

IN MEMORIAM
PROFESSOR DR. MĂRIOARA GODEANU



This year, over several months (18 August 2015) shall expire one year after the passing away of Mrs. Professor dr. Mărioara Godeanu, founding member and Chairman of the Department of Biology (1990-2007) of the Academy of Scientists of Romania. Remarkable scientist, eminent Professor, devoted and beloved by her students, Mărioara Godeanu left behind an impressive scientific work, outstanding achievements in fields she approached her research.

I would like to point out, in this brief presentation, a few of these efforts and concerns that have made her well known not only in our country but also abroad.

Born in Deva, Transylvania, in 1938, she becomes since her youth a citizen of Bucharest, making the high school and College in the capital, where she will live with her family. She graduated the Faculty of Biology in 1961 and enters into research at the Institute for Studies and Researches for Cellulose - Reed-Paper, being quickly named head of the Hydrobiology collective. She worked here from 1962 until 1968, becoming principal biologist at the Institute for Studies and Design for City Management in Bucharest. Few years, in 1976, she passes as principal biologist at The Central Institute of Biology, within the Institute of Biological Sciences in Bucharest. She browses all levels of scientific research: senior researcher III and II. From 1991 to 2006, when she retired, she worked first as senior researcher II and then I in the new Research Center for Ecological Technology, later became Institute of Applied Ecology (IAE) in Bucharest, she became its General Manager. With the privatization of the IAE, she worked as Scientific Director of this institute, until 2005.

In 1976, Mărioara Godeanu get a Ph.D. in Biology with thesis "The aquatic and wetlands phytocoenosis in the Danube Delta in natural and arranged conditions", coordinated by academician Ludovic Rudescu.

After 1990, she follows some specializations such as: a postgraduate course "Identifying sources of funding", organized by the Romanian Society of Ecology and a course of Phytotherapy, organized by "Cristina" Medical Direction

of Bucharest, both in 1994. In 1995 she attends the postgraduate course "The Development of Medium Education Programs to the University Level", organized by "The Environment Training Program" (ETP) and in 1999 a course of "Radiant Energy", with international certified radiant technique for stress manager, level I and II becoming from 2003 "a practicing therapist" (eco- and phytotherapy). In 2008 she follows a basic course 1-5 of "Academy of Universal Energy and Spiritualists" obtaining as well the Environmental Management Card. In her final years, Marioara Godeanu coordinated many students' license works from Biology and Ecology and Environmental Protection specializations.

From 1992 until 1997, she held courses for the students of the Ecological University of Bucharest, in the field of Energy forms and Phytotherapy, coordinating license works as well. From 1998 to 2008 she also taught at the University of the Civil Engineering of the Bucharest, Department for Teacher Training postgraduate courses on Environmental Protection and Environmental Technologies, coordinating dissertation and first degree papers in the field of Environmental Education and Pollution.

Since 2001, Mrs. Marioara Godeanu becomes full professor at the Faculty of Natural and Agricultural Sciences of "Ovidius" University of Constantza, until the year of 2005.

In the period 2007-2008 she is named "Trainer for the environment" under PHARE Programme for Environmental Education and Biotechnology.

Upon the graduation of the faculty and until her health did not allow, professor Mărioara Godeanu carried on an extensive and outstanding scientific research, completed by numerous scientific papers, books and inventions, known internationally, rewarded by numerous titles, prizes and distinctions.

The research areas are also numerous but close as theme. In this presentation I'll try to point out some of the concerns of this important scientist.

She carried out her first studies into the field of Ecology and Ecophysiology of the aquatic and swamp plants from the Danube Delta, phytosociology, production and primary productivity in the delta, publishing in this field over 30 scientific papers. The studies were focused on the practical and economic aspect, such as the economic exploitation of the delta reed, its mechanized harvesting effects and the documentation for the determination of the reed yield for free and arranged spaces. In 1968, she realizes an extensive synthesis study of the biological and hydrobiological data from the Danube Delta from 1960 until 1968.

Another research area addressed in her research is related to the biology and ecology of organisms in the water supply and sewage, waste water treatment. In this sense she has conducted feasibility studies for water supply stations to optimize the efficient functioning of the municipal wastewater purification

stations from for zootechnics, for extractive, chemical and nuclear industry. All these have resulted in 54 scientific papers and 29 patents.

