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Supreme Leader Kim Jong Un pays homage to Kim Jong Il over his demise anniversary



Kim Jong Un, chairman of the Workers' Party of Korea, chairman of the State Affairs Commission of the DPRK and supreme commander of the armed forces of the DPRK, visited the Kumsusan Palace of the Sun.

He was accompanied by Choe Ryong Hae, member of the Presidium of the Political Bureau of the WPK Central Committee, first vice-chairman of the DPRK State Affairs Commission and president of the Presidium of the Supreme People's Assembly, and Pak

Pong Ju, member of the Presidium of the Political Bureau of the WPK Central Committee, vice-chairman of the DPRK State Affairs Commission and vice-chairman of the WPK Central Committee.

Also among the visitors were Premier Kim Jae Ryong, member of the Political Bureau of the WPK Central Committee and member of the DPRK State Affairs Commission, and other members of the Political Bureau of the WPK Central Committee.

The Kumsusan Palace of the Sun, the supreme temple of Juche brimming with deep yearning and reverence for Chairman Kim Jong Il, was wrapped in an atmosphere of solemnity.

Supreme Leader Kim Jong Un entered the hall where the statues of President Kim Il Sung and Chairman Kim Jong Il stand.

A basket of flowers was laid at the statues in his name.

Kim Jong Un, together with other visitors, paid high tribute to the great

leaders at their statues.

In the hall where Chairman Kim Jong Il is preserved in his lifetime appearance, he made a deep bow to the Chairman who had dedicated his all to carrying forward and accomplishing the Juche revolution and bringing prosperity to all generations to come while throwing himself into the service for the country and people until the last moment of his revolutionary life.

Compiled from KCNA

REMEMBRANCE

Nation honours Chairman Kim Jong Il with diverse remembrance events

All the Korean people across the country remembered Chairman Kim Jong Il in the humblest reverence on the occasion of his eighth death

anniversary.

On Dec 17, officials of Party and government organs, ministries, national agencies and military organs visited the

Kumsusan Palace of the Sun where President Kim Il Sung and Chairman Kim Jong Il are preserved in their lifetime appearances to pay homage to them.

A group of Koreans from Japan led by Kim Won Hwan, advisor to the Central Measure Committee for

National Education of the General Association of Korean

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Homage: Korean people pay respects to Kim Jong Il

FROM PAGE 1

Residents in Japan, and other home-visiting overseas Koreans paid respects to the great leaders at the palace.

That day, the representative and staff members of the Pyongyang Mission of the Anti-imperialist National Democratic Front visited the palace.

Working people, service personnel and youth and students paid floral tribute to the peerlessly great men at their statues and mosaic murals depicting their beaming images across the country.

A basket of flowers sent by Supreme Leader Kim Jong Un was seen at the statues of the President and the Chairman on Mansu Hill in Pyongyang.

Flower baskets were laid at their statues in the name of Party, government and military organs, public organizations, ministries, national agencies, units of the Korean People's Army and the Korean People's Internal Security Forces and institutions, industrial establishments and schools at all levels in Pyongyang.

A floral basket was laid there in the name of the Pyongyang Mission of the Anti-imperialist National Democratic Front.

Nigerian President Muhammadu Buhari who is also commander-in-chief of the Armed Forces sent a floral basket to their statues on Mansu Hill.

A delegation of the Laos-Korea Friendship Association led by Chairman Pan Noymany, staff members of the resident UN coordinator office and country offices of the UNDP, UNICEF, UNFPA, FAO, WFP



People lay baskets of flowers and bouquets at the statues of President Kim Il Sung and Chairman Kim Jong Il on Pyongyang's Mansu Hill.

and WHO, and Jong Il Sim, widow of DPRK Hero An Tong Su, presented floral baskets at the statues on Mansu Hill.

Baskets of flowers also came from the family of Zhang Weihua, a Chinese anti-Japanese revolutionary martyr, the family of Kim Sun Ok who is related to the anti-Japanese revolutionary struggle, the Asia-Pacific Regional Committee for Supporting Peaceful Reunification of Korea, Yuwen Middle School in Jilin of China, the Beijing Chao Ya International Cultural Exchange Centre in China, the Switzerland-Korea Committee, the Japan-DPRK Friendship Kyoto Net for the Promotion of Cultural, Scientific and Civilian Exchange, Tokyo-Pyongyang Rainbow Bridge of Japan, the family of former Japanese deputy prime minister Kanemaru Shin, the chairman and secretary general of the Ecuadorian Committee for Remembering Generalissimo Kim Jong Il, director of Kim Jong Il Library of Ecuador, president of the International World Group of Italy, and president of the R.S. Royal C. Entertain Co.

Flower baskets were placed at

the statues of the great leaders and mosaics bearing their beaming images in Pyongyang and local areas in the name of institutions, enterprises and army units, and working people, service members and youth and students paid tribute to them.

Korean documentary *To Hold Chairman Kim Jong Il in High Esteem Forever* was screened at the People's Palace of Culture in Pyongyang on Dec 17.

Among the audience were Choe Ryong Hae, member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, first vice-chairman of the State Affairs Commission of the DPRK and president of the Presidium of the Supreme People's Assembly, Pak Pong Ju, member of the Presidium of the Political Bureau of the WPK Central Committee, vice-chairman of the DPRK SAC and vice-chairman of the WPK Central Committee, and other senior Party and government officials and officials of ministries, national agencies, military organs and institutions and enterprises in Pyongyang.

A remembrance concert was given by the National Symphony Orchestra at the Moranbong



The National Symphony Orchestra gives a remembrance concert at the Moranbong Theatre in Pyongyang.



