

**=== IN MEMORIAM ===**

**Vasile Muntean, PhD,  
Associate professor to Faculty of Biology and Geology,  
Babeș-Bolyai University**

**(21 June 1954 - 26 August 2024)**



Some people remain in our memory through the good mood they used to convey.

He was born on June 21, 1954, in a family with ancient Transylvanian roots. The child Vasile Muntean attends the general school in his native village – Tirimia, Mureș county (1961-1969) and then the Theoretical High School no. 4 from Târgu-Mureș (1969-1973). For the young Vasile, during the period 1973-1974, military training follows; military rank: second lieutenant.

Following his passion for biology, he attended the Faculty of Biology, Geography and Geology, Biology section, at “Babeș-Bolyai” University from Cluj-Napoca (1974-1978). After this cycle, he will obtain the Bachelor’s degree in Biology with the thesis entitled: “*Bacteriological and biochemical study of the biodeterioration of stone monuments*”. Between 1978-1979 he followed a specialization in “Ecology and environmental protection” and the specialization paper was entitled “*Ecological study of the biodegradation of organic films applied for the protection of some materials used in industry and cultural and artistic works*”.

Between 1987-1988, he followed the post-graduate course "Environmental protection", with the graduation thesis: "*The enzymatic potential of saline lakes in Romania and the need for their protection*". Since 1996, he has a PhD in biology with the doctoral thesis: "*Enzymological and microbiological studies on the sludge of saline lakes in Romania*" under the coordination of Professor Stefan Kiss, "Babeş-Bolyai" University, Cluj-Napoca.

During 2002-2003 he followed a postdoctoral programme at the Institute of Plant Molecular and Cellular Biology, Polytechnic University of Valencia, Spain, where he studied "*Post-transcriptional regulation of plant response to stress: splicing of mRNA precursors as a target of ionic toxicity of salts*".

After completing his specialization, he worked as a biologist at the Sewage Treatment Plant at the Craiova Chemical Plant (1979-1983), then for a short period as a biologist at the Biofarm Medicine Factory, Bucharest (August-September 1983), then from September 1983 to 1986 he was employed as a biologist at the Institute of Biological Sciences Bucharest, in the Bacterial and Viral Genetic Engineering Laboratory. From 1986 to 2005, he came to Cluj-Napoca at the Institute of Biological Research, in the Laboratory of Environmental Microbiology and Enzymology, covering the following stages: 1986-1988 – biologist; 1988-1990 – principal biologist; 1990-1995 – scientific researcher; 1995-1999 – senior scientific researcher III; 1999-2005 – senior scientific researcher II. In the period 2001-2002, he also served as scientific secretary of the Cluj-Napoca Biological Research Institute. At the same time, he completed his doctoral studies, obtaining his PhD degree in biology in 1996.

He started his teaching career in 2005 at the Faculty of Biology and Geology at the Department of Experimental Biology, the Microbiology discipline, as lecturer, and from 2009 he becomes an associate professor in the same discipline. Dedicated staff, he is loved by students and colleagues with whom he makes deep friendships. He coordinated dozens of bachelor's and dissertation theses. He was a tutor to several generations of students. He was a person involved in the education and learning of students, organizing with them thematic trips connected with the taught field (pharmaceutical factories, milk factories, beer, wine, wastewater treatment plants, etc.). Also, in support of the students, he contributed with four books:

1) Muntean, V., 2009, *Microbiologie generală*, Ed. Presa Universitară Clujeană, 332 p., ISBN: 978-973-610-845-7.

2) Muntean, V., 2013, *Microbiologie industrială*, Ed. Presa Universitară Clujeană, Cluj-Napoca, 440 p., ISBN: 978-973-595-507-6.

3) Carpa, R., Drăgan-Bularda, M., Muntean, V., 2014, *Microbiologie generală. Lucrări practice*, Ed. Presa Universitară Clujeană, Cluj-Napoca, 223 p., ISBN: 978-973-595-694-3.

4) Muntean, V., 2017, *Microbiologie medicală*, Ed. Presa Universitară Clujeană, Cluj-Napoca, 381 p., ISBN: 978-606-37-0129-0.

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As for research, he has published over 70 articles in national and international journals. He participated with oral or poster presentations at many national and international conferences (Italy, Russia, Spain, Hungary, Germany, etc.). He was member of scientific journals in Romania (reviewer to *Studia Universitatis Babeş-Bolyai Biologia*) and member of other editorial committees (International Consortium for Salt Lake Research).

He was principal investigator in 2004-2006, for project 04-03-PED-4526, PNCDI I – BIOTECH, Biotechnologies for the remediation of waste dumps from mining operations, and participated as a member of the working group of several dozen other projects submitted by the Institute of Biological Research Cluj-Napoca, but also by the Faculty of Biology and Geology.

Vasile Muntean had four children, Vasile, Ștefan, Mihaela and Horia. All of them graduated university and are now working in Bucharest city. Vasile jr. studied at Faculty of Veterinary Medicine, University of Agricultural Sciences and Veterinary Medicine, Bucharest and now he is a veterinarian. Ștefan studied at Faculty of Automatic Control and Computers, Politehnica University of Bucharest. Mihaela studied at Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine, Bucharest. Horia studied at Faculty of Cybernetics, Statistics and Economic Informatics, Academy of Economic Studies from Bucharest.

