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The teaching and scientific work of Professor Dr. Doc. THEODOR NEAGU, Corresponding Member of the Romanian Academy

by

Professor Dr. Ovidiu Dragastan

Professor Theodor Neagu was born on 20 September 1932, in the town of Giurgiu, graduating from Primary School No. 2 in 1945. He continued his studies in Bucharest, as a student in the Theoretical Highschool "Mihai Eminescu", graduating from it in 1951.

Attracted especially by Life and Earth Sciences, fond of flowers, trees, insects and *ludus naturae* – fossils, he became, in the autumn of 1951, a student in the Faculty of Geology and Geography, the Department of Geology.

During his student days, he showed his passion for Palaeontology that would soon become the "devouring flame" of his youth and maturity years.

He graduated from Geology in June 1955, with excellence diploma No. 3920, issued on 25 October 1956.

In the same year, due to his very good accomplishments, Theodor Neagu obtained a position within Bucharest University. He began his 1955/1956 academic year as a Principal Demonstrator within the Chair of Paleontology and Stratigraphy, headed at the time by Academician Professor Miltiade Gh. Filipescu. Within this chair he found and reinforced his call, the "art" of studying fossils. He passed all the university hierarchical levels: Laboratory Chief (1956/1957), Assistant (1957/1967) and Lecturer (1967/1968). A tenacious young, productive writer and scientist, Theodor Neagu gave lectures in all the fields of the Chair: Palaeontology, Micropaleontology, Palaeobotany and Palynology, Stratigraphy, Palaeoecology and Techniques of Palaeontological Analysis, under the direct supervision of the two personalities of the Chair, Professor Dr. Doc. Miltiade Gh. Filipescu and Professor Dr. Doc. Ion Z. Barbu.

From his first teacher he learned tenacity in defending his ideas and from the second he acquired rigour, goodwill, wisdom and the principle that "scientific prestige is conquered with modesty".

During the autumn of 1968, the position in Micropaleontology became vacant by the retirement of Professor Dr. Ion Z. Barbu. Consequently, Theodor Neagu obtained by competitive examination the position of a Senior Lecturer in Micropaleontology and Palaeontology, beginning from the 1969/1970 academic year.

During the sad period when promotions within higher education were cancelled, for so-called "economic" reasons, such a hindrance did not at all affect Theodor Neagu's nature and passion.

After 1990, Theodor Neagu was promoted as a Professor in the fields of Palaeontology and Micropaleontology, within the Chair of Geology and Palaeontology, after 20 years of hard work, when he was recognised as a national and international personality in the field of Micropaleontology.

His teaching activity is founded on vast erudition in natural sciences combined with a fine "detective" spirit of natural phenomena, of evolutionary processes, in interpreting fossils and microfossils, all within an inspired combination

of his biological and geological backgrounds. He collected plants from all corners of Romania, within a Herbarium of incontestable value, also collecting insects on field trips with his students. Theodor Neagu created the Collection of Micropaleontology of the Bucharest Laboratory of Palaeontology (L.P.B.). This collection is well known in the world and is represented by more than 6000 taxa from Romania and from abroad. The same energy animated him in forming the classical collections of Palaeontology that were enriched by him year after year, with fossils of flysch deposits of the Eastern Carpathians and especially of Dobrogea. For Professor Neagu, Dobrogea actually represents a micropaleontological and palaeontological treasure. Within this treasure he described numerous taxa with names of historical recognition: *Axiopolina*, *Derventina*, *Scytiloculina* or *Rumanoloculina*.

In 1957, Theodor Neagu began his PhD study in the field of Micropaleontology. In 1965 he defended his PhD thesis entitled "The Stratigraphic and Micropaleontological Study of the Upper Cretaceous Deposits between the Buzău Valley and the Râul Negru" (the region Intorsura Buzăului–Valea Mare–Dobârlău–Teliu). The thesis was published in the English language in Issue No. 12 of "Memoirs" (1970) of the Geological Institute of Romania.