A concert is held at the Central Youth Hall in remembrance of Chairman Kim Jong Il to mark the eighth anniversary of his death.

Theatre in Pyongyang on the same day.

Earlier, working people's organizations held a variety of events such as remembrance meeting, concert, oath-taking meeting and presentation on the virtue of the Chairman.

At the remembrance meeting of workers and trade unionists, speakers recalled that Kim Jong Il went on a long journey of love for and devotion to the country and people while working hard till the last moment of his revolutionary life.

Remembrance concerts

were given by artistes in North and South Phyongan, South Hwanghae and Jagang provinces, Kaesong and other places.

The performers impressively represented their profound reverence for the Chairman who burned himself like a candle to carry forward and accomplish the revolutionary cause of Juche and achieve the prosperity of socialist Korea as he traversed the arduous, untrodden path upholding the red flag of the revolution.

By Pang Un Ju PT

TOUR

Party information workers tour revolutionary battle sites in Mt Paektu

A group of Party information workers from across the country made a study tour of the revolutionary battle sites in the Mt Paektu area following in the footsteps of Supreme Leader Kim Jong Un.

The revolutionary battle sites in the Mt Paektu area are steeped in the history of the guerrillas who graced the first page of the history of the Korean revolution with solemnity, and the sacred footprints of President Kim Il Sung and the spirit of the anti-Japanese revolutionary martyrs are enshrined in them.

The study tour party formed with hundreds of information workers of the Workers' Party of Korea from the capital and local areas held a meeting for the start of the trek in front

of the statue of Chairman Kim Jong Il in Samjiyon City, Ryanggang Province.

They were filled with the determination to learn the indomitable revolutionary spirit of Paektu with all their heart and fulfil their responsibility and duty as point men on the ideological front and powerful motivators in launching a campaign of education in the revolutionary traditions in keeping with the new requirements of the developing revolution.

They climbed up Mt Paektu, the sacred mountain of the revolution, pushing their way through virgin snow and blizzards, visited the native house of Chairman Kim Jong Il in the Paektusan

Secret Camp and toured revolutionary battle and other historic sites in the area.

During their march, they held a chorus contest of revolutionary songs, study session on the reminiscences of anti-Japanese guerrillas, mass dance and quiz.

After rounding off the trek, they held a meeting to make a pledge to remain loyal to the Supreme Leader and adopted a letter to him.

In the letter the Party information workers vowed to uphold in a do-or-die spirit the Supreme Leader's plans and intentions to surmount difficulties and pave the way for victory and prosperity on the inexhaustible strength of the revolutionary traditions, the eternal treasure and lifeblood of

Juche Korea.

A group of youth and students from across the country embarked on a study tour of the

battle sites after the information workers.

Compiled from KCNA



Young people from across the country are on a study tour of the revolutionary battle sites in Mt Paektu.

LEAD

People's interests upheld as absolute standard

Supreme Leader Kim Jong Un said in his policy speech given at the First Session of the 14th Supreme People's Assembly that the government of the Republic should regard the people's interests as the absolute standard and give the first consideration to their will and desire in formulating and carrying out its policies.

The speech reflects the ennobling view on the people of the Supreme Leader who gives top and absolute priority to the people's interests and convenience and spares nothing for the promotion of people's wellbeing.

His first consideration in planning and undertaking any projects is whether they serve the interests of the people and they are liked by the people, and he resolutely rejects anything that does not meet the demands and interests of the people.

He visited new homes of ordinary working people to learn about their convenience. He even walked up the staircase with no railings first in a building under construction to give detailed guidance. He also inspected the construction site of modern children's medical service centre several times to give proper guidance.

Even today, the Korean people

recollect with deep emotion the miracle that occurred in the northern areas of North Hamgyong Province which suffered a devastating disaster due to an unprecedented flood three years ago.

The Supreme Leader, who grieved most at the time over the calamity suffered by the people in the region, ensured that the main thrust of the 200-day campaign was directed to the rehabilitation of flood-stricken northern areas. He set the housing project as the primary task of rehabilitation and saw to it that all human, material and technical potentials of the state were mobilized and concentrated on the project, so as not to make the flood victims suffer from the winter cold, even if relief efforts required huge money and materials.

Splendid socialist fairy streets and villages sprang up in the six afflicted cities and counties in a matter of two months thanks to the warm love of the Supreme Leader, who spares nothing for the good of the people, and cheers of hurray for the Workers' Party and socialism and the people's laughter of happiness rang out in the areas.

During the construction of Ryomyong Street a few years

ago, the Supreme Leader examined over 1 390 miniatures on dozens of occasions to turn the new street into the one in which top priority is given to the people's convenience and interests in every way.

Making the rounds of different places of hot spring resort construction site for hours last September, the Supreme Leader said the Yangdok County Hot Spring Resort is a creation in which the Party's architectural idea based on the people-first principle has fully been embodied, everything is for the people and reflects their demand, and when the project is completed, it will become a cultural and holiday resort frequented by many people. He called for presenting the people with the resort as a gift after completing it on the highest level by doing the finishing work qualitatively and tactfully.

That is why the Korean people follow the Supreme Leader with boundless reverence for him who continues to administer the politics of loving the people while prioritizing and absolutizing their convenience even in building a factory and other structures.

By Pak Song Min PT

MODERNIZATION

Factory pushes for upgrading of textile machine

The Pyongyang Textile Machine Factory concentrates all efforts on modernizing its production processes.