We met Vasile Muntean during our study years, but only got to know him better after 2004, when we became colleagues at the Faculty of Biology and Geology, Cluj-Napoca. His friendly, communicative nature combined with a sense of humor, and especially the joint research projects, made us close friends. Perhaps the most interesting common activities were recreational activities when we talked about not only science but also life problems. Also, the trips organized together with the students in various factories or at Salina Turda, or the participation in the conferences in Bistrița brought us closer and we built friendships that we will never forget. We spent over 15 years together in the same office, with joys and troubles, but we never argued. We listened to Mozart and other classics together, told jokes and worked on what needed to be worked on. Being a volcanic nature, the first sign of the disease appeared in 2015, but then, with a return of strength, he continued her activity with dedication, especially the teaching one. But the disease is unforgiving, and in January 2024, a week after we met again at the office, a stroke kept him in the beds of the Neurology hospital for 7 months, during which we understood each other only by signs. On August 25, being moved by the children to be closer to them, at the Geronto Life Med Center, Bucharest, he stopped his activity on earth forever.

We thank you Vasile, for everything you did and what you left behind!

**Rest in peace!**

## SELECTED PAPERS

### Books:

- Muntean, V.**, 2009, Microbiologie generală, Ed. Presa Universitară Clujeană, 332 pag. ISBN: 978-973-610-845-7.
- Muntean, V.**, 2013, Microbiologie industrială, Ed. Presa Universitară Clujeană, Cluj-Napoca, 440 pag. ISBN: 978-973-595-507-6.
- Carpa, R., Drăgan-Bularda, M., **Muntean, V.**, 2014, Microbiologie generală. Lucrări practice, Ed. Presa Universitară Clujeană, Cluj-Napoca, 223 pag. ISBN: 978-973-595-694-3.
- Muntean, V.**, 2017, Microbiologie medicală, Ed. Presa Universitară Clujeană, Cluj-Napoca, 381 pag. ISBN: 978-606-37-0129-0.

### Selected research articles:

- Kiss, S., Drăgan-Bularda, M., Pașca, D., Pinte, H., Zborovschi, E., **Muntean, V.**, Crișan, R., 1990, Use of zeolite as an adsorbing surface for modelling systems analogous to therapeutic mud, *Rev. R. Chim*, 35(7-9), 915-918.
- Muntean, V.**, Crișan, R., Pașca, D., Kiss, S., Drăgan-Bularda, M., 1996, Enzymological classification of salt lakes in Romania, *Int. J. Salt Lake Res*, 5(1), 35-44.
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- Carpa, R., Dobrotă, C., Butiuc-Keul, A., Dobrotă, C., **Muntean, V.**, 2010, Molecular identification of diazotroph microbial consortia in mountain soil, *Centr. Eur. J. Biol*, 5(5), 664-673.
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- Farkas, A., Dragan-Bularda, M., **Muntean, V.**, Ciataras, D., Tigan, S., 2013, Microbial activity in drinking water-associated biofilms, *Centr. Eur. J. Biol*, 8(2), 201-214.
- Baricz, A., Coman, C., Andrei, A.Ș., **Muntean, V.**, Keresztes, G.Z., Păușan, M., Alexe, Banciu, H.L., 2014, Spatial and temporal distribution of archaeal diversity in meromictic, hypersaline Ocnei Lake (Transylvanian Basin, Romania), *Extremophiles*, 18, 399-413.
- Carpa, R., Keul, A., **Muntean, V.**, Dobrotă, C., 2014, Characterization of Halophilic Bacterial Communities in Turda Salt Mine (Romania), *Orig. Life Evol. B*, 44(3), 1-8.
- Baricz, A., Cristea, A., **Muntean, V.**, Teodosiu, G., Andrei, A.Ș., Molnar, I., Alexe, M., Rakosy-Tican, E., Banciu, H.L., 2015, Culturable diversity of aerobic halophilic archaea (Fam. Halobacteriaceae) from hypersaline, meromictic Transylvanian lakes, *Extremophiles*, 19(2), 525-537.

- Epure, L., **Muntean, V.**, Constantin, S., Moldovan, O.T., 2015, Ecophysiological groups of bacteria from cave sediments as potential indicators of paleoclimate, *Quaternary International*, **XXX**, 1-13.
- Andrei, A.Ş., Robeson, M.S., Baricz, A., Coman, C., **Muntean, V.**, Ionescu, A., Etiope, G., Alexe, M., Sicora, C., Podar, M., Banciu, H.L., 2015 Contrasting taxonomic and physiological stratification of microbial communities from two hypersaline meromictic lakes, *ISME J*, 9(12), 2642-2656.
- Andrei, A.Ş., Baricz, A., Păuşan, M.-R., **Muntean, V.**, Sicora, C.I., Alexe, M., Rakosy-Tican, E., Banciu, H.L., 2017, Spatial distribution and molecular diversity of archaeal communities in the extreme hypersaline meromictic Brâncoveanu Lake (Transylvanian Basin, Romania), *Geomicrobiol. J.*, 34(2), 130-138.
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- Baricz, A., Levei, E.A., Şenilă, M. Cîntă Pînzaru, S., Aluaş, M., Vulpoi, A., Filip, C., Tripon, C., Dădârlat, D., Buda, D.M., Francisc V Dulf, Pintea, A., Cristea, A., **Muntean, V.**, Zsolt G Keresztes, Mircea Alexe, Banciu H.L., 2021, Comprehensive mineralogical and physicochemical characterization of recent sapropels from Romanian saline lakes for potential use in pelotherapy. *Sci Rep*, 11, 18633 (2021).

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