President Islam Karimov Addresses the International Conference in Samarkand

President of the Republic of Uzbekistan Islam Karimov delivered a keynote speech at the opening ceremony of the international conference “The Historical Legacy of Scientists and Thinkers of the Medieval East, Its Role and Significance for the Modern Civilization”.

Following is the text of the address.

Distinguished participants of the conference, ladies and gentlemen!

It is an enormous pleasure to me to greet you, participants of the conference, and first and foremost our esteemed guests – heads and representatives of prominent international organizations and institutions, scientific and research centers, universities and other higher education institutions, renowned scholars and specialists – and express my profound respect and gratitude for your acceptance of our invitation to take part in this forum.

Our conference is added with a special meaning and unique significance by the fact that it is taking place in Samarkand, which for its nearly three-thousand-year history has been a crossroad of civilizations and cultures of peoples.

The ancient and eternally young Samarkand is widely known in various corners of our planet as a majestic city with an inimitable Eastern flavor, the richest history and the surviving extraordinary and amazing monuments of the past. It is hardly accidental that Samarkand, along with Rome, is famed across the world as the “eternal city”, whose resplendent blue cupolas have been appealing to millions of tourists.

As a man who was born and raised in this city, I am doubly pleased to convey on behalf of all the locals our sincere hospitality and say to every one of you, “Welcome to Samarkand”.

Dear friends!

The goal sought by our conference is to discuss and thoroughly perceive of the scientific legacy of the outstanding scholars and thinkers of the medieval East, evaluate their role and place in the history of the modern civilization.

I believe it is also important to afford a new potent impetus to the further intensive research works and the popularization of their genuinely invaluable scientific heritage, to reveal the urgency and demand in the discoveries made by them for the contemporary science and progress.

The history of the medieval East suggests that the boom in culture and education, medicine, literature, arts and architecture, the emergence of schools of thought, the inflow and generation of talents used to be contingent by and large on such factors as the speedy economic and agricultural and urban development, the high level of craftsmanship and commerce, construction of roads and laying out new caravan routes and, what is crucial, the preservation of relative stability.

From this perspective I would like to stress in particular that scientific progress is impossible if there is no stability. Academies, higher education institutions and the like thrive, as do education in
general and the interest in this all among the people who desire to advance and move ahead. It is all possible only when calmness and stability reigns, and only then people go to bed not scared of the problems and cataclysms that could await them the following day. This is a truth whose correctness has been proved in the course of many centuries and ages. I am convinced that you understand me well in this context.

The advanced culture, that of Central Asian peoples in particular, is indicated by the ancient monuments and records of the Bactrian, Soghdian, Orkhonian, Khorezmian script, wall painting and sculpture, architecture and many other arts. Established from the 11th through to the 13th century, the Khorezmian state used to encompass a considerable part of Asia by uniting the lands of neighboring peoples from India to the Persian Gulf.

It is hard to overestimate the tremendous and irreplaceable role of the Great Silk Road (the 2nd century BC – the 15th century AD) as an international transport artery of antiquity that used to link such countries and regions as China, India and Central Asia, the Middle and Near East and the Mediterranean. That route helped secure not only trade relations among the abovementioned lands, but also the information dialogue among continents and countries. It used to serve as a champion of swift spread of new technologies and innovations (production of silk, china, powder, paper and many other things), agricultural crops and agricultural technologies, along with cultural values, by creating thus conditions for an inter-civilization and technological exchange.

Special role was played by the mutual enrichment of peoples of various countries with scientific knowledge and achievements. Information on the activities of scholars and thinkers of the East and West used to travel along the routes of the Great Silk Road, while practical access to the works, ideas and discoveries of such great academics of the antiquity as Socrates, Plato, Aristotle, Ptolemy and others.

In accordance with traditions of those times, enlightened thinkers and philosophers, scientists and poets are known to have found refuge and patronage, as a norm, at palaces of rulers and sultans.

They included the widely famed galaxy of scholars who successfully worked in the 9-11th centuries in the Mamun Academy in Khiva and the House of Wisdom (Bait al-Hikma) in Baghdad, and also at the school of Ulugbek in Samarkand in the 15th century.