This paper has a monographic character, being the first paper of this kind published in Romania, presenting microbiostratigraphic data for the Albian–Senonian interval.

The micropaleontological zonation made in flysch deposits was correlated with the recorded macrofauna (ammonites, belemnites and bivalves) illustrating the stratigraphic value of this regional scale for regional correlations and for the existence of Lower Turonian and Campanian–Maastrichtian deposits within the area.

The essential part of his thesis remains the chapter on systematics, full of synonymies and descriptions of 252 foraminiferal species, 12 bivalve species, 5 ammonite species and 4 belemnite species. Professor Neagu masterly and scrupulously figured the taxa by drawings in the 40 plates of the paper.

The response to his thesis in the international scientific community rapidly came from the United States, together with the appreciations of Helen Loeblich Tappan (California University), a personality in the field of Micropaleontology: "This excellent Memoir will be very useful in my writing and teaching. The illustrations are excellent and it is certainly a pleasure to use such a well illustrated work." This illustrative appreciation from Professor Tappan was at that time among the few positive remarks with regard to the Romanian micropaleontological school.

During his PhD studies, between 1956 and 1965, Professor Neagu published 10 papers alone or as a co-author with Academician Professor M. G. Filipescu or with Geologist P. Soigan, with regard to the micropaleontological

assemblages found in Cretaceous flysch deposits, the Eastern Carpathians (Buzău region).

The stupendous activity during those years made him, in 1963, a Member of the Geological Polish Society (Cracow), being proposed by Professor Dr. Fr. Brieda.

Also, as a recognition of this scientific activity, in 1964 he was elected correspondent for Romania of the most renowned, international scientific periodical "Micropaleontology," published in New York. In 1965, Professor Neagu was elected a Member in the Scientific Committee of the Mediterranean Mesozoic and in 1968 he became a Member and Secretary of the Geological Society of Romania.

After defending his PhD thesis in 1965, Professor Neagu was granted a scholarship of the Ministry of Education, for an academic year in the United States. The first period he spent in Kansas University, where he met two titans of Palaeontology, Professor Raymond C. Moore and Professor R. Kaessler. The second period he spent in January 1966 at Louisiana State University, in Baton Rouge, where he worked under the direct supervision of Professor H. V. Andersen. As a result of this stage, he published in *Micropaleontology* (Vol. 12, No. 3, 1966) the article "*Shackoina of the Cenomanian of the Eastern Carpathians*", where he defined the subspecies *S. cenomana gandolfi* and *S. multispinata bicornis*. He also continued his collaboration with Professor Andersen after the period of scholarship, when, at Professor Andersen's request, he identified the age of the drilling cores of Well NW-230, belonging to the Natchitoches Formation Parish, within the K/T boundary. In this paper he described 140 species of foraminifers, and a special volume was published, edited by Professor Andersen at the Louisiana Geological Survey.

At the venerable age of 65 years, Professor Theodor Neagu's scientific work covers 84 scientific articles, books and textbooks, published in Romania and especially abroad (in their majority).

He discovered over 130 Jurassic-Cretaceous genera, species and families that are new in science, of Romania and from abroad. All these taxa, recognised and included in the international scientific heritage, were integrally mentioned in 1988, with their original description by Professor Neagu, within the famous treatise on "*Foraminiferal Genera and their Classification*", published in two volumes in New York and edited by Professor Alfred Loeblich, Jr. and Professor Helen Loeblich Tappan. This treatise is considered the "Bible" of all micropaleontologists in the world.

The scientific activity carried out over the years can fall into the following categories:

1. Scientific articles on Micropaleontology;
2. Scientific articles on Palaeontology;
3. Scientific articles on Palaeobotany and Palaeoalgology;
4. General articles on the concept of paleontological species, evolution, history of research and numerous biographies of professors or geologists who contributed in the past to the development of paleontological sciences in Romania;
5. Scientific articles on Stratigraphy or Biostratigraphy;
6. Books and textbooks.

