## DOREL ZUGRĂVESCU Corresponding Member of the Romanian Academy (November 25, 1930 – November 20, 2019)

Gheorghe Dorel Zugrăvescu was born in a family of intellectuals (the father – a well-known lawyer in Pitești, the mother – a distinguished author of some appreciated poems). He graduated from "Alexandru Lahovary" high-school of Râmnicu-Vâlcea as a leader of his promotion, then he became a student in the Division for Geophysics of the Mining Institute – Bucharest, which he graduated with Merit Diploma. In 1954, as a student in the second year in the Mining Institute, Dorel Zugrăvescu



was admitted as a junior researcher in the Geophysics Section of the Institute of Physics has the Romanian Academy in Măgurele. The scientific researcher carreer, as he has proven to be gifted, then materialized in the positions of scientific researcher (1955) and senior scientific researcher (1965), as well as organizing a Laboratory of Geodynamics within the frame of the Geophysical Research Center of the Romanian Academy, a laboratory he developed within the institutes that have housed geodynamic research during 1970–1990 (Institute for Applied Geophysics, Astronomical Institute, Centre for Earth Physics). In 1990 Dorel Zugrăvescu founded the Institute of Geodynamics under the umbrella of the Romanian Academy, on the opportunity of the revival of the Romanian Academy after the political regime change of December 1989. He was the Director of the Institute till his retirement in 2006 and Honorary Director since. He continued to lead the Laboratory "Geodynamical Observatories" of the Institute, as well as various organisms he created within the frame of the Romanian Academy or in international cooperations. As a recognition of his activity, Dorel Zugrăvescu was elected in 1991 Corresponding Member of the Romanian Academy.

The instrumental geodynamics was initiated and has been developed in Romania by Dorel Zugrăvescu. On the occasion of the February 15, 1961 total solar eclipse, he undertook, using exclusively self construction equipment, done partially in cooperation with Maurice Allais, the first recordings in instrumental geodynamics in Romania. He then succeeded to create a number of underground laboratories, in old mine galleries (Ursoiu and Crăciunesti) and natural caves (Pades-Gorj), which were characterized by the necessary stability and ensured the temperature constancy, of primary importance in measurements with sensitive sensors (horizontal quartz pendulums, water-tube tiltmeters, cuartz extensometers, vertical pendulum), costructed under his guidance by a small group of technicians he managed to form that time. Dorel Zugrăvescu transformed the building in which he made the first measurements in 1961, building that belongs to the Căldărușani Monastery complex, in the Geodynamic Observatory with the same name, establishing a durable collaboration, the first and to the present the only one between an Orthodox church – the Romanian Orthodox Church / Căldăruşani Monastery and science – the Romanian Academy / the Institute of Geodynamics. At present, the research in Geodynamics makes use in this institute of geodynamics polygons that include both geodynamics observatories, in which continuous recordings of the Earth deformations are done, and profiles and stations for repeated measurements of other Earth fields (gravity, geomagnetic, geoelectric, geothermal), linked to the tectonic bloks dynamics on the Romanian territory.

His objective to set up new laboratories, at national and international levels, and to start new research areas in Geodynamics, besides previously established domains such as geomagnetism, electromagnetism, electrometry, in which Dorel Zugrăvescu had contributions, was materialized by setting in 2001, together with V. N. Strahov, member of the Russian Academy of Sciences, Director of

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the All Union Institute for Earth Physics, the International Virtual Laboratory of Geodynamics and, in 2004, together with Prof. Koichiro Matsuura, the UNESCO Chair of Geodynamics.

Dorel Zugrăvescu was a member of prestigious scientific organizations, such as the International Society of Alternative Medicine (USA), the Academy of Sciences of Moldova, the National Academy of Ecological Sciences of Moldova, Royal Society of Astronomy (Belgium), the Russian Academy of Natural Sciences, the German-Romanian Academy (Germany), Honorary Member of AGIR (the General Association of Engineers, Romania), founding member and Vice-president of AOS-R (the Academy of Scientists, Romania) and of AŞTR (the Academy of Technical Sciences, Romania). As well, Dorel Zugrăvescu was the president of the National Romanian Committee for Geodesy and Geophysics and of the Teledetection Committee of the Romanian Academy, Editor-in-chief of the journals Revue Roumaine de Géophysique and Studii și Cercetări de Geofizică (Studies and Research in Geophysics), edited by the Romanian Academy. As a consequence of his reach activity, Dorel Zugrăvescu was awarded numerous prizes and distinctions, such as the "Gheorghe Murgoci" Prize of the Romanian Academy (1965), the "Sabba S. Ștefănescu" Prize of the Romanian Society of Geophysics (1994), the "Diploma for Excellence in Research" of the National Agency for Science, Technology, and Innovation (2000), the "Radu Botezatu" Prize of AOŞ (2001), the Prize for Excellency and the Honorary Diploma of the Ion Basgan Foundation (2010), the CNCSIS Prize (2010), the Prize for Excellency in Geosciences of the Society of Exploration Geophysicists (2010), Diploma Omnia of AŞTR (2011), the Order for Merit – Officer Degree (2011).

The scientific activity of Dorel Zugrăvescu, quantified in over 130 published papers and workshop presentations, as well as in two books he edited\*, has been accompanied by his civic attitude, both in the difficult years for the Romanian Academy in which the supervised research institutes dismantled and in the years after entering the democratic era of Romania's history, in his capacities as a member of the Scientific Council of the Natinal Institute for the Study of Totalitarianism and as a founding member of the "Pantheon of Romania" Foundation.

