## PROFESSOR CONSTANTIN ENACHE: 80 YEARS OF LIFE, 60 YEARS AS A GEOLOGIST

## **POPESCU Aurelian**

**Abstract.** The paper presents aspects of the life and activity of Dr. Geologist Constantin Enache, unchallenged leader of the geologists from Oltenia between the second half of the 20<sup>th</sup> century and the dawn of the 21<sup>st</sup> century. This contribution is meant to be homage and celebration of Constantin Enache, as a geologist, researcher, professor and outstanding person.

Keywords: Constantin Enache, Oltenia, geologist, researcher.

Rezumat. Profesorul Constantin Enache: 80 de ani de viață, 60 de ani de geologie. Lucrarea este un omagiu adus geologilui, cercetătorului, profesorului și omului Constantin Enache. Sunt prezentate aspecte din viața și activitatea sa ca mentor al geologilor din Oltenia, între a doua jumătate a secolului al XXI-lea și începutul secolului al XXI-lea.

Cuvinte cheie: Constantin Enache, Oltenia, geologie, cercetător.

It is rather difficult to comprehend a man's life and activity in just a few pages, especially when he is a personality as complex as Dr. Geologist Constantin Enache, the leader and mentor of virtually all geologists in Oltenia. These lines convey and represent a disciple's homage and gratitude, a recollection for those who have known him during his enduring activity.

I met Mr. Constantin Enache in 1989, when I was a young geologist working at the Institute of Geological Prospections and Explorations (IPEG) Oltenia in Craiova. I was impressed, from the very first moment, by his competence and his way of approaching geological issues. I had bought when first issued, *Dewatering of Deposits*, and *The Mollusc Fauna of the Lignite Deposits in Oltenia*, genuine "bibles" for all of us, the field geologists working in survey and exploration of lignite.

Then, there was a few years break, until 1993, when I became a curator at the Museum of Oltenia. There we reunited for what was to be a long and fruitful collaboration. We roamed together some pretty thousand miles, in search for outcrops, which he had studied years ago and whose location he remembered infallibly. Together we harvested thousands of shells of Pliocene molluscs, but also of ammonites, corals and fossil plants.

All the fossil samples gathered by the two of us are now part of the patrimony of the Museum of Oltenia, thus enriching the collection with valuable items which have been thoroughly determined from the scientific point of view, by Mr. Constantin Enache himself. Despite his respectable age, which for many other retired men means walking and playing chess in the park, he used to march for whole miles in the valleys, hills and mountains, in search of points of interest (from the geological and paleontological perspective). I have vivid memories of our trips to Drănic (Fig. 1), Podari, Bucovăţ, and Bâlta on the Jiu Valley, at Buiceşti, Sviniţa, and Batoţi, in Mehedinţi, Scoruşu, Scoarţa and Aninoasa in Gorj and many, many more.

In winter, or during the days which were inappropriate for field trips, he used to be present at the museum, a lot of time where he shared with me from his long experience. On such an occasion I have found out that, while a student at the "Saint Peter and Paul" High School in Ploiesti, he was strongly impressed by the teacher Lipcan, who used to teach the Geography of Romania, mainly based on geology. The drawings of geological units, which the teacher drew in colours on the blackboard, left a mark in his memory and influenced him in a decisive way with respect of his choice of career.

Many times he has been telling me about his years at the Bucharest University (1950-1955), about his professors, for example Dan Giuşcă, Virgil Ianovici, Gheorghe Murgeanu, Miltiade Filipescu, Emilia Saulea, Mircea Socolescu, Nicolae Grigoraş, Nicolae Oncescu, Victor Papiu, who gained a special place in his memory and whom he holds in high respect. With Professor Simon Pauliuc, back then a young teaching assistant, he had a close friendship, and later on the Professor became his thesis adviser.

He nostalgically told me about his first employment, at the "Mining Enterprise Filipeştii de Pădure", where he filled the position of chief geologist, which was available. There he enjoyed the appreciation of the engineer Satinger, chief of the investment office, who, after noticing his passion and keen interest in research, gave him as a present the yearbooks and reports of the Geological Committee; in his turn, he donated these books, in 2010, to the Office of Natural Sciences of the Museum of Oltenia.