Among the over 75 papers, 60 were published in such

international periodicals as *Micropaleontology* (New York), *Revista Espanola de Micropaleontologia* (Madrid), *Annales de la Société Géologique de Pologne* (Cracow), *Revue de Micropaléontologie* (Paris), *Cretaceous Research* (London), *Journal of Micropaleontology* (London), *Acta Geologica Hungarica et Senckenbergiana* (Frankfort on the Main). All these papers make new contributions to the development of Micropaleontology as a science and in the majority of cases they have direct connection with Oil Industry.

Part of Professor Theodor Neagu's contributions can be mentioned here chronologically:

- within the Senonian deposits belonging to the Internal Flysch Zone of the Eastern Carpathians, he described an association of agglutinated foraminifers with three new species: *Psammotodendron dichotomicum* n. sp., *Aschemonella carpathica* n. sp. and *A. moniliformis* n. sp., belonging to macroforaminifers. Also, new Cenomanian taxa in the same flysch zone were described, such as the subspecies *Clavulinoides gaultimus carinatus* n. ssp. and *C. g. intermedius* n. ssp. (1962, 1964);

- the Albian biozonation within the Moesian Platform (the Giurgiu zone and the Putineiu well) was accomplished for the first time in this oil-bearing province, where 115 foraminiferal species were described. Among them are *Uvigerinamina moesica* n. sp. and 3 new subspecies, published in 1965. He, together with Geologist Dr. Gheorghe Popescu, described *Vidalina carpathica* of the Dâmbovicioara basin and of Banat;

- in 1968 he published a very important and substantial study that changed the general ideas with regard to the Miliolid systematics and generally their stratigraphic value for the Lower Cretaceous and especially for Southern Dobrogea. He defined new genera, *Derventina* and *Danubiella*, as well as new species, *Quinqueloculina robusta* n. sp., *Q. multicostata* n. sp., *Massilina ostroviana* n. sp., *M. dobrogiaca* n. sp., and others, all accepted and included in the international scientific circuit. Then *Andersenina rumana* n. gen. n. sp. followed, published in the famous periodical "Contributions from the Cushman Foundation for Foraminiferal Research";

- he described *Meandrospira bancilai* n. sp. in the Dâmbovicioara basin, in the marly limestone of the Barremian-Aptian age, a porcelaneous foraminifer demonstrated afterwards to be an ecozonal marker for the Lower Aptian (1970). In 1969 and 1970, he studied the planktonic foraminifera occurring in the southern part of the Eastern Carpathians, when he described the new species *Preaglobotruncana barbui* n. sp., *P. prahovae* n. sp. and *Trochammina murgeanui* n. sp.;

- in 1975, Professor Neagu published in "Memoirs" (Vol. XXV, the Geological Institute of Romania) a fundamental work for the Lower Cretaceous biostratigraphy concerning the platform and basin facies, entitled "Monographie de la faune de foraminifères éocènes du couloir de Dâmbovicioara, de Codlea et des Monts Perşani (couches de Carhaga)". He submitted this paper to the 14th European Colloquium of Micropaleontology, held in Bucharest in September 1975, and it was dedicated to the great Romanian paleontologist, Professor Ion Simionescu. The paper deals with various types of range zones for the Valanginian-Lower Bedoulian interval, and with new benthonic foraminiferal

species: *Acruliamina dacica* n. sp., *Gaudryina dacica* n. sp., *Patellovalvulina patrulei* n. sp., *Vaginulina transylvanica* n. sp., *Stichocibicides carpathicus* n. sp., *S. stefanescui* n. sp.;