It is stepping up the upgrading of the loom manufacturing process relying on its technical force.

It installed a pre-treatment tub in the resin powder painting process, the most important thing in the modernization of the process, and improved its technical performance, thereby boosting the work efficiency much more than previously, correctly ensuring chromaticity and lustre of looms and making it possible to fully retrieve and recycle the resin powder that is wasted from the process.

"We have recently manufactured and introduced a modern pneumatic jet loom to greatly improve the quality of products. We are going to raise its automation level to double its performance," said Sin Tong Nam, head of the technical development department.

The factory also set up

TREND

Copying after role models

The laudable deeds of those who have devoted their all energies to the prosperity of the country for decades are tugging the heartstrings of all people.

Among them are scientists, technicians, coalminers, farmers, teachers, weavers, doctors and forest rangers.

In the DPRK, they are praised as meritorious persons of socialist patriotism and all the citizens are encouraged to learn their noble view of life and behaviour.

Han Sung Chan, manager of Pit No. 9 of the February 8 Jiktong Youth Coal Mine of the Sunchon Area Youth Coal-mining Complex, has devoted himself to hitting coal production targets every month and contributed to making all the coalminers of his pit labour innovators.

Kim In Gyu, department head of the metal engineering faculty of Kim Chack University of Technology, majored in mechanical engineering when President Kim Il Sung instructed that iron and the machine are the "king" of industry.

He became a lecturer after graduating from the university and prepared not only himself but all the other lecturers of his department as competent and dedicated educators.

By Ri Sung Ik PT

COAL

Machinery and supply service boost output

The Chonsong Youth Coal Mine under the Sunchon Area Youth Coal-mining Complex is achieving good successes in coal production.

It found the basic factor for increased production in raising the proportion of work done by machines in pits.

A typical innovation it has introduced is overhead cableway.

The large coal mine has cutting faces with a series of complicated passages deep underground.

So it was a labour-consuming work to go down to deep underground faces, said Jo In Bin, manager of Pit No. 2.

The coal mine pushed the installation of cableway and coal production in parallel.

In the course of this, a rational technical plan was contrived to reduce power consumption by six times and that of iron and steel exhaustion markedly. The technical guarantee was provided to ensure the safe operation of cable cars using a 20kW motor though the section

for overhead cableway No. 3 is much crooked.

With the completion of a project for excavation and expansion of pits, four new overhead cableway courses were added to the coal mine.

After the cableways started operation, a new scene was unfolded in the underground life of coalminers.

Coalminers read technical books as they go down pits in cable cars and sing merry songs as they go up after daily work.

The mine's technicians modified a rectifier for electronic commutator to prevent jamming and recycled bearings for mine cars to raise their operating ratio.

The coal mine pays special attention to improving the living condition of employees.

It built a pigsty, greenhouse and other supply service bases and normalized their operation so that it could give premiums to the workshops that completed their production plans.

By Chae Hyang Ok PT



RYU KWANG HYOK / THE PYONGYANG TIMES
The newly developed pneumatic jet loom at the Pyongyang Textile Machine Factory.

a vacuum casting process based on the foamed plastic combustion model, thus increasing casting efficiency and doubling cloth output while saving much time and labour as compared to the previous casting process.

It is working on the building of an underpressure sand box and system and vibrating compactor for the vacuum casting process

Kim Myong Wol, senior doctor of the ophthalmic department at the North Hwanghae Provincial People's Hospital, has cured innumerable patients by even dedicating her own conjunctiva to a patient with a belief that there can be no blind persons under the socialist system of the DPRK.

Ri Myong Sun, weaver at the Pyongyang Kim Jong Suk Textile Mill, is a consummate worker well known in the factory for operating five times more looms than the normal assignment.

The total length of the cloths she has so far woven reaches over 2 400km and the distance she walked for the normal running of looms is at least 400 000km, the equivalent of travelling round the earth for 10 times.

"I was deeply impressed by the laudable deeds of the meritorious persons of socialist patriotism," said Jong Chang Hyon, deputy chief of the steel casting workshop of the Ryongsong Machine Complex.

A drive is now sweeping the whole society to follow the examples of the meritorious persons and all the people exert themselves in their work.

By Kim Il Jin PT

AI

University institute channels effort into developing AI techniques

A contest in the field of artificial intelligence was one of the crowd-pullers at the national exhibition of achievements in informatization-2019 last November.

The artificial intelligence institute under the information science faculty of Kim Il Sung University outdid all others in the programming contest, which was held in such sectors as machine translation, voice, letter, face and fingerprint recognition, and car license number identification.

"The secret of our success is mainly the application of the deep learning, which is one of the hottest technologies worldwide," said Choe Chol, director of the institute.

According to him, a fierce competition is being staged in the AI field to develop recognition systems almost on a par with human intelligence by using the deep learning. However, the application of the technology is unthinkable apart from the establishment of a huge database.

The institute has been engaged in the development and upgrading of Korean letter and voice recognition technologies for over 20 years and now takes the dominant position in this field on the domestic front.

Its Korean letter recognition program can read printed and cursive letters with the accuracy of over 99.5 and 95 percent respectively, while the Korean voice recognition program has a recognition rate of over 98 percent.



Researchers work on a project at the artificial intelligence institute of the information science faculty of Kim Il Sung University in Pyongyang.

"As we have laid such a firm foundation, we could win the car number identifying contest held for the first time in the country," said section chief Kim Sun Dol.

This program is said to be able to correctly identify the license plate numbers of cars running at high speed.

The institute's English-Korean and German-Korean translation programs also show the high level of its machine translation technology.