Distinguished by the results of his work, he was promoted at the Mining Trust Muntenia, as chief geologist.

In 1959 he left for Craiova, after joining a team of professionals, which was about to found a mining company and eventually he moved here. Therefore, despite the fact that he was born in 1931 in a railway station, at Scăioşi, Prahova County, where his father was head of the station, he considers himself as an "Oltenian".

The data issued from the field works undertaken at the coal mines from Muntenia and Oltenia are illustrated by his written contributions in such publications as "Nature" and "Mines, Petrol and Gases", the latter being acknowledged as an outstanding scientific publication.

At this stage also, Constantin Enache lays down, together with experts from the Calculation Centre of the University of Craiova, the first applications of the computer in various aspects of geology. For that time, it was a revolutionary approach, proposed and courageously advanced and supported by the young researcher.

Most of his activity unfolded at "The Institute of Research and Mining Prospection for Lignite" (ICITPML), where he held a position ever since its establishment in 1967.

Many times he has spoken to me about his peers at the Institute, about their groundbreaking activity in the field of deposit dewatering, about the successes and the odds they encountered there (Fig. 2).

A few years ago, while I was working on my doctoral thesis, Mr. Constantin Enache brought me a copy of his own PhD. thesis, defended in 1976 and entitled *The Geology and Hydrogeology of the Region between the Jiu and the Motru, with focus on the Coal Deposit* where the new data as well as the new methods proposed by the author in researching lignite deposits are equally capitalized upon. By this opportunity I found out that, due to the outstanding results in his field of work, in 1974 he had been co-opted in the Managing Council of the Geological Direction in the Ministry of Mines and Geology. This Direction was led by Prof. Dan Rădulescu and later, in 1978, by the academician Al. Codarcea, a member in the Republic's Commission for Geological Reserves.

His deep knowledge of the problems regarding the dewatering of deposits has recommended Constantin Enache for the task of drawing up, in 1971, Romania's report for the session of the directors of the national scientific institutes of mines, organized by the Coal Committee for Europe on the topic *The drainage of aquifer formations from the mines of Oltenia*. He also drew up Romania's report (after being nominated the leader of the Romanian delegation) at the experts' 4<sup>th</sup> session in current mining exploitation, The Economic Commission for Europe of UNO, the Coal Committee, Geneva, 1982, on the topic: *Dewatering methods and means in the coal quarries, particularly at great depth or in case of difficult deposit conditions*.

His scientific achievements are 'crowned' by *Deposit Dewatering*, a book published in 1985 at "Scrisul Românesc", a publishing house in Craiova. This study has become a must for professionals in the field.

Another side of the activity carried out by Constantin Enache with ICITPML is represented by his constant preoccupation with scientific novelty, both in research and in the more practical aspects. Thus, in 1979 he patented the invention "Dewatering device" for submersible pumps, as well as 3 other innovations in the field of dewatering technologies.

He has spoken to me repeatedly about the experience exchanges with specialists from similar institutes in the USSR (Moscow, Leningrad, Tula, and Belgorod), Poland, Czechoslovakia, Hungary, Federal Germany (Köln) (Fig. 3).

During our talks, memories about his travels to China (1984 -1987) were constantly recurring. In the Bailong area (Fig. 4), the Chinese authorities had the intention of opening a pit coal mine, but the deposit was in difficult hydrogeological conditions.

Despite the fact that he had not previously worked in such geological conditions, Constantin Enache took responsibility for the success of the on-going workings and joined the team which contributed to the opening of the mine. The contact with Chinese specialists and especially with Chinese culture made a big difference to him, and he took care to "eternalize" the defining aspects of this intercultural encounter in such tokens as: photographs, slides, drawings and poems.

Fascinated by the way he was narrating his trips to China, and knowing that he had also visited other countries, either as a tourist (Greece, Italy) or motivated by his work interests and responsibilities (Switzerland, Germany, Russia, Poland, etc.), I suggested to dr. Enache to make public conferences on some aspects of his journeys around the world. The result was a series of slide projections accompanied by music, highly appreciated by the attending public. A large part of the public has become faithful, and we sometimes had even to repeat the presentations.

