







## TWENTY ROMANIAN AND BULGARIAN SCIENTIST AND INVENTORS

















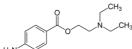
**Ana Aslan** (born January 1, 1897, in Braila - May 20, 1988, in Bucharest)



Physician, professor, academician, scientist and inventor who set up the first Geriatric Institute in 1952 in Bucharest.



She highlighted the importance of procaine in relieving age-related dystrophic disorders by applying her extensively to the geriatric clinic under the name Gerovital.



Procaina is a local anesthetic used initially in dentistry and is marketed as novocaine.

H<sub>2</sub>N' Ana Aslan invented (in collaboration with pharmacist Elena Polovrageanu) the Aslavital geriatric product, patented and introduced in industrial production in 1980.

Ion Cantacuzino (November 25, 1863, Bucharest - January 14, 1934, Bucharest)



Professor Ioan Cantacuzino, one of Romania's most illustrious scientific personalities, is amongst the creators of Romanian experimental medicine, founder of the Romanian microbiology school. His findings have been of particular importance in the treatment of cholera, typhus epidemic, tuberculosis and scarlet

fever.

Ion Cantacuzino has conducted extensive research on cholera vibration and antiholocaust vaccination, active immunization against dysentery and typhoid fever, etiology and pathology of scarlet fever.

Based on his research on cholera vibrone, Cantacuzino has developed a method of anti-holocaust vaccination called the "Cantacuzino Method", a method used today in countries where cholera cases are also reported. Thanks to Ion Cantacuzino, Romania was the second country in the world, after France, which introduced the BCG vaccine ("Bacillus Calmette-Guérin") in 1926 for the prophylactic vaccination of newborns against tuberculosis.

















Henri Marie Coandă (June 7, 1886, Bucharest - November 25, 1972,



Bucharest). He is considered the father of the reaction plane he experienced for the first time in the world in 1910, near Paris.

In 1934, he obtained a French patent for the "Process and device for deviating a stream of fluid flowing into another fluid, which refers to the phenomenon now called the

Coanda Effect", consisting in the deviation of a flowing fluid flowing along a convex wall, a phenomenon first observed by him in 1910, on the occasion of the probing of the engine with which his reaction plane was equipped.



Henri Coanda is the author of over 250 inventions, for which he has obtained 700 intellectual property patents in many countries of the world. The Aviation Museum is home to almost 700 kg of documents belonging to Coanda, containing viable information even for the current technological level.

George (Gogu) Constantinescu (born October 4, 1881, Craiova - December



11, 1965, Coniston, Cumbria, United Kingdom) was an inventor, scientist and Romanian engineer.

He laid the foundation for sonic theory that allows the use of fluid (or fluids in general) for the transmission of power through vibrations (oscillations) by using mathematical models in the field of electricity.

He applied the theory of sonicity in the development of several inventions: the sonic engine, the sonic pump, the sonic hammer and others. Among other achievements,

there is also a pulling device among the propeller blades regardless of its speed and the first automatic gearshift. He actively participated in the construction of Bristol-type English planes before the First World War.

Gogu Constatinescu's account includes about 400 patents, patented in the USA, Denmark, Switzerland, Austria, Germany, Great Britain, France, Romania, etc., as well as others that have never been published.

















**Ștefan Odobleja** (b.October 13, 1902, Valea Izvorului, Mehedinți - d. September 4, 1978, Drobeta Turnu Severin)



He was a military doctor, philosopher and Romanian writer, global precursor of generalized cybernetics, which he himself called "consonant psychology." Thanks to his remarkable, long ignored and unrecognized contributions, Stefan Odobleja was

elected post-mortem member of the Romanian Academy (in 1990).

In 1938, scientist Ștefan Odobleja published in Paris the work "Consonantist Psychology" at "Librairie Maloine". It contained 900 pages and 300 images. The author wrote in the volume that "this book is ... a table of contents, an index or a dictionary of psychology, [for] a ... great Psychology Treaty that should contain 20-30 volumes."