Last year, its software development process was awarded the nation's top-level quality management system certification, and on that basis the institute developed an integrated retrieval system and an integrated electronic procedure system.

"It is a vital matter in information retrieval to set up a big data retrieval system as soon as possible," said Pak Tac Hyok,

a section chief of the institute.

The integrated retrieval system can collect, store and manage public information offered through websites.

The integrated retrieval system and electronic procedure system were appreciated as best IT products last year.

The institute was successful in the development of network security management systems, web pages and mobile apps.

It was chosen as the best IT business in 2016 and 2017 and one of the top 10 IT businesses in 2018 and 2019.

"Our research effort has focused on artificial intelligence this year and we'll go on with this effort and bring out more AI-related products, while developing basic technologies to gain a competitive edge in the world," said Choe Chol.

By Kil Chung II PT

ENERGY SAVING

Hotel seeks smart management solutions

"Energy is a vital matter for our hotel as it consumes much electricity and water," said Jo Ryong Gi, manager of the Haebangsan Hotel.



Staffers monitor the power and water management system of the Haebangsan Hotel in Pyongyang.

According to him, there are well over a hundred guest rooms, kitchens and service networks and the temperature of hot water that is steadily supplied for them is 45-50°C.

"We relied only on electric power to boil such large quantities of water in the past. But we've introduced solar water heaters to meet the demand for hot water while saving much electricity supplied by the state," said hotel staffer Ri Hye Ryon.

The solar water heaters on the rooftop ensure a sufficient supply of hot water around the clock.

In winter water from the central heating system is preheated with a quick speed heater before being heated by the solar water heaters, thereby ensuring water temperature while saving electricity.

"We established the automatic control system for

ONLINE EDUCATION

Workers play their part by studying online

In the DPRK, all the working people study while they work at institutions, enterprises, factories and farms according to their wish.

Sci-tech learning spaces at industrial establishments and factory, farm and fishermen's colleges offer sufficient conditions for learning.

Working people browse the websites of the Sci-Tech Complex, Grand People's Study House, Central Information Agency for Science and Technology, etc. for scientific and technological information and attend online lectures.

The number of employees who enrol at online courses of different universities continues to increase at the Pyongyang Kim Jong Suk Silk Mill.

As employees' enthusiasm for learning and their technical skills get greater, they create valuable technical innovation plans and apply them to practice, thereby revitalizing production.

"As workers acquire much knowledge at the sci-tech learning space, they come up with lots of novel ideas and original plans of great practical significance and science and technology are closely combined with production," said Choe Song Hun, chief engineer of the silk mill.

Workers of the Ryuwon Footwear Factory learn the current trend of footwear industry and technical matters at the sci-tech learning space with

huge stocks of latest technical information of various fields related to shoe production.

"We diversify products in terms of kind, shape and colour by dint of science and technology. All our workers are eager to learn and in the course of diligent study they present original shoe designs and technical innovation plans," said workteam leader Kim Sun Ok.

Thanks to the study-while-you-work system, workers of the Pyongyang General Electric Cable Factory 326 have also been able to introduce dozens of technical innovation plans in the second half of this year.

The technicians and workers of the factory developed a variety of products through the mass technical innovation drive, including a cost-effective and high-performance pneumatic insulating and grounding box which is winning growing popularity among different units.

Employees of the Phyongsong Synthetic Leather Factory also attend online lectures to learn modern science and technology and solve technical problems arising in production.

Other working people who study at factory, farm and fishermen's colleges also present valuable technical innovation plans to contribute to increased production.

By Ko Kwang Yon PT



Employees acquire technical knowledge in the sci-tech learning space at the Pyongyang Cosmetics Factory.

the supply of hot and cold water," said staffer Kim Chol Ryong.

This system makes it possible to monitor the conditions of water tanks in real time and automatically control pumps to supply hot water uninterruptedly, and to measure and display daily hot water output and hot and cold water consumption.

The hotel also established the automatic power management system.

And it set up the integrated management system by linking

such resource management systems and the business management system which has been in operation for more than ten years.

As a result, it has annually saved 300 000 kWh of electricity, 5 percent of manpower and lots of materials and funds for repair.

"We will positively introduce energy-saving management in order to make our hotel a model of intelligent building," said the manager.

By Jong Hwa Sun PT

RECREATION

Coal miners enjoy themselves at holiday camp

Coal miners enjoy themselves at the coal miners' holiday camp of the Pukchang Area Youth Coal-mining Complex.

With a total floor space of 2,350 square metres, the holiday camp is divided into a service building and a gym. While the service building is provided with all conditions to offer every convenience to vacationers, the outdoor sports ground and resting park are well suited for relaxation.

The complex's labour innovators refresh themselves there together with their families.

According to Jong Hak Gyun, director of the holiday camp, special attention is being paid to diversifying their daily schedule so that they can have a pleasant time at the camp.

"We've been much moved by the sincerity of attendants and cooks who do their best for our convenience and this adds more to our pride and honour as coal miners," said Kim Ryong Nam, pitman from the Inpho Youth Coal Mine.

The holiday-makers relish different kinds of dishes at every meal thanks to the excellent service of chefs.

They play volleyball, basketball, table tennis, tennis and badminton amid the enthusiastic cheering of other campers.

The swimming competition and other amusement games would always leave a funny story at the swimming and wading pool area, said lifeguard Kim Ok Byol.

According to her, a camper who hasted to overtake others became out of breath and was dragged out of the pool in a swimming match and another camper sank into the water as he tried to catch a ball to become a laughing stock.