Dorel Zugrăvescu permanently promoted our Institute at national and international levels, via collaboration relationships maintained through personal merits, through research results presentations, and, not in the least, by means of the mission in western European countries, in 2000. He was supported by Olga Zugrăvescu, devoted wife, who seconded him in life, in ups and diseases, with an infinite devotion.

Departing this life, Dorel Zugrăvescu leaves a difficult to fill in void, both in our Institute and in the Romanian community of geophysicists, in the hearts of all those who knew and cherished him.

Dr. Crişan Demetrescu
Corresponding Member of the Romanian Academy

<sup>\*</sup> Geodynamics: Outline of a Domain, Eds.: Zugrăvescu D., Şuţeanu C., Ed. Academiei Române, Bucureşti, 2004; The Active Geodynamic Zone of Vrancea, Romania, Eds.: Zugrăvescu D., Şuţeanu C., Ed. Academiei Române, Bucureşti, 2005; Planeta Pământ – Planeta Vie, Vol. I, Eds: Zugrăvescu D., Munteanu Fl., Ed. Eagle, 2011; Planeta Pământ. Planeta vie, Vol. II, Eds: Zugrăvescu D., Munteanu Fl., Ed. A.G.I.R., 2015.

## Dr. eng. FLORIN RĂDULESCU (April 1, 1939 – April 9, 2020)

A graduate of the Faculty of Technical Geology within the Institute of Mines, Bucharest, Geophysics Department (1955–1960), he obtained the title of Doctor in Geophysics in 1979 with his doctoral thesis entitled "Seismic research on the structure of the earth's crust in Romania", under the guidance of Prof. Dr. Liviu Constantinescu.

Dr. eng. Florin A. Rădulescu was married to Gloria Gina Domnița (born Marineanu) and had a son – Mihai Sorin – who pursued a historiographical career, specializing in genealogy (currently Professor at the Faculty of History of the

University of Bucharest).

He had an experience for over 50 years in the field of geosciences. His career path started at the Enterprise of Geological and Geophysical Surveying (Ministry of Petroleum), where he worked between 1960–1963. As an engineer in the seismic prospecting team he participated in the investigations performed south of Bucharest, in the Bârlad depression and in the Transylvanian Basin.

His career continued as the head of the magnetic prospection team (1963–1966), within the Enterprise of Prospecting and Laboratories (The State Committee of Geology) leading the surveys in Pădurea Craiului Mountains, Călimani Mountains, Drocei Mountains, and Metaliferi Mountains.

Between March 1966 and September 1967, he carried out his activity within the Mining Research Institute, dedicating his research activity on topics such as the tensions in the Filipeştii de Pădure coal mines, the Motrului Basin, and the Slănic Prahova and Târgu Ocna Salt Mines.

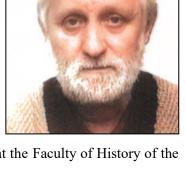
From 1967 to 1977 he worked as the head of prospection team at the Institute of Applied Geophysics – Institute of Geology and Geophysics, having major contributions in deep seismic studies on international profiles II, XI, XII (Galați – Călărași, Galați – Tg. Secuiesc – Oradea and Filiași – Băilesti).

From January 1977 until his retirement he worked at the National Institute for Earth Physics, dedicated his work on topics such as processing and interpretation of explosion recordings in quarries of Dobrogea, Turcoaia, Mahmudia, Sitorman and the ones from the Apuseni Mountains (Roşia Montană and Roşia Poieni quarries), the study of crustal movements in geodynamic polygons (Gruiu – Căldăruşani) and of the current crustal deformations in seismically active areas of the curvature of the Eastern Carpathians and in the area of the Iron Gates.

He has lead the research work within 10 projects won in national competitions, including CERES and MENER Programs.

Dr. eng. Florin Rădulescu was also an associate professor at the Faculty of Geology and Geophysics, University of Bucharest, where he shared his knowledge and expertise by teaching the course "Globe Physics" (Licence Program) and course entitled "Study of the lithosphere through seismic methods with controlled source" at the Master Program.

He received the Romanian Academy Award "Gheorghe Munteanu Murgoci" (in collective), in 1985, as a recognition of his work presented in the scientific paper entitled "Lithosphere Structure along the Galaţi – Chişinău Criş and Iaşi – Turnu Măgurele Profiles". His dedicated work in the field of geophysics was also recognized in 1995 – the Jubilee Medal "70 years of Romanian Geophysical Prospecting".



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His scientific work includes 75 scientific papers published in national journals, 31 papers published abroad, 59 scientific papers presented in national scientific meetings, 30 papers presented at international scientific meetings, and over 70 internal scientific reports as the main author and/or co-author.

Dr. eng. Florin Rădulescu was a member of the Romanian Society of Geophysics and of the Romanian Society of Physics.

Since 2009 he has collaborated with the publication "Oil and Gas Monitor" published by the "Society of Oil and Gas Engineers" (SIPG). In 2016 he received the Diploma of Excellence for his contribution to the magazine. From October 2009 until February 2020 he published over 170 articles on various topics.

*Dr. Mihai Diaconescu*National Institute for Earth Physics