- between 1982 and 1996, he published twelve papers in *Revista Española de Micropaleontología* (Madrid), introducing a new taxonomy for the families and subfamilies Pfenderinidae, Miliolidae, Involutininae and Trocholinnidae, with species recorded from the Lower Cretaceous. The majority of the new taxa of the Pfenderinidae family (*Pfenderina aureliae* n. sp., *P. janae*, *P. ostroviana* n. sp., *Nezzantinella macovei* n. sp., *Dobrogellina ovidi* n.g., n.sp., *D. anastasiui* n.sp.), of the Miliolidae family (*Decussoloculina mirceai* n. g., n. sp., *D. barbui* n. sp., *Axiopolina* sp., *Rumanoloculina robusta*, *Moesiloculina scythica*, *Scytholoculina bancilai*, *Damubiella cernavodensis* n.g., n.sp., *Istriloculina emiliae* n.g., n.sp., *Corniloculina tenue* n.sp.) and of the subfamily Involutininae (*Trocholina* sp., *Bancilina* n.g., *Andersenolina preconigi* n.g., sp., *A. histri* n.sp.) were confirmed and recorded from all the shallow carbonate platform facies of Aquitania to the Moesian Platform, from Morocco, Saudi Arabia and the Balkans.

This period can be considered as a crucial, creative period of great scientific value for the development of Micropaleontology as a science. Professor Neagu's indubitable merit was to know how to identify "hidden", inner structural, generic features of the group of *Trocholinnids*, features that had been overlooked for 70 years by such great micropaleontologists of the world as Paalzow, Reichel, Gorbatschik, Dieni & Massari and A. Arnaud-Vanneau;

The study on the Dobrogean chalk is a paper dedicated to the 125-year celebration of the first paper published by Reuss on the age of this kind of deposit. The paper emphasizes the benthic and planktonic foraminifera, introducing a new biostratigraphic scale for such deposits (1987, 1989, 1992);

Among Professor Neagu's preoccupations were the Recent Foraminifera collected within the coral reef occurring on the eastern coast of Tanzania (Africa), a study that was published in 1982 at the request of Academician Professor Dr. Mihai Băcescu and of Dr. Th. Nalbant.

During this period of time (1962-1996), Professor Neagu published studies in collaboration with colleagues, teaching staff, geologists of Romania or from abroad, with young PhD students and especially with undergraduate students.

Among the papers whose co-author he was, it is worthwhile to mention those written with Dan Patrulei (Dinantian Deposits of the Romanian Plain Foundation, 1963), with Academician Professor Mircea Săndulescu (The Benia Sandstone, Tectonic Position, Age and Palaeogeographic Considerations, 1993), with Emil Avram (The Stratigraphy of the Southern Dobrogea Cretaceous Deposits, 1988, 1996), with W. Kuhnt, with S. Geroch and M. A. Kaminski, M. Moullade (Upper Cretaceous Abyssal Claystone in the North Atlantic and Western Tethys, 1992), with Gh. Bombiță, E. Antonescu, Gr. Pop, Jana Ion (The Mesozoic Formations of Maramureș, 1992), with E. Platon (1994), with Mircea Neagu (1995), with I. Manea and N. Gavriloiu (1983), and with E. Avram, I. Costea, O. Dragastan,

R. Muțiu, C. Vinogradov and V. Sindilar (Distribution of the Middle-Upper Jurassic and Cretaceous Facies in the Romanian Eastern Part of the Moesian Platform, 1995-1996).

With foraminifera as his main field of research, Professor Neagu worked on macrofauna collected in the style of a true fossil hunter. For years, he collected macrofauna from the Eastern Carpathian flysch, from the Perșani Mountains, from the Dâmbovicioara basin and especially from Dobrogea.

I now cite from the paper he published in 1972: "During the summer of 1966, on a field trip with second-year geological students in the area of the Bucegi Mts., within the series of sandstones of the Valea Dorului, I discovered an ammonite fragment attributed to the *Lewisiceras* genus." The discovery of this genus led to the identification of Senonian age of the "upper conglomerates," according to Academician I. Băncilă and D. Patrulei, who were the first to sustain the idea of conglomerates having an upper position, occurring unconformably over the Bucegi conglomerates or over the Albian mollase.

