Professor MARIN IVASCU at his 70th anniversary

It is a pleasant duty for the Editorial Board of "Romanian Reports in Physics" to dedicate this issue to our colleague, the distinguished Romanian physicist, Professor Marin Ivascu, at his 70th anniversary.

Professor Marin Ivascu was born on November 27th, 1931, as the son of Joita and Stefan Ivascu, in the village "Bolintin Deal" close to Bucharest. Following the college studies at the National College "Sfantu Sava" from Bucharest he became a student at the Faculty of Mathematics and Physics of the Bucharest University. After graduating University in 1955 he obtained a Physicist position at the Cyclotron laboratory of the Institute of Atomic Physics, where he developed an outstanding scientific career. For almost 50 years Professor Ivascu was a faithful user of the Cyclotron and then Tandem van-de-Graaff accelerators where he developed world-class research programs.

A very gifted and creative student, Marin Ivascu started the nuclear physics research in the team of Acad. Prof. Horia Hulubei by studies of the nucleon induced nuclear reaction mechanisms in medium and light-mass nuclei (^{20,22}Ne; ^{24,26}Mg; ^{28}Si; ^{32}S; ^{40}Ar). He had a major contribution in experiments, which establish the competition between direct and compound nucleus processes for low energy (3 to 7 MeV) protons and neutrons. Stimulated by the results obtained in these studies he proposed in 1964 another type of experiments to be pursued at the Cyclotron accelerator: elastic and inelastic scattering of alpha particles and (α,p) reactions at low bombarding energies (between 24 and 33 MeV). The goal of these experiments was to provide new experimental data for benchmarking the Optical Model and DWBA theoretical tools just emerging at that time. Under the supervision of Acad. Prof. Horia Hulubei he completed his Ph.D. Thesis with a work entitled "Elastic and inelastic diffusion of alpha particles on medium mass nuclei". More than Professor Ivascu and his research team have published 50 papers in reaction mechanisms, in the most prestigious national and international journals.

The years 1969-1970 were a landmark for the scientific career of Professor Ivascu due to his fellowship at the Robert Van-der-Graaff Laboratory, Utrecht - Holland. There he started to re-focus his scientific interest more to the nuclear structure issues, first investigated with hadronic probes then with electromagnetic ones. Reference Nuclear Physics papers have been published by Professor Ivascu during that period, referring to the structure of ^{85,86}Sr nuclei via the reactions ^{84,86}Sr(d,p)^{85,86}Sr and for the first time (d,α) reactions for lifetimes measurements via Doppler shift techniques. After a very successful completion of the Utrecht period, Professor Ivascu dedicated himself to the building of a strong nuclear physics program at the Tandem and Cyclotron accelerators of the Bucharest Institute of Atomic Physics. New experimental data on lifetimes of the nuclear levels, with a particular relevance for shell model testing, were obtained in the medium mass nuclei Cu, Ni, Sn and Zn in the years 1970 - 1976. He published the results in 35 sound scientific papers. In the period 1976-1980, the scientific interest of Professor Ivascu was concentrated mainly on the nuclear gamma ray spectroscopy. He conducted experiments at the Tandem accelerator revealing new insights on the structure of the neutron deficient isotopes of Y, Zr, Pa, Rb, Ba and Pr. Several papers with strong international impact have been published by Professor Ivascu and his research team,

focusing on new gamma spectroscopic data and their interpretation in geometrical and algebraic nuclear structure models. Since 1980, Professor Ivascu became deeply engaged in the new research field of the “Exotic Radioactivity”, well known worldwide in the nuclear physics community for the outstanding contributions of the Romanian scientists. Collaborating with Dr. D.Poenaru, Dr. D.B.Ion and Dr. A.Sandulescu he published more than 80 scientific papers and 4 books at Plenum Press and CRC Press (USA) on the field of Heavy Ion and Exotic Radioactivities.

In the years following 1990 the scientific interest of Professor Ivascu was focused on the continuation of the gamma spectroscopy program and new developments in Mass Spectrometry at the Bucharest tandem accelerator. In the international collaborations he is actively involved in the most recent developments in the low energy nuclear physics such as “Protonic Radioactivity” and “ Radioactive ion beam physics”. He directed several research projects on these fields. The scientific activity of Professor Ivascu gained a worldwide recognition, his papers are quoted in works published in the most prestigious international journals.

In parallel with an outstanding scientific career, Professor Marin Ivascu was a dedicated educator in nuclear physics. During more than 30 years of teaching, he trained numerous young scientists who went on to play a determinant role in the Romanian research and industrial activity. He often presented very attractive lectures in Introductory Nuclear Physics, Heavy Ion Physics and Radioactivity both as a lecturer at the Center for Education in the Nuclear Field of the Institute of Atomic Physics and as an Associate Professor at the Physics Faculty of the Bucharest University. Professor Ivascu supervised 33 PhD Thesis in physics, leaving his mark on a whole generation of Romanian nuclear scientists.

Professor Marin Ivascu was throughout his career a remarkable organizer for the Romanian physical sciences, at all levels - starting from the position of laboratory head to the position of the General Director of the Central Institute for Physics (in Romanian ICEFIZ) and Vice-President of the State Comity for Nuclear Energy (in Romanian CSEN). During the years 1971-1977 as the Head of the Cyclotron Laboratory and Heavy Ion Physics Department he outlined a creative approach for projects in basic and applied research. Since 1977 as a Director General of ICEFIZ Professor Ivascu coordinated the national physics programs in Nuclear Physics, Materials Research, Lasers and applications, Reactor Physics, Fusion Research and Vacuum Techniques and Applications. Due to his competence and organizational skills, in the period 1977-1990 Romanian physics was active in the development of the national economy and obtained a corresponding social acknowledgment. As Vice-president of CSEN Professor Ivascu coordinated the physics research related to the introduction of nuclear power in Romania. In the years 1986-1989, he was also a member of the minister team, supervising the construction of the Cernavoda CANDU Nuclear Power Plant.

As a scientist, organizer of the Romanian physics and national representative in different international committees Professor Ivascu was a good ambassador of our country; following always, at the highest level the national interest. He was always a strong supporter of the idea that science, when wisely used, can bring closer nations in the international stage.

Marin Ivascu married in 1955 Rodica Cecilia Ivascu (n. Bucurescu) and enjoy together almost 50 years of happy family life. He has one daughter (Irina , PhD in Physics) and one grandson (Dragos).

Professor Ivascu's is a distinguished personality: a unique blend of knowledge, competence, vision, ideas and talent to recognize and attract people. He wisely listens and talks with people around him, asked questions and generates ideas.

At his anniversary the Editorial Board of Romanian Reports in Physics heartily wishes Professor Ivascu a long and healthy life, successes and accomplishments in his scientific and family life.

Editorial Board