

Serban Titeica (1908 - 1985). Born in Bucharest, in 1926 he entered the Faculty of Science at the University of Bucharest, from which he graduated 3 years later in both Physics-Chemistry and Mathematical Sciences.

In 1930 he left for Leipzig to specialize in Theoretical Physics, working under the guidance of the Nobel Prize laureate Werner Heisenberg. In June 1934, Titeica took his Ph.D. with the thesis „On the behaviour of electrical resistance of metals in magnetic field”, theoretically explaining a striking phenomenon discovered in 1928 by Piotr Kapitza – the isotropy of the electrical resistivity and its linear dependence on the field in high magnetic fields. Titeica has shown that both phenomena are due to the quantization of electron motion in a magnetic field, a lot of subsequent works originating in this thesis.

Returning to Romania, Serban Titeica held various positions at the Universities in Iasi and Bucharest. In 1948 he was appointed professor and held the chair of the newly created Theoretical Physics Department of the University of Bucharest, delivering lectures on theoretical mechanics, statistical physics and thermodynamics, electrodynamics and quantum mechanics, and also special seminars on theoretical nuclear physics, group theory and advanced topics in quantum mechanics. He formed generations of students, attracted them to theoretical physics by stimulating their thinking and scientific curiosity.

Example of rigour and appropriateness, based on a profound knowledge of the physical reality, and on a comprehensive formulation of the approached topics, professor Serban Titeica used to be, as well, an outstanding scientist. He distinguished himself through his standard works in different branches of theoretical physics, such as: calculation of charged particle stopping power in matter, calculation of electric and magnetic multipole radiation in terms of charge distribution inside the nucleus, contribution to the vacuum polarization and positron theory, the study of the properties of the physical systems related to the 3rd principle of Thermodynamics, and so on.

Actively involved in both research and teaching, Titeica has decisively contributed to the creation of a powerful Theoretical School in Romania.

As an appreciation of his scientific merits, he was elected, in 1955, as a member of the Romanian Academy, whose vice-president became in 1963, until 1985; he was also a member of the former USSR Academy of Sciences and of the Saxon Academy in Leipzig. From 1962 to 1964 he was the Vice-Director of the Joint Institute of Nuclear Research in Dubna. As a member of the Council of the European Physical Society (1970-1975), professor Titeica contributed to a fruitful scientific collaboration among physicists across Europe.

Since 1956 he acted as Deputy Director at the Institute of Atomic Physics and then, since 1970 through 1976, as Deputy General Director of the Central Institute of Physics contributing, together with his friend Horia Hulubei, to the modernization and development of the activity of scientific research in Romania.