Also, in 1972 and 1975, Professor Neagu, together with A. Bărbulescu, published papers on the *Craniids* and the *Terebratulids* of the Lower Cretaceous in Southern Dobrogea, describing new species: *Belbekella macovei* n. sp., *Sulcirhynchia romanica* n. sp., and in 1975, together with Ioana Pană, he published "Gastropods of the Lower Cretaceous". In 1991, with D. M. Georgescu, he published a paper on the *Belemintella* genus of the Campanian of Romania, including a new species, *B. carpathica* NEAGUI n. sp., together with a biometrical study that denoted the separation of subspecies *B. mucronata mucronata* and *B. mucronata minor*.

The papers on biostratigraphy generally regarding the Mesozoic deposits and especially the Jurassic-Cretaceous deposits, essentially contributed to the elucidation of age identifications and especially of tectonics related problems. We cite, among others: the Jurassic-Cretaceous boundary beds in Romania (D. Patrulei et al., 1976), Southern and Central Dobrogea (M. Chiriac, A. Bărbulescu, O. Dragastan, I. Pană, 1977) or in the Senonian post-tectonic basins of the Hațeg region (Gr. Pop and I. Szasz, 1972).

The Cretaceous flysch deposits of the Eastern Carpathians made the subject of a series of studies presented at the sessions of the Carpathian-Balkan Geological Association (with M.G. Filipescu, Elena Bratu, G. Iliescu, J. Săndulescu and C. Vinogradov, in 1961).

Another series of contributions regards the fields of Palaeobotany and Palaeoalgology, written together with Professor Dr. Doc. R. Givulescu and Professor Dr. Ovidiu Dragastan on the species *Matonidium goepperti* collected from the Upper Cretaceous deposits of the inner flysch zone in 1986. This study was made on a sample found by Dr. Paulian Dumitrică. The paper "La flore du Crétacé supérieur (Turonien) du bassin de Babadag (Dobrogea de Nord, 1980) deals with a series of samples curated within the collection of the Bucharest Laboratory of Paleontology, some of them initially identified by such great paleobotanists of the last century as F. Marion and L. Laurent, sent for study to them by Professor Gregoriu Ștefănescu.

The Lower Cretaceous characeans of Southern

Dobrogea were published together with Geologist Maria Georgescu Donos (1973). This paper includes the description of *Clypeator europaeus* n.sp.

An interesting article published in 1985, regarding the concept of species in Palaeontology, approaches in a combined manner the ideas of a biologist and paleontologist concerning the applicative concept of chronospecies, speciation, giving examples within the families *Rotaliporidae* and *Globotruncanidae*.

Professor Theodor Neagu also excelled in the field of the history of Palaeontology. His fluent, very attractive and historically rigorous pen brought to light the History of the Laboratory of Palaeontology of the University of Bucharest (1984) and also numerous and useful biographies of forerunners, professors or geological researchers (Ion Simionescu, Gr. Ștefănescu, Ion Z. Barbu, Mircea Paucă and D. M. Preda) who, by their effort, advanced Geology and left it as a heritage to us, his followers.

The textbooks and courses of lectures were a permanent preoccupation for him. The course on Micropaleontology, Part I (Protozoans), published in 1979 and Part II (Metazoans), published ten years later, number over 700 pages together.

The course is presented in a modern manner and first of all addresses the students but, by the multitude of approached aspects (chronology, biostratigraphy, morphology, dichotomous keys of identification, systematics and regional correlations) it has been used by all experts of laboratories of Micropaleontology, of Petromar, of the Centre of Research and Design for Geological Exploration, of the Geological Institute of Romania and of other universities.