According to researchers, the East, Central Asia in particular, was the source of two powerful scientific-cultural booms in the 9-12th centuries and in the 14-15th centuries, which have by right been acknowledged by the world academic community as the era of the Eastern Renaissance that made a beneficial impact on the processes of renaissance in other regions of the world.

At the same time, as many scholars note, the Renaissance in Europe resulted in the creation of great works of literature, arts and masterpieces of architecture, discoveries in medicine and human cognition, whereas the Eastern Renaissance was distinct, first and foremost, with the advancement of natural and exact sciences, namely, mathematics, astronomy, physics, chemistry, geodesy, pharmacology, medicine, as well as history, philosophy and literature.

When we speak of the great scientific discoveries of the early period in the medieval East, we cite among the first the name of Muhammad ibn Musa al-Khorezmi who made an invaluable input into the contemporary mathematics, trigonometry and geography. He was first to make a case for and
introduce the tenfold positioning system of calculation, the zero sign and polar coordinates, which proved to be turning points in the evolution of mathematics and astronomy.

Al-Khorezmi instituted algebra as a science, elaborated clear-cut rules in the narration of scientific information and treatises, authored many works on astronomy, geography and the theory of climate. The services made by al-Khorezmi in the progress of world science are universally acknowledged; his name and his works – exclusively among the academics of the medieval East – are perpetuated in contemporary scientific terms like “algorithm” and “algebra”.

Written as far back as in the 9th century, the fundamental work by Ahmad al-Ferghani “Book on Elements of Astronomy” contained initial knowledge on the constitution of the world, sizes of the Earth, proofs of its sphericity, and up to the 17th century was used at European universities as the principal text in astronomy, served as a scientific foundation for Columbus, Magellan and other travelers of the era of Great Geographical Discoveries. One of al-Ferghani’s considerable practical achievements was the elaboration of the theory of astrolabe – the principal astronomical instrument in the Middle Ages, as well as the creation of a facility on the Nile River known as the Nile Measurer that functioned as the major instrument in defining the level of water in the river during many centuries.

As the President of Uzbekistan, I was honored, while in Cairo, to have a look at that Nile Measurer and admire the genius of the man who we regard as our ancestor.

Another marvelous scholar, Abu Nasr ibn Irak, who is considered the founding father of the spherical trigonometry, is renowned with his innovations in mathematics and astronomy. He is dubbed by right as the second Ptolemy.

It is hard to estimate to the full extent the genius of the works created by the remarkable scientist of encyclopedic knowledge – Abu Raihon Beruni. From more than 150 scholarly works by Beruni, only 31 masterpieces have survived to us, but even those excerpted data and knowledge we dispose of today demonstrate the multifaceted heritage he left.

Beruni was first to offer an original theory of seas and the structure of the globe, calculated the Earth’s radius, explained the presence of vacuum, predicted (500 years prior to Columbus) the existence of a continent beyond the Pacific and the Atlantic, was first to work out a classification of minerals and the theory of their origins, laid the foundations of the science of geodesy. It is not accidental that the natural science historians of the entire world refer to the 11th century as the “Age of Beruni”.

A peculiar admiration of the posterity is drawn to the life and activities of Abu Ali ibn Sino, called Avicenna in the West, who earned the well-deserved title of the “Islamic world’s most celebrated philosopher and scholar of encyclopedic knowledge and one of the greatest thinkers of the humankind.” Having started scientific research at the age of 16, he wrote more than 450 works, primarily in the sphere of medicine and philosophy, along with logics, chemistry, physics, astronomy, mathematics, music, literature and linguistics. His works were admired by Leonardo da Vinci, Michelangelo, Francis Bacon and many other generations of academics.

We recognize with pride that with his priceless fundamental work – the Canon of Medicine, the most celebrated text in the history of medical science – Ibn Sino defined major directions for the development of medical disciplines for many centuries to come and factually laid down the
foundation for the principal methods of practical medicine and pharmacology, still actual and suitable to these days. It was no mere chance that the text was one of the first books published in Europe in the 15th century, and it continued to be a textbook in medicine at leading European universities for 500 years.

A classical example of the highest level of scientific dialogue, the profound rethinking and development of philosophical views of antiquity by our great thinkers is the correspondence between ibn Sino and Beruni with regard to Aristotle’s “Book about the Sky”.

