

Dr. ANDREI-ALEXANDRU SOARE
(1931–2017)



On the 15/16 October 2017, ing. Andrei (Andi) Soare, appreciated geophysicist, with remarkable scientific results in this special branch of Earth sciences – Geophysics, left us for a better world. As a striking coincidence, this date was the same as the inauguration day, in 1943, of the Geophysical Observatory Surlari – Căldărușani, coordinated by him for 50 years, since 1959.

Andrei-Alexandru Soare graduated from the Geology Faculty – Geophysics Department – of the Mining Institute in Bucharest, in February 1955. He worked that year as the leader of the Mining Magnetometry team of the Geological Committee – Prospecting and Laboratories Enterprise in Târgu-Lăpuș area, to prospect for Manganese minerals.

In 1956, Andrei Soare was invited by Prof. Liviu Constantinescu to be a researcher at the National Geomagnetic Observatory Surlari – Căldărușani, which he did for the next 50 years. In 1968 he initiated the so-called nuclear magnetometry in Romania, by installing at the Observatory a VARIAN proton magnetometer (a US make) and a portable ELSEC one (a Great Britain make). Later, in 1970, cooperating with researchers from the Institute of Atomic Physics (Măgurele), Andrei Soare contributed to the construction of the first Romanian proton magnetometer.

Andrei Soare also initiated the systematic transfer of Surlari recorded data to the world-wide observatory network, getting in 1998 for the Romanian observatory the status of “Planetary geomagnetic observatory”, integrated in the INTERMAGNET programme.

Using the Surlari observatory recordings, as well as data from a network of about 200 stations uniformly distributed over the Romanian territory during 1967–1968, Andrei Soare carried out the first deep magnetic sounding in Romania. The so-called induction vectors his group obtained were interpreted in the geological context of the country, allowing some hypotheses on the deep structure of the territory to be advanced.

Together with a group of geophysicists and technicians, Andrei Soare organized in 1969 the first marine magnetic measurements, succeeding to get the magnetic map of the Romanian Black Sea to 200 km offshore in two field campaigns.

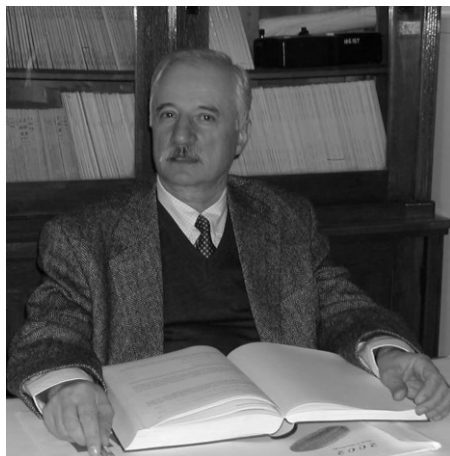
Between 1979 and 1985 Andrei Soare taught classes of geomagnetism and magnetic prospecting, advising also over 40 diploma theses, with the Chair of Geophysics of the Geology and Geophysics Faculty of Bucharest University.

For his scientific activity, Andrei Soare was awarded two prizes of the Romanian Academy, namely “Gh. Munteanu-Murgoci” (for the Magnetic Map of the Black Sea) and “Ștefan Hepites” (for the paper “Historical geomagnetic measurements in Romania”).

The outstanding researcher Andrei Soare was also a man of musical and literary culture, who enriched evenings at Surlari Observatory, playing the violin or organizing musical auditions based on his rich LPs and CDs collection.

In 2000, Andrei Soare was awarded the Society of Exploration Geophysicists (SEG) prize for his entire activity, and in 2005 “Diploma recunoștinței” from the Institute of Geodynamics of the Romanian Academy, on the occasion of celebration of 40 years of the Geodynamical Observatory Căldărușani. In his last years, Andrei Soare was the president of the Geomagnetism and Aeronomy Department of the National Romanian Committee of Geodesy and Geophysics of the Romanian Academy and National Correspondent for the International Association of Geomagnetism and Aeronomy (IAGA).

Dragomir Romanescu
Florin A. Rădulescu



Prof. PAUL GEORGESCU (1939–2018)

On March 21st, 2018, we lost one of the remarkable colleagues of the Department of Geophysics, Faculty of Geology and Geophysics, Emeritus Professor of the University of Bucharest, Paul Georgescu.

Professor Paul Georgescu was born in Bucharest on October 30th, 1939. After graduation from elementary courses and high-school (1957), he started the “Technical Geology Faculty” from “Oil, Gas and Geology Institute”, attending the courses of Geophysical Prospecting specialization. After graduation as the first class in Geophysics ever, was appointed to the higher education system in the Department of Geophysics.

After a period as an Assistant, he was promoted in 1969 as a Lecturer at the Department of Geophysics. Professor Paul Georgescu was included fast in complex didactical activities. Over his 44 years of activity, he taught courses and conducted laboratory works for nine disciplines from the education plan: Electromagnetic Fields Theory, Electrical Prospecting, Gravity Prospecting, Geophysical Methods of Prospection, Mining Geophysics, Engineering Geophysics, Earth Physics, Borehole Geophysics, and Environmental Geophysics. In addition to the courses, his didactical activity covered laboratory works, diploma projects, and specialization courses for foreign graduates (especially university personnel).

The course of his didactical activity went back on the right track after 1990; he obtained in 1990 the title of Associate Professor and in 1993 the title of Professor. Simultaneously he became a doctoral degree supervisor and, under his guidance, numerous Romanian and foreign specialists obtained the scientific title of Doctor in the field of Geology.