In the foreword to the course, he shows: "I considered an opportunity to try to materialise my whole practical and documentary experience in a textbook on Micropaleontology that would lead to the most rapid and correct identification possible of the principal groups of Protozoans (Radiolarians, Foraminifers and Tintinnids)". For the first time in the case of Foraminifera, the dichotomous keys are used for the identification of genera. The 122 plates with all the figured genera, drawn by him after numerous originals of his personal collection, brought him the eulogy from Professor Dr. Vladimir Pokorny and Professor Dr. Helen Loeblich Tappan.

The course on Palaeontology, in a manuscript, shows

profound knowledge in the field of Life and Earth Sciences (Zoology, Botany, Ecology, Geology), a fact that, together with the Professor's teaching experience, makes this course the most accepted and appreciated by the students.

Since 1980 Professor Neagu has been Honorary President of the Paleontological Society of Romania. By his entire teaching and scientific activity developed for 42 years in the Chair of Geology and Palaeontology of the University of Bucharest, Professor Neagu carried forward, with much passion, the "flame" of his forerunners, the great personalities of Romanian Paleontology, Gr. Ștefănescu, Sabba Ștefănescu, Ion Simionescu, I. P. Voitești, M. G. Filipescu and Ion Z. Barbu, embodying now, by his personality, the glory of paleontological sciences in Romania.

Being recognised for his incontestable scientific merits, on 23 March 1993 he became a Corresponding Member of the Romanian Academy, at the proposal of Academician Professor Ion Bănciță and of the Geonomical Section of the Romanian Academy.

On the occasion of his 65 anniversary, the Romanian geological, and especially paleontological, school wishes to pay a justified homage to the scientific personality of Professor Dr. Doc. Theodor Neagu. He trained generations of geologists and micropaleontologists disseminated in Romania and in the whole world today.

The First Symposium on Palaeontology organised by the Faculty of Geology and Geophysics, Chair of Geology and Palaeontology of the University of Bucharest, proves that the Romanian School of Palaeontology resurrects thanks to the efforts of the celebrated Professor Theodor Neagu and of all the paleontologists present here.

I wish to finish by citing one of Ion Simionescu's sayings at a 1936 conference at the Romanian Athenaeum:

"WE MUST LEARN TO HONOUR THE GLORIES OF OUR PEOPLE, WHO REPRESENT THE ETERNITY OPPOSITE THE EPHEMERAL LIFE OF THOSE WHO HAVE THE GIFT TO ATTRACT ATTENTION ON THEMSELVES FOR A SECOND BY UNPRODUCTIVE NOISE"

Professor Dr. Ovidiu Dragastan
Head of the Chair of Geology and Palaeontology
University of Bucharest

Scientific papers of Professor Dr. Doc. Theodor Neagu

1956

1. Contribuții la orizontarea Cretacicului de pe Valea Teliu - regiunea Brașov. (with Prof. M. G. Filipescu) Anal. Univ. București, ser. Șt. Natur., vol. 12.

1957

2. Poziția geologică a marnelor roșii din flișul intern de la Gemenea și Sadova (regiunea Suceava) (with Prof. M. G. Filipescu and Geologist P. Soigan), Acad. Română, Bul. Științ., Vol. 2 no. 3-4.

1959

3. Studiul micropaleontologic al Cretacicului superior din Valea Teliu. Anal. Univ. București, ser. Șt. Natur., vol. 21.

4. Studiul micropaleontologic al Cretacicului inferior de

la Giurgiu. Anal. Univ. București, ser. Șt. Natur., vol. 22.

1962

5. Studiul foraminiferelor aglutinate din argilele cretacic superioare de pe Valea Sadovei (Câmpulung Moldovenesc) și bazinul superior al Văii Buzăului. Acad. Română, Stud. cercet. geol., vol. 7 no. 1.

6. Asupra prezenței Cretacicului inferior, fosilifer de pe pârâul Feneș-Valea Mare (regiunea Brașov). Anal. Univ. București, ser. Geologie, vol. 32.