This study set out for the first time in the world the major themes of cybernetics. Worldwide, however, cybernetics is the founder of Norbert Wiener, who published his first work in this field only in 1948. Switzerland is the country that recognized the world scholarly scholar, establishing in 1982 in Lugano in memory its, the Cybernetics Academy of Switzerland.

Ştefan Procopiu (born January 19, 1890, Barlad - August 22, 1972, Iaşi) was a

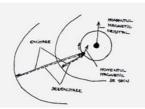


Romanian physicist, professor and inventor, member of the Romanian Academy (since 1955).

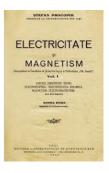
After his studies at the Faculty of Sciences in Iaşi, he has been studying in Paris with professors Gabriel Lippmann, Marie Curie, Paul Langevin, Aimè Cotton and Charles

Fabry, working in Laboratoire de récherches physique. He became a Doctor of Physics at Sorbonne (March

5, 1924), having published 30 papers. He is the discoverer



of the Bohr-Procopiu magneton (1919) (along with Bohr). It is the discoverer of the Procopiu effect. The scientist published 177 scientific papers.



















George Emil Palade (November 19, 1912, Iasi, Romania - October 7, 2008, Del Mar, USA).



He was a medical doctor and American scientist of Romanian origin, a specialist in cell biology, who won the Nobel Prize in physiology and medicine in 1974. In 1986, the National Medal of Science ("National Medal for Science") was awarded to the United States for "fundamental pioneering discoveries in the field of an essential series of supercomplex structures with high organization present in all cells are you coming".

The most important element of Palade's research was the

explanation of the cellular mechanism of protein production. It highlighted intracytoplasmic particles rich in RNA at which protein biosynthesis, called ribosomes or Palade's corpuscles, is achieved. Together with Keith Porter, he published the journal The Journal of Cell Biology, one of the most important scientific publications in the field of cell biology.

Anghel Saligny (born April 19, 1854, Şerbăneşti, Galati county - June 17,



1925, Bucharest), an academician, engineer, Romanian minister and educator, is considered one of the pioneers of the world technique in the design and construction of bridges and silos with metal structure, respectively of reinforced concrete, one of the founders of Romanian engineering.

Anghel Saligny was a remarkable construction engineer, the world's forerunner of the metal and reinforced concrete

science, creating multiple inventions and unique

solutions in the design and construction of bridges and industrial constructions, for the foundation of port and docks.

Anghel Saligny's biggest work is the Cernavoda bridge complex, which at that time was the longest



bridge in Europe and one of the world's largest open-air bridges with a 4.088 m (4.088 m) opening between the left bank and the right of the Danube valley.

















Nicolae Vasilescu Karpen (born December 10, 1870, Craiova - March 2, 1964,



Bucharest) was a Romanian scientist, engineer, physicist and inventor. He has carried out important pioneering work in the field of elasticity, thermodynamics, electrochemistry and civil engineering. He was a member of the Romanian Academy (since 1923).

He conducted studies on iron adhesion to concrete and researched the internal fluid pressure and the osmotic pressure mechanism.

In 1909, he proposed for the first time in the world,

through a note addressed to the Paris Academy of Sciences, the use of high-frequency carrier currents for long distance cable telephony.

He is the inventor of the K-cell, which is made up of a gold electrode and a platinum electrode, while the electrolyte is high purity sulfuric acid.

It is one of the world's longest-running electrical cells.

Eliza Leonida Zamfirescu (November 10, 1887, Galati - November 25, 1973,



Bucharest), an engineer and inventor of Romania, head of the laboratories of the Geological Institute of Romania.

She was a member of the General Association of Engineers in Romania and a member of the International Association of University Women, unanimously recognized as the first female engineer in the world.

He made a special contribution to the progress of the national economy and to the assertion of Romanian

science, through his original works, congresses, symposiums and publications. Here he was concerned with the analysis of drinking water, various minerals, oil, gas, coal, solid bitumen, construction rock and ore preparation, signing 85,000 analysis bulletins, the results of which were published in the series "Economic Studies", edited by Geological Institute.

His contribution to the research of Romania's mineral richness provides him a place of honor in the gallery of the great figures of national, European and world science.