The services of Beruni, ibn Sino, other outstanding scientists and thinkers who worked in Khorezm in the 10-11th centuries, are not confined just to the scholarly texts and discoveries, but also include such an important issue as the formation of an intellectual school of thought – the Khorezm Academy of Mamun that left a deep track in the intellectual history of the human race. The scholar with encyclopedic knowledge of the 10th century Abu Nasr Farobi used to be referred to as the Aristotle of the East by his contemporaries. He enriched many sciences, evolved philosophical views of scholars of various countries, and wrote more than 160 works.

Among the most renowned among them are “Word on Substance”, “Book on the Origins of Sciences”, “On the Meaning of Reason” and other texts. A considerable part of the academic works by Farobi has been translated into many European and Eastern languages and is still a subject matter for thoroughgoing research.

A galaxy of magnificent scientists and intellectuals of the medieval East would be incomplete if we fail to mention the so-called epoch of Temur and his descendants Temurids, whereby a bright star is still associated with the name of Mirzo Ulugbek, along with his numerous companions and disciples like Kazizoda Rumi, Ali Kushchi and others.

It is well known that a grandson of Amir Temur’s and ruler of Samarkand for more than 40 years, Mirzo Ulugbek earned fame as a great astronomy scientist, whose name is cited along the names of such geniuses as Copernicus, Giordano Bruno, Galileo and others.

Created by Ulugbek in the 15th century, a set of astronomical tables contained the definition and location of 1,018 stars by becoming a new catalogue of astronomical measures for 16 centuries.

His companion al-Kashi was first to introduce decimal fractions, to elaborate the methods of consistent approximations and discovery of roots of arbitrary degrees.

One may enquire more closely into the Ulugbek observatory during a trip to the museum of Ulugbek located on one of the high hills surrounding Samarkand.

The huge, boundless fount of wisdom and humanistic cognition of the surrounding world constitutes a creative heritage of such greatest philosophers, poets and enlighteners as Abu Abdullah Rudaki, Firdousi, Nizami Ganjavi, Saadi, Hafiz Shirazi, Jami, Alisher Navoi, Babur, and of many others that is truly a treasury of world significance.

The author of the history’s first Dictionary of Turkic Languages was Mahmud Kashgari, who accompanied his work with a splendid collection of Turkic proverbs and poems that constitute the goldfield of vocabulary in the full sense of the word. Kashgari is considered as the first researcher of language, culture, ethnography, folklore of Turkic peoples.
Quite celebrated during his lifetime was Mahmud Zamakhshari, the linguist, literary critic, geographer and philosopher, who is recognized as the founding father of Arab grammar. He also was the author of the history’s first multilingual Arab-Persian-Turkic dictionary.

And, surely, all of us should pay tribute and respect to the galaxy of great historians of the medieval East, whose works constitute invaluable evidence to the events of those times—first and foremost Ahmad ibn Arabshah, Nizamiddin Shami, Sharafiddin Ali Yazdi, Hafiz-i Abru, Khondamir, Abdurazzaq Samarkandi and others.

Esteemed participants of the conference!

Today, after nearly a thousand years, we continue to admire the genius, the multiplicity of interests and encyclopedic knowledge of scientists and thinkers of the medieval East. Unfortunately, due to various cataclysms experienced by mankind, wars, natural disasters, we can say that only a thousandth of their great heritage has survived to us. Now it is difficult to imagine that in certain periods of history, when ignorance and obscurantism prevailed, scientists were persecuted and prosecuted, the lives of many of them ended tragically.

In this case, as the facts indicate, the first victims of confrontations, clashes and conflicts among people, were sources of knowledge, that is, priceless manuscripts and texts. You all know very well that the antiquity’s largest library of Alexandria and a unique library of Ulugbek were lost so irrevocably. Unfortunately, this sad list may be continued.

But, despite all the difficulties and ordeals, scientists and thinkers remained devoted to their research duties, the ideals of humanism and enlightenment.

And today, we have every reason to assert that their lives that were sacrificed to serve science, as well as their achievements that currently delight all the enlightened humanity, were indisputably a real spiritual heroic deed, to which we all bow our heads.

Today I would like to emphasize that a huge reservoir of scientific heritage, of the great discoveries by geniuses of the medieval East is not fully studied and is waiting to be explored.