7. *Clavulinoides gaultinus* (Morozova) (1948) (Foram.) dans le flysch crétacé en Roumanie. Ann. Soc. Géol. Pologne, vol. 32, fasc. 3.

1963

8. Asupra prezenței Dinanțianului în fundamentul Câmpiei Române (Masivul Moesic) (with Geologist D. Patrușiu). Acad. Rom. Studii Cercet. Geologie, vol. 8, no. 2.
9. Sur le Crétacé de la zone de flysch interne, entre les rivières Teleajen et Trotuș et implications sur la structure des Carpathes Orientales. (with Prof. M. G. Filipescu et al.). Asoc. Carpatho-Balcan. Cong. V., București, 1961, Comunicări de stratigrafie, 1963.
10. Large-Size Agglutinated Foraminifera of the Campanian of Romania. Ann. Soc. Géol. Pologne, vol. 34, fasc. 4.
11. Über die Anwesenheit des Dinantes im Untergrund der Rumänischen Ebene (Moesisches Massiv). (with Dr. D. Patrușiu). Academia Română, Revue Roum. Géol. Géograph., vol. 7, no. 2.
- 1965**
12. Albian Foraminifera of the Romanian Platform. Micropaleontology, vol. 11, no. 1 (1965 Ministry of Education award winner).
13. Studii stratigrafice și micropaleontologice al Cretaciului superior dintre Valea Buzăului și Râul Negru (Întorsura Buzăului) - Abstract of his doctoral thesis. Centrul Multipl. Univ. București.
- 1966**
14. *Vidalina carpathica* n. sp. des dépôts Barrémiens carpathiques. Rev. de Micropaléontologie, vol. 9, no. 1 (with Geologist Gh. Popescu).
15. *Schackoia* of the Cenomanian of the Eastern Carpathians. Micropaleontology, vol. 12, no. 3.
- 1968**
16. Study of the Miliolidae in the Lower Cretaceous of Southern Dobrogea. Trav. Mus. Hist. Natur. "Gr. Antipa," vol. 8.
17. *Andersenium rumana* n. g. n. sp. and some taxonomic observations on the Subfamily Valvulinidae. Contrib. Cush. Labor. Foramin. Research., vol. 19, no. 3.
18. Biostratigraphy of Upper Cretaceous deposits in the South-Eastern Carpathians near Brașov. Micropaleontology, vol. 14, no. 2.
- 1969**
19. Cenomanian Planktonic Foraminifera in the Southern Part of the Eastern Carpathians. Ann. Soc. Géol. Pologne, vol. 39, fasc. 1-3.
- 1970**
20. Asupra prezenței Aptianului în Valea Cărelor-Întorsura Buzăului. Acad. Română, Stud. Cercet. Geol. Geofiz., ser. Geol., vol. 15, no. 1.
21. The genus *Meandrospira* (Foraminifera) of Lower Cretaceous Strata in Romania. Senckenbergiana lathaea, vol. 51, no. 5-6.
22. The genus *Hechtina* (Foraminifera) of the Lower Cretaceous and its systematic position. Senckenbergiana lathaea, vol. 51, no. 5-6.
23. Microbiostratigraphy of the Cenomanian deposits of the southern part of the Eastern Carpathians. Acad. Română, Rev. Roum. Géol. Géophys., sér. Géologie, vol. 14/2.
24. Los Foraminiferos Neojurásicos de Topalu (Dobrogea-Central, Romania). Revista Española de Micropaleontología, vol. 2, no. 2 (with Dr. A. Bărbulescu).
25. Micropaleontological and Stratigraphic Study of the Upper Cretaceous deposits between the Upper Valley of the Buzău and Râul Negru Rivers. Instit. Geologic, Memorii, vol. 12 (G. Cobălcescu award granted by the Romanian Academy in 1970).