A different side of Mr. Enache's activity is the didactic one. Ever since his permanent settlement in Craiova he has been giving lectures, on the problems of pit coal deposits, first, at The People's University. Between 1985 and 1988, considering his status of an acknowledged specialist, both in the country and abroad, he was invited to give lectures at the Centre for the Professional Improvement of Higher Educated Employees in the Ministry of Mines.

Starting with the year 1987 he has been nominated in doctoral commissions at several prestigious institutions: the Faculties of Geology in Bucharest and Cluj-Napoca, the Institute of Geography and the Institute of Speleology based at the Academy.

After retiring, in 1990, he detained a position of lecturer at the private Cadastre College in Craiova and at the Faculty of Geography in the private Ecological University.

From 1994 until 2005 he has functioned as an associate professor with the Faculty of Geography in the University of Craiova (Fig. 5). During this period he was invited to teach the Palaeontology course at the Faculty of Biology. Every time I met him at the Faculty of Geography, either during breaks, or outside class time, I found him leaning over some maps, with one or two students, explaining something.

He has guided with method and inspiration, generations of students who admired and loved him. Even today, several years after ceasing teaching, he continues to help with advice and guiding the young geographers who come to him.

In the mid-nineties, I established a scientific chapter affiliated to the Natural Sciences Branch of the Museum of Oltenia. I called it "Museum's Friends", and Mr. Enache was unanimously elected as honorary president. Within this chapter, a few enthusiastic young people were active, to whom Mr. Enache used to explain various aspects of geology

and palaeontology, in a facile way and sometimes even in the field. It will remain unforgettable to me the field missions in the area of Bahna, from Brădești, Leu, Bâlta, where, together with Mr. Enache, several members of the chapter were present.

Sometimes, in the field or at the museum, he wrote poetry. To my amazement, he had written hundreds of poems in his life! Some of them, truly sensitive ones, have been included in thematic volumes and "launched" in the virtual space of the Internet.

Visual art, namely painting, has represented another creative dimension of his personality, and it has remained an enduring passion in the course of his life. He has painted especially landscapes, either in the country, or from abroad, in the countries where he travelled; the landscapes in China, are particularly impressive through grandeur and colours. Even though the general public has not had many occasions of getting acquainted with Mr. Enache's body of work (he only had one exhibition, open after 1990), the visitors who *have* seen and analysed his pictures think that these artworks can easily be exhibited in any museum in Romania.

Now in his eighties, an age that would allow him to consecrate his time to well-deserved resting and to his two grandsons (Fig. 6), Mr. Enache continues to do what he has always done: to have the same restlessness and scientific curiosity he had in his youth, to help the younger, but also the older with any problem, to be creative on a multitude of levels and to be the leader and mentor of geologists from Oltenia.

Geologist Dr. Constantin Enache - a whole army within a person!

Popescu Aurelian

The Oltenia Museum Craiova, Str. Popa Şapcă, No. 8, Craiova, Romania E-mail: aurelian\_popescu@yahoo.fr

Received: March 18, 2011 Accepted: July 30, 2011 Plate I. Selected images from the life and activity of Constantin Enache. Planşa I. Imagini alese din viaţa şi activitatea lui Constantin Enache.



Figure 1. On the fosiliferous site Drănic. Figura 1. La situl fosilifer Drănic.



Figure 2. With colleagues in the mine Horăști (standing). Figura 2. Împreună cu colegii în mina Horăști (în picioare).



Figure 3. Scientific session in Köln (the first one from the left). Figura 3. Sesiune ştiinţifică la Köln (primul din stânga).



Figure 4. In the Bailong quarry (the third from the right). Figura 4. În cariera Bailong (al treilea din dreapta).



Figure 5. At the University of Craiova. Figura 5. La Universitatea din Craiova.



Figure 6. With his little nephew David, at the Museum of Oltenia. Figura 6. Cu nepotelul David, la Muzeul Olteniei.