After all, in Uzbekistan alone, today the stacks include over 100,000 handwritten papers, most of which are included in the UNESCO World Heritage List. Manuscripts of scholars and thinkers of the medieval East constitute the “golden stock” of libraries in many countries in Europe and Asia: the UK, Germany, Spain, Russia, France, Egypt, India, Iran and others.

What do these facts tell us? This, above all, is another confirmation that the brilliant works and scientific heritage of outstanding scientists and intellectuals of the medieval East are an asset of not only one nation or people, but of all mankind. It is a priceless endowment, a source of wisdom and knowledge for new generations of people and, if you like, an excellent material for new discoveries.

It is reasonable and effective to use this extant richest material for the benefit of the entire human race; this is our task, it is our duty.

Special attention and recognition deserves the invaluable role of dedicated scientists in this case, thanks to who we are endowed with priceless scientific legacy of the past.
I would like to take this opportunity to address you today, and in your face to your colleagues – scientists, historians, archaeologists, anthropologists, specialists in many other sciences, to all who are engaged in hard work over yellowed manuscripts, ancient manuscripts, – with words of sincere gratitude for the fact that thanks to you the treasures of human thought of the past become available to descendants and contemporaries, this beautiful and mysterious world of previous eras and civilizations opens up to us.

I sometimes think that there is a lot of sciences in the world, and outstanding scientific achievements are made in all areas, but I always marvel at the painstaking work that best characterizes the Uzbek proverb that to be into science is like digging a well with a needle. Above all it is those who work on manuscripts for ten and twenty years, and for lifetime. I want to thank them individually for such insistent aspiration to open to the world the heritage of the great geniuses, without which humanity can scarcely evolve.

One of the most respected members of our conference is a leading researcher in our region, the Japanese professor Kato, whose scientific activity has helped open a lot of unknown pages in the history, ethnography, archeology and arts of Central Asia. His research on the Great Silk Road, the state of Bactria, as well as the archaeological research ongoing since 1989 in Surkhandary region at the settlements of Dalverzintepa and Koratepa, translations into Japanese of the works of Amir Temur, Babur, Ulugbek and other great thinkers of Central Asia led to the knowledge of the history and culture of our vast region to be the world heritage.

And I personally, time and again, want to thank him for what he is doing for the development of the culture of our peoples. He was awarded the Dustlik Order, which means friendship. This is so in tune with his purpose in life, in which he creates friendships, something without which humanity can not exist, after all, the human being is alive with friendship, not wars.

Another participant in the conference – Professor Frederick Starr, the famous American historian, archaeologist, anthropologist, chairman of Central Asia and the Caucasus Institute at Johns Hopkins University, who has published 22 books and over 200 academic articles. In 2009, his essay “The Rediscovery of Central Asia was recognized in the United States one of the best media publications of the year.

The Eastern Renaissance period is deeply studied also in academic and cultural circles of India. In our hall today is present Professor Mansura Haidar, the academic director of the Indira Gandhi National Center of Culture, for many years has been engaged in fruitful comparative study of Central Asian written sources of the 9-15th centuries.

Her scientific monograph “The Historical Significance of Zafarnoma by Nizomiddin Shami” has received international recognition, in which she examined in detail a book devoted to the activity as statesman of Amir Temur, the only text written during the latter’s lifetime.

Our guest from the Republic of Korea Park Choonbae, President of Inha University, one of the leading universities in South Korea and the Asian continent, is the recognized organizer of higher education, specialist in aerospace engineering, led research for many years in the field of aeronautics and space in South Korea. With his direct, personal involvement, a branch of the famed Inha University opens this year in Tashkent for training undergraduate and graduate students in information technologies.
Professor of Cairo University, a well-known scholar of Turkic philology and literature Magida Makhluf last year completed her lasting work on the translation of Baburnama into Arabic, setting out her deep academic commentary and offering critical analysis of studies conducted hitherto. It is very important that the outstanding work of our great ancestor Zahiriddin Muhammad Babur, along with English, Persian and many other languages, today has become available also in Arabic.

We greatly appreciate the scientific activities of Professor Jules Janssens of the Catholic University of Leuven in Belgium, who is the author of over 60 publications in various fields of history and philosophy of the East. His book “Ibn Sino and His Influence on Arabic and Latin World” and the collection “Avicenna and His Legacy” received acknowledgement and great recognition not only among professionals, but also a wide range of readers around the world.

