**Outstanding personalities**

Russia gave the world a lot of great writers, artists, musicians, philosophers, sportsmen, and politicians. The names of Russian scientists and inventors are known all over the world. Almost in all branches of science and technology the Russian scientists played the leading role.

The achievements of the Russian scientists are great.

Vladimir Vernadsky (1863-1945), a Russian scientist, is considered to be one of the founders of geochemistry and biogeochemistry. The son of a professor, Vernadsky graduated from St. Petersburg University in 1885 and became curator of the university's mineralogical collection in 1886. In 1890 he became a lecturer on mineralogy and crystallography at Moscow University, where he earned his Ph.D. in 1897. He served as a professor at Moscow University from 1898 to 1911. After the Revolution he was active in scientific and organisational activities. He founded and directed (from 1927) the biogeochemical laboratory of the Academy of Sciences at Leningrad (St. Petersburg).

Vernadsky's initial work was in mineralogy. He was also a pioneer in geochemistry. He made a detailed study of the Earth and chemical processes going on in its crust, including the migration of chemical elements.

Vernadsky was one of the first scientists to recognise the tremendous potential of radioactivity as a source of energy, and he was also one of the first to put forward the idea that radioactivity is vital to many processes of the Earth's life. His later years were taken up with the study of the life processes in the atmosphere and in the Earth's crust. Vernadsky is regarded the founder of the theory of the biosphere, that is the total mass of living organisms, which process and recycle the energy and nutrients available from the environment. His name is well known today. For example, an avenue and a metro station in Moscow bear the name of Vernadsky.

I also admire the work of Alexander Tchijevsky (1897-1964), a Russian scientist of space biophysics, and a young friend of Tsiolkovsky. Konstantin Tsiolkovsky (1857-1935) was among the first to work out the theoretical problems of rocket travel in space. He is the greatest Russian research scientist in aeronautics and astronautics who pioneered rocket and space research.

Tchijevsky worked in the tradition of late Cosmic Philosophy. The son of a Russian general, Tchijevsky spent the early years of his life in Kaluga. There he got his education and then worked. In this town he made friends with Tsiolkovsky, who became his advisor and scientific colleague.

For the rest of his life Tchijevsky lived and worked at different research institutions in Moscow. His theories of sunspot activity and human activity stated that sunspot cycle activity increased and decreased in a cycle of approximately 11 years. During World War I Tchijevsky continued his studies at the war front. He noticed that a dependence existed between the severe battles and solar activity.

To test his hypothesis that sunspot cycle influenced human lives, Tchijevsky analysed the data covering each year form 500 BC to 1922 AD. Then he studied the histories of 72 countries during that period, noting signs of human unrest such as wars, revolutions, riots, expeditions and migrations. Tchijevsky found that 80 percent of the most significant events occurred during the years of maximum sunspot activity. Tchijevsky observed that the Russian Revolution of 1917 occurred during the height of the sunspot activity. The scientist spent long years in Soviet prisons because his theory challenged the established system.

Tchijevsky did not believe that solar disturbances caused discontent among people. Solar activity simply served as detonators that set off the reaction of the people who had many grievances and causes for complaint. The recent studies tend to confirm Tchijevsky's hypothesis.

- Can you tell us about an outstanding American personality?

- John Fitzgerald Kennedy (1917-1963), 35th president of the United States (1961-63), faced a number of foreign crises, especially in Cuba and Berlin, but managed to secure such achievements as the Nuclear Test-Ban Treaty and the Alliance for Progress.

John Kennedy grew up in a large family. He was the second of nine children, and his father wanted all his children to compete physically and intellectually with each other. Kennedy graduated from Harvard University. For six months in 1938 he served as secretary to his father, then U.S. ambassador to Great Britain.

In the fall of 1941 Kennedy joined the U.S. Navy and two years later was sent to fight in the Pacific against the Japanese during Word War II. Originally John's elder brother was to become the U.S. president, but he was killed during the war. So, John who originally planned to become a scholar or a journalist was to replace his brother. In 1960 the Democratic Party nominated Kennedy as its official candidate for the presidency.

In 1960 John Kennedy became one of the most famous political figures in the country. He was young and ambitious, people believed that he would open a new era in the American history. During the television debates Kennedy appeared as a good looking and promising person. Kennedy won the election and in 1961 he became the president of the United States. John F. Kennedy was the youngest man and the first Roman Catholic ever elected to the presidency of the United States. His slogan was "Let's get this country moving again". His administration lasted 1,037 days. From the onset he was concerned with foreign affairs.