The recreation hall on the first floor is an arena for Korean chess and yut (four-stick) games. The most spectacular is the yut between couples and between groups of males and females.

In the evening, the camp resounds with songs of the campers. They sing of the honour and pride of being coal miners contributing to the country's power industry.

"Every camping day is so pleasurable that I can't feel the passage of time, but I do feel the warm sincerity of the camp staff and officials of the complex who take good care of us," said Jo Kwang Il, tunnelling worker at the Songnam Youth Coal Mine, adding he would work hard to produce more coal in future.

The camping is provided free of charge at state expense.

By Kim Kum Myong PT



RYU KWANG HYOK / THE PYONGYANG TIMES

Coal miners have a good time playing table tennis at the holiday camp of the Pukchang Area Youth Coal-mining Complex in the DPRK's South Phyongan Province.

EDUCATION

'Gardeners' growing flower buds

Segori Kindergarten in Hoesang District, Hamhung City of South Hamgyong Province, is widely known for having trained many talented children.

"We channel particular efforts into cultivating children's talents. We find the children with unusual talents and explore teaching methods that suit them," said Chon Un Hui, headmistress of the kindergarten.

The kindergarten attaches great importance to the multimedia lesson and classes in which children have a try at and make something. Teachers say that such teaching methods are very effective in enhancing the power of children's cognition about nature and society.

"Have a try" education in which children see something with their own eyes and make something by themselves, not relying on the one-way explanation of a teacher, helps them understand matters and phenomena correctly and



PAK KWANG HUN / THE PYONGYANG TIMES
Kim Ryong Jin, a six-year-old top prize winner at the 12th national competition of talented kindergarteners.

quickly.

The kindergarten puts much stress on extracurricular education.

Teachers develop teaching methods into interesting ones to suit children's tastes and characters and compile teaching contents in full consideration of their future development. They differentiate the selection of etudes in keeping with children's

preparedness even though they all have an aptitude for music. They also direct much energy to sound detection, sight reading, playing posture, vocalization, pronunciation, respiratory regulation and others.

"We attach much weight to teaching correctly one by one and giving enough practice," said Ri Myong Ok, a teacher with 30-odd-year music teaching experience.

The kindergarten trains many children with extraordinary talents in paduk (go), drawing and making.

Its excellent educational conditions and environment for the development of intellectual faculties help children give full play to their thinking and imagining abilities.

Successes have been made thanks to the strenuous efforts of the teachers.

The kindergarten's children won high appraisal at the national children's music art festival every year for over 20 years. The kindergarten has retained the first place

PROFILE

Dentist has scores of certificates under his belt

Song Kwang Myong (pictured), dentist at the maxillofacial surgery of the dental branch of the Songyo District People's Hospital in Pyongyang, is known as an enthusiastic and competent doctor with an unflagging spirit of inquiry among his colleagues.

"He has been working in our branch as prosthodontist and dentist for over a decade and received as many as 50 certificates of scientific and technological achievements by carrying out research projects that are conducive to the development of odontology. He is also devoted to the treatment of patients and he is a good example for our medical workers to follow," said Han Myong Bok, head of the branch.

Song got his first certificate with research into a dental material.

In prosthodontics it is important to take a correct impression of the gums. But the gypsum that was used at the time took much time to harden even for slight moisture, which impeded prosthetic work greatly.

In the course of finding the way to improve the quality of gypsum, he confirmed a rational heat treatment method and mixing ratio and conceived the technique of making anhydrite based on pulverization to apply it to clinical practice.

His anhydrite that overcame the limitations of gypsum won popularity among prosthodontists and clients as an ideal dental material.

Later, he came up with a new dental material by adding fluorine to conglutinating cement that is used in prosthodontics. The fluorine cement prevented secondary dental caries and helped improve dental service.

Busy as he was with treatment, he continued research to unveil high quality dental materials, hygienic supplies and medical appliances including mouth deodorant, antibiotic resin and haemostatic using traditional medical mixtures.

His inventions were highly appreciated at national exhibitions.

As he delved into technical data he always discovered something new.

While reading a technical



book he found that zeolite has great absorptive power for bacilli.

So he intensified research for making a new dental material with the solid substance, succeeded in making silver zeolite-polyacrylic resin, a new kind of highly antibacterial material for dentures, on the basis of locally available raw materials and applied it to clinical practice.

According to Song Kwang Myong, antibacterial resins are generally made by adding various inorganic and organic antibacterial agents to resins and organic antibacterial agents have harmful effects on the human body and cannot ensure stability of resins. But zeolite, an inorganic antibacterial agent, is stable at high temperatures, which makes it easy to process resins while doing no harm to the body, he said. He added that it kills dozens of kinds of bacilli like colon bacilli and staphylococcus aureus and retains antibacterial features even after a long period of use.

His method of making dental antibacterial resin by using zeolite came first at the 12th national exhibition of inventions and new technologies and Song was awarded a gold medal and certificate of national invention.

"I was unpleasant with the previous false teeth for the bad breath. But I don't feel such unpleasantness with the dentures made with the antibacterial resin," said 78-year-old Ri Jong Muk.

Without resting on his laurels, the 35-year-old dentist is working on a research project for preventing complications in the dental sector.

By Ri Myong Jun PT

in such events as vocal and instrumental music and paduk at the provincial competition of talented children.

For example, Kim Ryong Jin, aged 6, won the top prize at the 12th national competition of kindergarten children with extraordinary talents (intelligence) last July.