After retiring in October 2005, Prof. Paul Georgescu became Consultant Professor. In this quality, he taught the courses of Electrical Prospecting, Electromagnetic Methods, and at the Master’s program he taught the courses Geotechnical Exploration of Aquifer Formations, Hydrocarbon Deposits, and Solid Mineral Deposits.

He also obtained the title of Emeritus Professor at the University of Bucharest.

As a scientific researcher, in 1998 he became the Director of the “Expertise and Consulting Bureau” research center from the University of Bucharest, where he conducted numerous scientific researches on a contractual basis.

In the long didactical activity in higher education, he was the Head of the Department of Geophysics from the Faculty of Geology and Geophysics between 1992–2005 (13 years).

Professor Dr. Paul Georgescu obtained a specialization in the field of numerical interpretation of geophysical data at the Geological Institute for Applied Geophysics in München (1970–1971), where he was the beneficiary of a DAAD grant. For six months (1999–2000) he was an invited researcher at the Institute of Globe Physics from Paris as coordinator of the project: “Etude des signaux géoelectriques et géomagnétiques à l’Observatoire de Chambon-la-Forêt, France”.

Professor Dr. Paul Georgescu obtained the Romanian Academy Award “Gheorghe Munteanu Murgoci” (1977), the “Sabba S. Ștefănescu” award of the Romanian Geophysical Society (1995) and the Certificate of Outstanding Achievements in Romanian Geophysics offered by the Society of Exploration Geophysicists (SEG).

The competence domains for which Emeritus Professor Dr. Paul Georgescu obtained outstanding results as an excellent scientific researcher of world level are Applied Geophysics, Environmental Geophysics, Modeling 1D, 2D and 3D of electrical resistivity anomalies. He participated as a director or researcher in multiple national and international projects with variable subjects, as 3D modeling of apparent resistivity anomalies, studies concerning the applicability of geophysical methods in mapping and monitoring hydrocarbon contamination, geological studies of salt massifs stability, analysis of magnetic storms on transport systems of power/electrical current, advanced models of processing of refraction seismic data and the use of geophysical methods in detection of anthropic hazards.

Emeritus Professor Dr. Paul Georgescu was a member of many professional associations from Romania and abroad: he was a founding member and the president of the Romanian Geophysical Society for many years, vice-president and president of the Balkan Geophysical Society, corresponding member of the Academy of Technical Sciences, member of European Association of Geoscientists and Engineers (EAGE), member of the Society of Exploration Geophysicists (SEG).

In addition to didactical activity, Professor Dr. Paul Georgescu participated as a scientific researcher in 80 scientific research contracts. Only a part of the results (22 contracts) was published.

The fundamental research activity was oriented to the elaboration of models of 3D simulation of apparent resistivity anomalies. In 1977, Professor Dr. Paul Georgescu obtained a new integral solution of electrical prospecting equations for direct currents. For this achievement, he received “Gheorghe Munteanu Murgoci” Award of the Romanian Academy. The integral solution obtained in 1977 is used by specialists for 3D modeling of apparent resistivity anomalies. Some Romanian and foreign geophysicists contributed to improving these techniques of 3D modeling proposed in 1977. Numerous results in the domain of 3D modeling are obtained by alpha media theory elaborated by academician Sabba S. Ștefănescu.

A permanent preoccupation included the improved techniques of a direct interpretation of resistivity data and the introduction of new prospecting tools.

Many subjects of scientific research have been oriented for using geophysical methods in the strategy of evaluating the systems of the environment. A new domain of Geophysics (Environmental Geophysics) was recognized as a consequence of the national and international subjects of research, conferences and even courses of environmental geophysics. In the last decade, special attention has been paid to improving the prospecting techniques, especially electrical ones, for the exploration of aquifer formations. Hydrogeophysics constitutes today a new domain of research, which implies many hydrogeologists and geophysicists.

The stability of salt massifs studies and the definition of hydrogeological conditions constitute the subject of many research projects obtained in the framework of MENER and CEEEX. Other directions of research were represented by the study of induction electromagnetic phenomenon associated with magnetic storms (Romanian grant Academy).

Special results were obtained by research of perturbations of current lines for geomagnetic records. This theme was carried out in the framework of the geomagnetic observatory of France. A study using the radiomagnetotelluric method for mapping and monitoring of hydrocarbon contamination was done in cooperation with researchers from Germany, Russia, Ukraine, and Denmark.

Over the years, he carried out an intense activity for promoting Geophysics in the content of the Geosciences field. As the Head of the Department of Geophysics from 1992 to October 2005, Professor Dr. Paul Georgescu contributed essentially at the elaboration of the educational plan and the introduction of new study disciplines for the professional achievements of geophysical engineers.

Between 2003–2005 he was the president of the Balkan Geophysical Society and in that capacity he organized three international symposia, appreciated by the presidents of the American and European societies.

He was the president of the Geological Commission from the National Council for Acknowledging University Titles, Diplomas and Certificates (1998–2006), member in the commission of Earth Sciences from the National Council of Scientific Research for Higher Education, member for MDC commission for evaluation and re-evaluation of systems and objectives of national interest (2004–2006) and evaluator for CEEEX and CNCSIS.

The Department of Geophysics of the Faculty of Geology and Geophysics, University of Bucharest will have an eternal consideration and admiration for Emeritus Professor Dr. Paul Georgescu, for the support and contribution of exceptional value brought to the Romanian school of Geophysics.

All the colleagues who worked with and appreciated Professor Dr. Paul Georgescu expressed their deep regrets at the end of his life and the belief that we have, forever, special consideration for his distinguished personality.

May God Rest Him in Peace!

Aurelian Neguț