stretch out about 60 kilometres in almost parallel with the coastline of the West Sea of Korea.

According to an old record, as the mountain adjoins the sea to the northwest and the Taedong and Jaeryong rivers to the southeast, fishes and salt there were rated as the best ones in the area of Hwanghae Province, 40km-wide plains were fertile enough to do farming, and the mountain had lots of temples. And there was a fort on the mountain as a natural fortress.

The mountain has been called Asadal or Mt Paegak for its grandeur and beautiful scenery in all seasons and numerous legends of Tangun, the founding father of the Korean nation.

A legend has it that it is

called Kuwol as the autumn-tinted scenery in September is so beautiful, or the mountain consists of 99 peaks.

The mountain unfolds an enchanting view as it has numberless ridges and valleys and steep granitic cliffs in every ravine, showing well the delicate and fascinating beauty of rocks as if they were processed by cutters.

Crystal-clear water flows down through deep valleys forming waterfalls and pools to unfolds a spectacle.

On the hillside there is a famous pond called Sok with a legend that its water did not dry up despite seven years of severe drought, and several ponds are seen on the western slope. The southeastern slope abounds with waterfalls including Ryongyon and Samhyongje falls.

The mountain boasts diverse and rich fauna and flora, especially boletus, *Hydnum aspratium Berk* and songi mushroom which are known as three delicacies.

It was registered as an international biosphere reserve in October 2004 for the natural beauty of mountains and valleys, graceful scenery and rich ecological environment.

It presents unique views according to seasons.

Its summer scenery is

featured by green foliage and fresh waterfalls cascading down to valleys, winter by snow-covered trees and spring by flowers in full blossom and their fragrance. But the view of autumn during which the whole mountain turns red is really a sight which is incomparable to other beauties.

There are lots of historical spots and remains in the mountain.

It has several old buildings including Woljong and Hungnyul temples and the site of Kuwol fortress (5 230 metres in circumference),

one of the five fortresses in Hwanghae Province. It was built elliptically with trimmed stones in the period of Koryo Kingdom. In the fortress there are sites of houses and a place where Koryo ceramics were baked.

At the foot of the mountain, there are Talchon spa noted for its rich volume of water and medicinal efficacy and other hot springs.

Mt Kuwol is now a favourite haunt of local and foreign tourists.

By Pak Song Min PT



Mt Kuwol in autumn.