By Kwon Hyo Song PT

"A great deal of effort is required to raise even a flower. It is the same case with the cultivation of children's talents. It is important how teachers find and cultivate the children's bud of talent," said teacher Yun Hyang Mi.

SPECIAL

Samjiyon turns into livable alpine city

In good harmony with forests

A spectacular fairyland city has sprung up in the northernmost tip of the country where Mt Paektu, the sacred mountain of the Korean revolution, stands.

Distinctly divided into sections for education, dwelling houses, local industry and others, the city fully embodies national identity, modern qualities and northern alpine features in urban planning and architecture.

The sections are clearly divided by choosing the colours of coating and sheet-metal roofing materials of the buildings to suit their purposes and features and the buildings have been designed and arranged flawlessly in artistic and diversified forms and styles on the basis of national traditions.

The Paektusan Museum

stands imposingly in an area of well over 10 000 square metres as befits a centre for educating the people to deeply understand the undying exploits of President Kim Il Sung and Chairman Kim Jong Il and giving them comprehensive knowledge about the history of the development of the Mt Paektu area by the nation, the evolution of life in it and others, adding weight to the size and importance of the central axis of the city.

Public buildings and houses have been designed distinctively in various forms and shapes to give three-dimensional effect. Wide roads stretch straight, fully demonstrating the modern architectural beauty of the streets and their shapes and colours blend in so well with the primeval forests in the environs

of the city that they add to the flavour of a mountainous city.

Multi-storey apartment houses and public service amenities are linked well to ensure artistic connectivity and compatibility between buildings and all buildings, several- and many-storeyed ones, create harmony in line with the architectural requirements while ensuring practicability. Therefore, each architectural group reminds viewers of a great artwork.

In addition, new standards have been created even in road facilities, visual aids and illuminations, and parks and green spaces distributed properly to go well with the alpine areas of Mt Paektu, making Samjiyon a new model of local urban construction.

By Kim Rye Yong PT



RI KWANG SONG / PICTORIAL KOREA

A panoramic view of Samjiyon, Ryanggang Province, the DPRK, that has undergone a radical transformation to go well with the surrounding area of Mt Paektu.

Making the most of local economy and culture

Local factories and cultural centres in Samjiyon City also make the most of its

peculiarities.

Factories relying on raw materials available in the

northern alpine area have been built wonderfully.

The Samjiyon Blueberry Drink



Dwelling houses in Samjiyon are of both modern and local elements.

Support comes from nationwide

on a daily average.

Working people, students and schoolchildren across the country took an active part in the nationwide manpower and material support to the city construction project, following the example set by the triplet girls of Pyongyang who volunteered to live and work in the city.

Family and twin-sister shock brigade members were seen everywhere at the construction site and university students volunteered to work for the project one after another during their summer and winter vacations.

Lots of women also volunteered to work in the construction site from across the country, giving aid materials and looking after the builders.

Volunteers also included a woman living in Sadong District of Pyongyang who recovered from an incurable disease under the socialist system and pensioners who encouraged the builders.

Supreme Leader Kim Jong Un highly praised many people for their sincere material and moral support to the construction of Samjiyon City.

By Pang Un Ju PT

building and workers' hostel.

Advanced technologies have been introduced to establish an energy-saving integrated manufacturing system in the factory so that it can reap maximum profits by monitoring, measuring and controlling all production processes and management equipment automatically and analysing and estimating production command and management activities scientifically and comprehensively.

With production buildings, welfare facilities, a storehouse and others, the factory produces blueberry wine, juice and jelly, local specialties, from blueberries harvested from the pollution-free, natural forests. All processes are automated and germ- and dust-free at a high level from fruit selection to packaging.

Built in an area of some 27

920 square metres, the Samjiyon Potato Farina Factory has buildings for the production of potato farina and processed potato products, a 20 000-ton capacity potato storehouse, auxiliary

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The city also has the Pegaebong Ski Slope, a hospital, hall of culture, schoolchildren's palace, indoor stadium and sci-tech library.

By Ri Sung Ik PT

HONG KWANG NAM / PICTORIAL KOREA

REUNIFICATION

Anecdotes tell about Kim Jong Il's effort for national reconciliation

Chairman Kim Jong Il, who devoted untiring efforts to national reconciliation and unity, left many impressive stories during his meeting with personages of the south Korean political and public circles.

On a visit to lodging of Jong Ju Yong

In late October 1998 Chairman Kim Jong Il, who was on a field inspection tour of a local area, changed his schedule and returned to Pyongyang to meet Jong Ju Yong, honorary chairman of the Hyundai Group.

And he made his way to the lodgings of Jong and his suite.

As he met Jong who came out to the main gate to greet him, he said he was sorry for having come to meet him late at night, but he returned to Pyongyang as he thought he had to go and meet the honorary chairman of advanced years before he came to him.

Jong was so grateful to his thoughtful and kind words that he said that as he met the Chairman he would live to be over 100 years old and he would often visit Pyongyang.

That day the Chairman attentively listened to what he told him and had a heart-to-heart talk with him.

And he posed for a photo with him and his family members in full consideration of his desire, offering him to have a photo taken with him to celebrate their meeting and politely saying Jong Ju Yong who was advanced in age should stand in

the middle, and left his lodging late at night.

Warm hospitality

On June 13 2000 Pyongyang Airport was crowded with citizens who came out to welcome President Kim Dae Jung of south Korea with bundles of flowers in hands. He and his party were to visit Pyongyang to have an inter-Korean summit meeting for the first time 55 years after national division.

It was about the time when the airplane arrived at the airport.

The south Korean entourage who came to Pyongyang one step ahead were so surprised to see the unexpected reality.

