

Professor and Academician Şerban Ţiţeica (1908-1985). 110 Years from the Birth of Professor, Academician Şerban Ţiţeica

Prof. Dr. Horia V. Alexandru, University of Bucharest

On March 27, 1908, Şerban Ţiţeica, the third child of the famous mathematician Gheorghe Ţiţeica (1871-1939), a member of the Romanian Academy, was born. Like his older brother Radu Ţiţeica, he attended the high school classes at

the Schewitz-Thierrin Institute, after which he continued his studies at Mihai Viteazul High School, where he passed his baccalaureate in 1926. Şerban Ţiţeica pursued his studies at the Faculty of Sciences, University of Bucharest and obtained a degree in physicochemical and mathematical sciences. He also attended the courses of the Conservatory in Bucharest, being recognized as a talented pianist.

Deeply involved in the study of fundamental sciences, he obtained a scholarship at the University of Berlin. Here he made valuable studies with the famous physicist Werner Heisenberg, one of the founder of quantum mechanics, and defended his doctoral thesis "The Variation of Electrical Resistance of Metals in Magnetic Fields". This reference paper considered the quantification of electron movement in the magnetic field and was published in the Annalen der Physik (Leipzig) journal.

Coming back to Romania, he had a very fruitful university career. During the period (1934-1941) he was assistant/lecturer at the Polytechnic University of Bucharest (Mathematical Analysis Department).

In the period 1941-1948 he was a Professor at the University of Iasi, where he taught the Structure of Matter, and from 1949 to 1977 he was a full professor at the University of Bucharest, where he remained as advisor teacher after his retirement. At the University of Bucharest, he delivered the courses of Theoretical Physics (theoretical mechanics, thermodynamics and statistical physics, electrodynamics, quantum mechanics, theory and elementary particles) between 1948 and 1973. In the Marie Curie laboratory of this faculty he collaborated with Prof. Gh. Manu on the alpha particles. Here he published the "Treatises of Thermodynamics and Physics of Statistics" and "Quantum Mechanics".

As one of his former students at Professor Şerban Ţiţeica's "Thermodynamics and Statistical Physics", I honestly bear witness to the fascination the teacher exerted on the audience. The lectures he delivered were full of elegance, special clarity and concision. Practically, you left the course with the "lesson already learned".

Professor Şerban Ţiţeica held important positions in the management of various scientific research bodies in Romania and worldwide. Between 1955 and 1976 he was Deputy

Scientific Director at IFA Măgurele, between 1856-1981 he was a representative of our country at the Dubna Nuclear Research Institute and Vice-director of that institute in the period 1962-1964. He was a member of the European Society of Physics, of the Saxon Academy of Sciences of Leipzig (1967), or of the Academy of Sciences of the former USSR in 1965.

He was editor-in-chief of the Romanian Academy's journals: "Studii şi Cercetări de Fizică" and "Revue Roumaine de Physique" in the period 1956-1985.

From the rich scientific activity of Professor Şerban Ţiţeica, we retain the theoretical contributions to multipolar electromagnetic radiation; the study of statistical assemblies in the theory of generalized relativity; a relativistic-invariant formulation of evolutionary equations of electrified microparticles; group theory and probability theory, and much more.

In 1955, at the age of 47, he was elected member of the Romanian Academy and vice-president of the Academy between 1963 and 1985. In 1968 he was appointed Emeritus Scientist and was elected member of the European Physical Society.

He died in Bucharest on 28 May 1985.