

ACADEMICIAN CONSTANTIN TURTA - RENOWNED, CONSISTENT, AMBITIOUS, NON-CONFORMIST SCIENTIST.



Mr. Constantin Turta, academician of the Academy of Sciences of Moldova, Professor, Dr. habilitate in chemistry, was born on 20 December 1940, in a hardworking family in the village Buciusca, town New Saharna, district Rezina. This village, according to 2004 census data, is populated by only 263 people.

After graduating the primary school in his native village in 1949 and the school of Rezina in 1956, he is registered at the Faculty of Chemistry, State University of Moldova, and successfully graduates it in 1961. During studentship, he acquires extensive knowledge in all fields of chemistry. But the greatest passion of young Constantin Turta was for inorganic chemistry and physical chemistry.

After graduating the Chemistry Department at SUM, he is assigned to a military unit of the Russian Federation, where he works as a junior scientific researcher (1961-1964). After the expiry of the obligatory work period at the military unit, he returns to Moldova, where he works as an assistant at the Polytechnic Institute of Chisinau. Then he followed PhD studies at the Institute of Chemistry of the ASM and the Institute of Chemical Physics of AS USSR (1966-1969).

After successfully graduating the doctoral studies, he is employed at the Institute of Chemistry of the ASM as senior lab assistant (1969-1971), and is subsequently promoted by competition to the positions of junior scientific researcher (1971-1975), senior scientific researcher (1975-1989) and head of laboratory, since 1989. During 2000-2004 acad. Professor Constantin Turta has worked fruitfully as the General Scientific Secretary of the Presidium of ASM. Throughout his work Professor Constantin Turta proved to be Consistent, Open-minded, Noble, Serious, Talented, Ambitious, Notorious, Trustworthy, Intelligent, Nonconformist (CONSTANTIN), Tireless, Upright, Reliable, Tenacious, Assiduous (TURTA).

Professor Constantin Turta became a world-famous scientist in the fields of bioinorganic chemistry, dynamic effects in coordination chemistry (dynamic electron delocalization in mixed valence iron compounds, the “cross-over” spin transition), in application of Mossbauer spectroscopy in chemistry, magnetochemistry, biologically active coordination compounds, nanomaterials. He founded the scientific school which was further recognized abroad, in the fields of bioinorganic chemistry and use of Mossbauer spectroscopy in chemistry.

Professor Constantin Turta, together with his students, developed new methods of synthesis of coordination compounds with biometals Fe, Co, Mn, Zn, Cu, Ni and carboxylic acids, dioximes, amino acids, Schiff bases, etc. As a result, there have been performed many scientific researches, which were rewarded with valuable results. In order to achieve his goals, advanced scientific equipment was used, which allowed the determination of molecular and crystalline structure, chemical and physico-chemical properties. Thus, the obtained results defined the areas of utilization of new chemicals.

Professor Constantin Turta has worked hard to create the Center for Physical Chemistry and Nanocomposites in 2006 at the Institute of Chemistry of the ASM.

As the executive deputy director of the Center for Physical Chemistry and Nanocomposites, he contributes with his rich experience in solving problems related to studying the processes of obtaining nanoparticles required

in nanoelectronics, development of advanced technologies to obtain the necessary new preparations for the national economy, providing scientific research with performance measurements of various properties of the studied objects from all institutions that deal with chemical research, improving the training of young specialist and highly qualified scientific personnel, through master, doctoral and postdoctoral studies. Academician Constantin Turta prepared 2 Dr. habilitates and 7 PhDs in chemistry.

Special attention was directed by Professor Constantin Turta towards international scientific relations with scientists from Russia, Ukraine, Romania, Spain, Poland, Switzerland, Germany, France, USA etc. Due to these international scientific relations Prof. Constantin Turta obtained through contest and directed 4 research projects with the European Union - INTAS, 4 research projects MRDA-US-CRDF, 1 Swiss research project - Scopes and 1 mobility project in the frames of the European Research Program FP-7.

Sustainable development of society would be impossible without the development and use of new non-polluting energy sources. Everyone knows that the biggest and inexhaustible energy source is the Sun. The main problem consists in finding a way to expand the use of this solar energy, and a way to preserve it. Scientists are working in this field worldwide. Professor Constantin Turta also activates in this field. He synthesized nanocompounds enabling their use in water photolysis, i.e. - to use solar energy to obtain hydrogen and oxygen from water. Addressing this issue would have an enormous positive impact on the global warming phenomenon.

Scientific results obtained by acad. Constantin Turta have been published in over 400 scientific papers, including about 200 scientific articles, published in international journals with impact factor. He is also the author of 28 patents.

Scientific work and practical results of acad. Constantin Turta were deservedly appreciated by superior bodies, being awarded with the Prize of the Presidium of the Academy Award of Science (1995); National Award in Science and Technology (2005); Order of "Labor Glory" (1995); Medal "L. Ciugaev" of the Institute of General and Inorganic Chemistry of Russian AS (2005). Professor Turta is the holder of several national and international exhibitions mentions: Gold Medals - Genius-96, AST-WEST EURO-INTELLECT (Varna, Bulgaria), European Exhibition of Creativity and Innovation, Euro Invent (Iasi, 2009); Silver Medal "European Exhibition of Creativity and Innovation, Euro Invent" (Iasi, 2010), Bronze Medal at the International specialized exhibition INFO-INVENT (Chisinau, 2009), Diploma Genius-96 (Bucharest, 1996), International Exhibition of Inventions " Designs and Trademarks "(Bucharest, 1997).

Dear academician, professor Constantin Turta, on the occasion of Your 70 years anniversary and 50 years of fruitful scientific and teaching activity, on behalf of the scientific community of the Academy of Sciences of Moldova, we address You our best wishes of prosperity, health, welfare, new advances in boinorganic chemistry, nanomaterials and advanced technologies.

Happy Anniversary!

With profound respect, acad. Gheorghe Duca
President of ASM

Dr. hab., Prof. Tudor Lupaşcu,
Director of the Institute of Chemistry of the ASM