Chairman Kim Jong Il came out to the airport. And cheers of hurray resounded through the airport.

Shortly after, the Chairman warmly welcomed President Kim Dae Jung and his party alighting from the airplane.

Referring to this warm hospitality at the time, a south Korean media company said: "Warm kindness and sincerity, hospitality and services, preparations and efforts shown by Chairman Kim Jong Il were the flow of thick blood and the greatest reception incomparable to head of state diplomacy in the international community."

Western media also splashed the news, describing Chairman Kim Jong Il's reception at the airport as a "great unprecedented event" and "an exception completely overturning the predictions journalists have made".

Clear-cut answer

One day in August 2000 south Korean media representatives on a visit to Pyongyang at the invitation of Chairman Kim Jong Il attended a reception at the Mokran House which took place in the presence of the Chairman.

They were so anxious not to miss the golden opportunity that they tried to ask questions on issues they wanted to know.

Naturally, the range of their questions widened, leading to the issue of national reunification.

Nearly at the closing time a representative stood up and asked: "Mr Chairman, when do you think the country will be reunified?"

All of the media representatives started with surprise at the question.

In actuality, the country's reunification had been suffering serious setbacks for over half a century and no one could conclude immediately and exactly when the country would be reunified.

The Chairman, however, instantly said that when the country will be reunified hinges on the decision of the north and south and that national reunification would be achieved at once then and there if the Korean nation decided and worked together with each other.

The light of admiration shone in the eyes of the south Korean media representatives.

By Choe Yong Nam PT

WILDLIFE

Protection of wildlife guarantees human future

Shortly ago, the International Union for Conservation of Nature added over 7 000 species of animals and plants to the list of endangered living things and gave a warning of the unprecedently rapid extinction of living things caused by the destruction of nature. It announced that it has now kept 105 000 species of living things under observation, of which 28 000 species are on the verge of extinction.

According to the data issued by the organization, some freshwater and sea fish species are in the "extremely dangerous" state before extinction.

Man gets immense wealth from nature, especially foods, medicinal materials and fuel. The pollination of 75 percent of crops depends on animals. The coastal ecosystem reduces the danger of tidal wave damage. Land and sea ecosystems absorb carbon dioxide.

But human activities destroy such ecosystems, which are organically linked to the existence and development of humankind, at high speed.

"At present, the greatest threat to birds and mammals is humankind. A large number of animal habitats have been destroyed by reckless deforestation, hunting, farming

by the use of chemicals, urbanization and other human activities as well as global warming," said the leader of a foreign ecosystem research group.

It is said that 13 million hectares of forests are destroyed every year worldwide.

The area of wetland saw a 35 percent reduction between 1970 and 2015.

Many mammals and amphibians are in jeopardy due to the reduction of their habitats.

Poaching for moneymaking is another contributor to animal extinction.

In South Africa, habitat

SOLIDARITY

World organization supports Koreans' cause

The 20th Congress of the World Federation of Democratic Youth took place in Cyprus between Dec 3 and 6.

It was attended by delegations and delegates of youth and students' organizations of 43 countries including the DPRK, representatives of international and regional organizations and guests of honour.

The congress, which was held on the theme of advancing towards the future world the youth have wished and struggled for, reviewed the activities the federation conducted over the past four years, decided on the orientation of activities for the next term, informed the participants of the political situation of each country and discussed the issues to be included in the political declaration.

The WFDY president in his speech called on all member organizations to be united firmly and wage a vigorous struggle for the building of new peaceful society with united strength, given that the imperialists are intensifying manoeuvres and hostile acts against legitimate sovereign states, especially the DPRK, Syria and Venezuela, to seriously endanger global peace and security.

The head of the DPRK delegation referred to the efforts of the Korean people including youth to achieve the independent reunification of Korea and build a powerful socialist country by dint of self-reliance in the face of heinous and persistent sanctions and threat by the imperialists.

Representatives of youth organizations of Russia, Cuba, Syria and other countries disclosed that interference, blockade and aggressive manoeuvres the imperialists are perpetrating in different parts of the world are wrecking peace and stability and fuelling mistrust between nations and ethnic groups, and expressed their determination to conduct anti-imperialist solidarity

of more than 80 percent of global rhinoceros population, about 7 000 rhinoceroses were killed by illegal hunters in 10 years. Experts are of the opinion that rhinoceros will be exterminated before 2026 if protective measures are not taken.

The extinction of wildlife is a matter of time and its damage will boomerang on humans.

For example, the extinction of bees and butterflies will cause food scarcity.

An international survey conducted a few years ago

activities more actively in order to defend social justice.

The congress adopted a statement in support of the Korean people and youth in their efforts to achieve durable peace and reunification of the Korean peninsula, along with a political declaration and international solidarity resolution.

The statement said that though over a year has elapsed since the adoption of the June 12 DPRK-US joint statement, there has been no progress in bilateral relations yet and the Korean peninsula situation is locked in a vicious circle of escalating tension.

To prevent a war and achieve durable peace on the Korean peninsula constitutes a contribution to global peace and security, the statement said, calling upon the world's progressive peoples and youth to actively join the Korean people in their struggle to defend national sovereignty and dignity and remove the danger of war from the peninsula for good.

The statement expressed the firm belief that the Korean people and youth will emerge victorious in the sacred war of justice against imperialism.

The anti-imperialist solidarity statement, which was adopted at the Asia-Pacific Conference of the WFDY on Dec 5, condemned all acts of wrecking peace and stability on the Korean peninsula, worsening the regional situation and barring global peace and prosperity. It said all forms of the imperialists' moves to isolate and stifle socialist Korea would not be tolerated and extended full support and solidarity to the struggle of the Korean people and youth.