I would really like to meet this person and ask: What attracts you to the work of a genius like Avicenna? I would like to see you appear on our television speaking on this subject matter and tell our public, our youth about your love for the history of the East, especially the legacy of Avicenna.

I would like to state in particular Professor Shi Yongli, head of the Department of History and Archaeology of the University of Science and Technology of China, the world-renowned expert on the history of astronomy. Most famous are his comparative studies of the development of astronomy in the Middle Ages in Central Asia, China, Korea and Europe. He is a world famous activist of the history and development of astronomy, member of the editorial boards of several leading academic and popular publications in China and Southeast Asia.

Also deserving a special respect is the selfless activity of Dr. Mark Bonnell, widely known physician in Europe and the recognized expert in the field of arranging modern health care systems. Headed by him, the Association Avicenna-France has been making an invaluable contribution to the promotion of scientific works of Ibn Sino in the field of culture, philosophy and medicine in France and Europe.

The celebrated Dutch scientist Robert van Gent of the Institute of the History of Science at Utrecht is also present at our conference. He has published more than 10 books and 60 scientific papers covering not only the issues in modern astronomy, geodesy and cartography, but also the history of their evolution, including that in the medieval East.

The same recognition and respect deserve almost the absolute majority of scholars and professionals who are making a worthy contribution to the study and promotion of the abiding importance of heritage of scholars and thinkers of the medieval East. Thank you all for your hard work, your contribution to the advancement of science and education.

Dear friends!

I am convinced you will agree with me that a deep respect for their history, the garnered experience, intellectual potential being created and considered the greatest treasure in the world, constitutes the basis for both the material and spiritual progress of any nation.

In this regard, I think it would be appropriate to repeat the words uttered by the great Spanish writer Cervantes that history is a treasure of our deeds, witness of the past, example and lesson for the present, and warning for the future. Here I would especially highlight the phrase “warning for the
future”. After all, who does not know history makes mistakes at every turn, and people who are not proud of their history, can not see their future.

We are well aware that without a thorough knowledge and development achieved by remarkable discoveries of the past, including those the medieval East, it is impossible to reach new, higher boundaries neither in science nor in other areas. We will continue to follow this principle in our activities.

The human race today faces new global challenges, I would include as pressing ones as climate change, protection and preservation of ecosystems and biodiversity, depletion of natural resources and others, the reasonable optimal solution to which becomes the strongest challenge of our time.

Solving these problems may require intellectual breakthroughs, rethinking and formulation of new laws developed in the course of many centuries, the organization of large-scale scientific research and experiments in a wide range of areas of study of the world around us.

To be sure, this will in turn require huge funds and investments, rational use of brilliant scientific achievements made in the past. If you think about it, in what difficult conditions the scientists and thinkers of the medieval East, whose names sounded in this hall today, created their fundamental scientific works and made their brilliant discoveries. After all, they did not have the opportunities we have today, nor modern laboratories or complex scientific instruments or advanced technologies. We all know that modern science can not develop without huge investments, which in turn serve as the basis for the emergence of great ideas and discoveries.

It becomes apparent that not without reason the 21st century is called the century of knowledge and intelligence of the human mind.

What is the essence of this?

We have always been aware that those states and societies who do not pay enough attention to careful preservation, enrichment and enhancement of the historical, cultural and intellectual heritage, as well as to the education of the younger generation on the basis of universal and national values, who do not set as their goal as formation of a harmoniously developed and independently thinking individuals having their views, their choices, their civic stance, – such states and societies are doomed to be on the sidelines of history.

Right from the first days of independence and sovereignty, we came to a firm conviction that it is impossible to build a new society without fundamental reform of the current educational system that was formed in the past, complete rejection of stereotypes and dogmas of the past communist ideology, without strengthening the democratic values in the minds of our young people.

If we consider that the population of Uzbekistan today is 31 million people, more than 60 percent of which accounts for young people aged under 30, the need for and role of these reforms become readily apparent themselves.