Kennedy was an immensely popular president, at home and abroad. At times he seemed to be everywhere at once, encouraging better physical fitness, improving the morale of government workers, bringing brilliant advisers to the White House, and beautifying Washington, D.C. His wife joined him as an advocate for U.S. culture. Their two young children were known throughout the country. In 1963 John Kennedy was killed, but the Kennedy mystique was alive.

- Who glorified Great Britain?

- Great Britain is proud of its writers such as William Shakespeare, Daniel Defoe, Robert Burns, George Gordon Byron, Walter Scott, Charles Dickens, Oscar Wild, John Golsworthy. James Cook, William Harvey, Michael Faraday, Edward Jenner, Alexander Mackenzie, Isaac Newton, George Stephenson, James Watt - glorified Great Britain too.

- What are they famous for?

- In 1628 William Harvey discovered the circulation of blood and this led to great advances in medicine in the study of human body. James Cook discovered Australia and New Zealand, and sailed round the world three times. Isaac Newton formulated the law of gravitation, he discovered that white light was made up of rays of different colours, and developed a mathematical method, which is known as the Binomial Theorem, and also differential and integral calculus. Michael Faraday is famous for his work in electricity; he is known as the father of electric motor. James Watt invented the universal steam-engine. Smallpox has almost disappeared due to Edward Jenner who introduced the smallpox vaccination in 1800. The name of George Stephenson is connected with the first railway; he is often called the "Father of Railways". Alexander Mackenzie is known for his exploration of the Arctic.

- Well, what can you tell us about Russian painting? When did a truly Russian tradition of painting begin?

- A truly Russian tradition of painting began in the 1870s with the appearance of the "Wanderers" - the Peredvizhniki. This society was formed by a group of Romantic artists who regarded themselves as Realists. Rejecting the classicism of the Russian Academy they formed a new realist art that served the common men. The "Wanderers" depicted Russian middle-class and peasant life in an easily understood style.

- Why did the "Wanderers" organise mobile exhibitions?

- When they set up a Society of Wandering Exhibitions, they organised mobile exhibitions of their works in order to bring serious art to the people.

- Who belonged to this group?

- The greatest Russian artists of the 1870s and 1880s, including Ivan Kramskoy, Il'ya Repin, Vassily Surikov, Vassily Perov, and Vassily Vereshchagin, belonged to this group. The Wanderers attached much importance to the moral. Their artistic creed was realism, national feeling, and social consciousness. The Wanderers were dominant in Russia for nearly 30 years.

- Can you describe the "Wanderers'" paintings?

- I am impressed by Il'ya Repin's paintings. He is known for the power and drama of his works. He created realistic and historical paintings. His powerful "Volga Boatmen", depicting bargemen harnessed together like beasts of burden, is full of realism. In his "Religious Procession in the Kursk Guberniya" Repin depicted almost all the estates of provincial Russia. With the development of realism, historical painting underwent great changes. In his large historical paintings "Ivan the Terrible and His Son Ivan, November 16, 1581" and "Zaporozhian Cossacks" Repin revived the spirit of historical events, he recreated historical characters, their fates and passions. The painter also made portraits of his great contemporaries, such as Leo Tolstoy, Mikhail Glinka, and Modest Mussorgsky.

- What do you know about English painting?

- English painting up to the 18th century was dominated by foreign portraitists. The modern British school of painting originated in England in the 18-th century. Its founder was William Hogarth. He invented a new form of secular narrative painting. In his moralizing paintings William Hogarth showed the life of his contemporaries. Thomas Gainsborough is known for his landscapes and elegant portraits. The mainstream of English painting in the first half of the nineteenth century was landscape. Constable and Turner were the greatest landscapists of that time.

- Can you dwell on one of them?

- Yes, of course. I'll tell you about John Constable. The son of a miller Constable honoured all that was natural and traditional. He never left England and made dutiful sketching tours through regions of scenic beauty. "The Hay Wain" sums up Constable's ideals and achievements. The painting shows Constable's beloved river Stour with its trees, a mill, and distant fields. In 1829 Constable became member of the Royal Academy. One of his late works of art is "Stroke-by-Nayland". In this large canvas John Constable depicted the distant church tower, the wagon, the plough, the horses, and the boy looking over the gate. The breadth of the picture, and colours painted in a rapid technique are equalled to Titian's or Rembrandt's landscape backgrounds.