The general and coordinating councils, the leadership bodies of the WFDY, were newly elected and the Kimilsungist-Kimjongilist Youth League was elected to the leadership of the federation.

By Om Ryong PT

found out that 40 percent of invertebrates, which play the role of intermediary in pollination, are on the verge of extinction and most of them are bees and butterflies. If bees become extinct, it will increase the production cost of cereals and cause food shortage.

To protect the ecosystem is not a problem confined to any specific organizations or some forest rangers, but a matter that the whole humankind should join efforts to solve.

By Min Chol PT

ROUNDUP

2019 glitters with gold medals

This year, the DPRK which made a big stride in building a socialist power has made notable achievements in the sector of sports, too.

At least 180 golds snatched from intl events

Weightlifters were the first to win gold medals of international games this year.

They bagged six gold medals at the IWF World Cup last February.

Later, they snatched seven golds at the Asian Weightlifting Championships and broke five world records and got another seven golds at the IWF World Weightlifting Championships. They renewed 34 records and collected 55 golds at the Asian Youth and Junior Weightlifting Championships.

Taekwon-Doists fully exalted the honour of the birthplace of the martial art.

They topped the country rankings with three trophies and 34 gold medals at the 21st Taekwon-Do World Championships held in Bulgaria last August.

DPRK players bagged nine golds at the 7th Military World Games and established new Asian and world records in the men's 10-metre air pistol and won six golds at the 14th Asian Shooting Championships.

They obtained gold medals at different international games including the FINA diving competition, the junior women's game and the juvenile women's game of the IHF Trophy Tournament East and Southeast Asia and the Asian Junior Wrestling Championship.

Moreover, they gained gold medals one after another at the Judo Asia-Pacific Championships, the IJF Grand Slam in Abu Dhabi and other international judo games, and received gold medals in the men's and women's events at the Asian Boxing Championships.

Acrobats won again the senior women's modelling duo at the 11th Asian acrobatic gymnastics championships, thus contributing to making the DPRK clinch four straight victories in this event.

Weightlifters not only were the first to bring home

glory this year but also adorned the end of the year with gold medals.

They bagged 10 golds at the recent IWF World Cup in China.

As a result, the Korean athletes gained over 180 gold medals in international events this year, hoisting the national flag in the international arena.

National records reset

New national records have been established in different events in 2019, which marked an important occasion in developing professional sports techniques.

Kim Myong Hyon from the Pyongyang Sports Club and Yang Tae Bong from the April 25 Sports Club reset national records in the men's 109kg and 96kg weightlifting events respectively at the Mangyongdae Prize Games in celebration of the Day of the Sun last April.

More than 10 players of the Korean People's Army and Amnokgang defence sports clubs reset national records in shooting.

The April 25 Sports Club's Kim Sol Song established new records in the 50- and 100-metre butterfly stroke, the 100-metre freestyle and 4x100-metre freestyle relay.

Jo Kum Ryong from the Amnokgang Sports Club reset a national record in the men's 100-metre race, while 16 players broke records in weightlifting, track and field and shooting at the youth event.

Eight new youth records were established in track and field at the youth championships.

More than 290 players from 28 sports clubs including April 25, Amnokgang, Kigwancha and Pyongyang competed in the championships.

Ko Kum Ryong from Korea University of Physical Education, who had set a national youth record in the men's 200-metre running last year, renewed the men's youth 100-metre running record, while Chilbosan's Ri Jin Mi reset a new youth record in the women's 100-metre and 200-metre running events, April 25's Kim Son Chol in the men's 800-metre running, Chongchongang's Kim

Myong Il in the men's 400m steeplechase and Korea University of Physical Education's Sin Ryong Jae in the men's 110m steeplechase.

Seventeen records were reestablished in weightlifting, track and field and shooting at the national championships.

In the shooting event, Choe Ji Ye from the Amnokgang Defence Sports Club renewed the national record in the women's 10m air rifle. Jo Yong Suk, O Hyon Ju and Ri Hyang Sun of the Amnokgang Defence Sports Club set a new record in the women's 10m air pistol.

Mass sports

A group running, mass rhythmic exercise and health-promoting Taekwon-Do competition of officials of commissions, ministries and national agencies took place on January 13 to mark the first sports day of this year.

With the enthusiasm for mass sports sweeping the whole country, many sporting events were held, especially the 24th round of Paektusan Prize Games of Civil Servants, the February 25 Prize Bowling Tournament, the 13th national agricultural workers' basketball tournament, the 7th sports event of public health sector and the civil servants' games-2019 in celebration of the DPRK's founding anniversary.

The badminton tournament of elderly citizens and enthusiasts held in Pyongyang to mark the International Day of Older Persons stood out among other mass sports events.

Water sports were actively conducted to mark the months of maritime sports in July and August.

The civil servants' swimming games, schoolchildren's river-crossing contest and other swimming competitions showed the locals' enthusiasm to further polish up swimming techniques.

Amid the growing public atmosphere of attaching importance to sports and making sports mass-based and part of everyday life, more than 170 institutions, factories and enterprises obtained the title of model sports unit.

By Ri Sung Ik PT



DPRK sportspeople have collected more than 180 gold medals at international competitions this year, including ten golds at the 2019 IWF World Cup.



New records have been set in different events like weightlifting, track and field and shooting at the national championships and hectic sporting activities conducted at grass-roots level.