- 1972**
26. Cenomanian Benthonic Foraminifera in the southern part of the Eastern Carpathians, Romania. Ann. Soc. Géol. Pologne, vol. 42, fasc. 1.
27. Senonianul din regiunea Hațegului (Carpații Meridionali). D. d. s. ședințelor Instit. Geol., vol. 58 (with Geologists Gr. Pop and L. Sasz).
28. Asupra prezenței Cenomanianului la Întorsura Buzăului. Anal. Univ. București, ser. Geologie, vol. 21.
29. Date micropaleontologice privind eocretaciul din bazinul Dâmbovicioara. Anal. Univ. București, ser. Geologie, vol. 21.
30. Asupra genului *Lewisiceras* în gresiile superioare de pe Valea Dorului (Masivul Bucegi). Acad. Română, Stud. cercet. Geol. Geofiz. Geogr. ser. Geologie vol. 17, no. 1.
31. The Eocretaceous Foraminiferal Fauna of the area between the Ialomitsa and Prahova Valleys (Eastern Carpathians). Revista Española de Micropaleontología, vol. 4, no. 2.
- 1973**
32. Characee eocretacice din Dobrogea de Sud. Acad. Română, Stud. cerc. Geol. Geofiz. Geogr., ser. Geologie, vol. 18, no. 1 (with Geologist M. Donos).
33. Ion Simionescu, (on the occasion of his birth anniversary). Anal. Univ. București, ser. Geologie, vol. 22.
- 1975**
34. Monographie de la faune des foraminifères éocretacées du Couloir de Dâmbovicioara, de Codlea et des Monts Perșani (couches de Carhaga). Instit. Geologic, Memorii, vol. 25.
35. Microbiostratigraphy of the Dâmbovicioara Pass and Adjacent areas. 14th Europ. Colloq. Micropaleontology, Guide Book.
36. Cretaceous. 14th Europ. Colloq. Micropaleontology, Guide Book (with I. Jana).
37. Gastropode globuloase din Eocretaciul Dobrogei de Sud. Univ. București, Comunicări, seria Geologie (with I. Pană, T. Stoica).
38. Brachiopode eocretacice din Dobrogea de Sud. Acad. Română, Stud. cerc. Geol. Geofiz. Geogr., ser. Geologie, vol. 2, no. 1 (with A. Bărbulescu).
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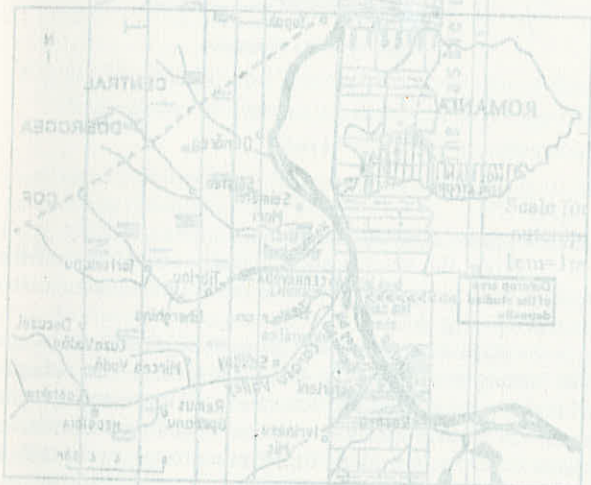


Fig. 1 - Geographical setting of the studied area.

Methods bearing in mind the uniformity of the deposits and the assemblage used for the study, also the regional scenery for the Late Jurassic-Early Cretaceous sedimentation proposed by Avram et al. (1955-1956), it was assumed that no large scale changes occurred within the depositional environment attached to the facies of the Valanginian interval. This is a reasonable and actually correct conclusion from the present analysis and actually in line with the conclusions, the regional assemblage of this part of the section and the

2. Methods and materials
 The present study involves a different approach. Firstly, an extensive list of previously reported fossils is recently furnished organisms was compiled for the Valanginian interval of the studied section. A qualitative approach was afterward employed for the characterization and analysis of the local Valanginian fossil assemblage to emphasize the paleogeographic features of the