In accordance with the national program, a twelve-year universal compulsory free education under the scheme 9 +3 was introduced in the country. What does this mean? If a person wants to fulfill their constitutional duty, his/her duty to the people and the country, they should teach their children for 12 years. The principal feature of the viability of our model lies primarily in the fact that after 9
years of study at secondary school, in the next 3 years pupils study in specialized professional colleges and academic lyceums, where each of them receives training in 2-3 professional occupations in demand on the market, along with general subjects and disciplines.

I would really like you to visit at least one college, whether in Samarkand or Tashkent. Have a look, in the remotes town or district the best buildings that we have erected are colleges. We have built 1,500 new colleges and lyceums on the state-of-the-art architectural designs. Previously, we used to show foreign guests exotic things, and today we are talking – and you can see our children, learn the conditions under which we give them knowledge, what citizens are growing in our country that we want them to get and what to expect. That is what we believe is the most important, and in this respect I want to say that besides the fact that today young people in our colleges receive 2-3 professions, they also necessarily speak one foreign language, mostly English.

Following a 12-year education, the youths can continue with studies in higher education institutions in undergraduate and graduate courses and fields they opt for.

As a result of successful implementation of the reforms in education meeting modern requirements, we have established an integrated system of continuous education, including all stages of the educational process – starting from pre-school and school education up to secondary specialized vocational and higher education, as well as single-stage post-graduate education, providing, in accordance with international standards, direct defense of the dissertation for the award of doctoral degree.

During the years of reforms, the number of higher education institutions in the country increased twofold, and today more than 230,000 students are enrolled at 60 universities and institutes. In Uzbekistan successfully operate several branches of leading universities in Europe and Asia, such as the University of Westminster, Management Development Institute of Singapore, Turin Polytechnic University, Russia Oil and Gas University, Moscow State University, Russia University of Economics.

Currently, a training and experimental center of high technologies is being created by the National University of Uzbekistan and the Academy of Sciences of Uzbekistan jointly with Britain’s leading institution – Cambridge University.

Starting from September 2014, as I have just said, branch of the South Korean Inha University will start its activities in Uzbekistan, to train in information and communication technologies and computer engineering. Thousands of representatives of our talented young people are educated in the leading universities in Japan, Germany, South Korea, China, UK, USA, France and other countries, opening a large space to their knowledge and skills.

Today, according to the UN, the funds allocated for education in the state budget of our country account for more than 35 percent.

It is no accident that a survey conducted in 2012 by the World Intellectual Property Organization and one of the leading international business schools, INSEAD, research on the level of human capital in Uzbekistan took the 53rd place among 141 countries in the world, and in the level of development of the education system, including the share of funds for educational purposes, research organizers ranked our country 5th in the world.
We are grateful that detached people have drawn impartial conclusions. We did not even know that there is such a center, which is engaged in similar research and generalizations. I think that such studies are useful in themselves, and we will strive for even greater accomplishments.

Esteemed participants of the conference!

Dear friends!

We believe in the exceptional importance and feasibility of this conference on the study and practical promotion of the scholarly heritage left by the great scientists of the medieval East, their invaluable contribution to the development of world civilization.

There is no doubt that, given the composition of the forum participants, this conference is indeed one of the rarest in the world. It is dedicated to a huge legacy of the medieval East not only to inform the general public, but also that it gives impetus to our youth for intellectual development. When I appeal to our youths, I always say that yes, we have a right to be proud of our great ancestors. But at the same time we need to develop and enrich this heritage to make a worthy contribution to this invaluable treasury. In this regard proposals put forward in plenary and breakout panel sessions will help address pressing issues for discussion topics. I would like to emphasize that we are interested in boosting comprehensive cooperation among our respective and leading foreign universities, scientific and research centers, in which we see one of the main objectives of this conference.

What is particularly important is that cooperation among scientists and experts generates interaction among the younger generation of students and young people, regardless of which corner of the world they live in, study and work.

We would very much like to see such forums organized regularly. A very hospitable people lives in Uzbekistan, and we would like you, our distinguished guests, to feel it, every one of you in their own example. Therefore, we are glad to see you not only in Samarkand and Tashkent, but also in such cities – gems of antiquity as Bukhara, Khiva, Karshi, and others who cherish our history and achievements of ancient civilization.

From this rostrum I would like to express once again my sincere gratitude to the audience in this hall, wish you a fruitful work and a pleasant stay in Uzbekistan, a sound health, every success and the best of luck in your noble endeavors.

Thank you for your attention.