Based on these researches 20 pilot stations entered into construction to track the action and efficiency of the micro- and macrophytes plants on the supply waters and waste waters purification. In 1989, during the inter academic exchange with China, in the cities of Canton, Nanjing Sanghai and Beijing were present research and technologies made arousing a particular interest from the Chinese side who has urged the construction by the Romanians of an experimental stations in Nanjing and Beijing.

The third area in which she made numerous investigations is related to border phenomena – the energo- informational - in living and non-living structures. This studies have been directed to the phenomenon of communication between various living structure using modern methodologies, such as: recording technique electrical signals, track, view infrared technique and photographic film and video recording, technique toxicity tests. Some experiments were performed in the greenhouses of ONT Travel Agency in Mamaia.

All these investigations have led, to the request of "Alexander Sahia" Film Studio to produce a scientific short film entitled "The Sensitivity of Plants". The film received the "Fritz- Fiel" prize at the Sshort Film Festival in Brazil.

Another study direction was the introduction of chromatography Pfeiffer type experiments in Plant Physiology research to determine the ratio between the internal and external factors of the vegetal organims.

Interesting is the study of the so-called "greenhouse form" phenomena, known as "the pyramid effect".

The latest areas I remember (and yet more) refer to the determining of the "water memory" (especially related to "shape effect"), as well as the relationship between Ecology and Economy, which brings attention to the problemes connected with the ordering principles în Ecology and that led to the publication of 6 scientific papers.

Besides studying the phenomena of the border area between sciences, were published, between 1981-2005, 28 works and she coordinated the appearance of 2 volumes of work, especially for this area, organizing 4 national symposiums with this theme.

The entire research activity of Mrs. Professor Marioara Godeanu was materialized in the publication of nine books (some in collaboration), two university courses for students (Plant Physiology and Photosynthesis, both published in 1999), 117 scientific papers and has 20 patents and 2 more as second author. She has recorded four personal OSM brands, evidenced by certificates.

As a result of outstanding scientific concerns, Ms. Professor Marioara Godenu was rewarded with numerous awards, diplomas and medals (over 60) and with the receiving as a member in several scientific societies, associations and academies (22 in number). The space does not allow me to remind all of them, but I would like to remind some of them: Romanian Academy "Theodorescu Emanoil" Prize in 1980 for 5 group of patents, "Procedures and new instalations

for the biological purification", Silver Medal at the 20th International Exhibition of "Inventions and New Technologies", Geneva (Switzerland) in 1992, The Grand International Exhibition Prix - Jena, 1992, Nuremberg (Germany) (for the Ecological system).

The Gold Medal at the 24th International Exhibition of Inventions (Geneva, Switzerland) for "Methods for recovery of aquatic fitomase", in 1996.

Diploma of "Inventions '98", awarded by the Ministry of Research and Technology, The Association of Romanian - Life Sciences - PRO BIOS Quality of Inventions and the role for Romanian science.

National Merit Order, in Knight rank, awarded by the President of Romania for her outstanding contribution in scientific research and inventions recognized nationally and internationally, in 2002.

Excellence Diploma Cup, as well as, The Plaque of Academy of Scientists of Romania for her contribution to the organization and holding of the III Congress of the AOS "Water a Miracle" in 2004.

Mrs. Marioara Godeanu was part of the "Monuments Commission in Romania" from 1964, member of the Society of Biological Sciences in 1968, member of the Association of Scientists of Romania from 1984 (from 1990 until 2007, president of the Department of Biology).

She was the founding member of the Academy of Scientists in Romania in 2007 and President of the Department of Biology.

She was a member of the Romanian Society of Ecology from 1990, member of the Society of Inventors of Romania in 1992, and vice- chairman, member and chairman of the Association of Women Inventors, 1992. She was also a member of the International Society of Limnology (ISL) and member of the International Society of aquatic macrophytes (AAVIB) since 1970 and member of the National Academy of Ecological Sciences of Moldova Republic in 2008.

This summary presentation raises a natural question "from where had this lady so much power and so much energy for work?" and I'm sure, if health would allowed, even today she would be in the laboratory or at the worktable, forward to working, that is why I thought to point out some briefly aspect of this scientist who, together with her husband (also biologist), gave to us friends and acquaintances" unforgettable moments that can not be delete from the memory.

Professor Dr. Adrian Bavaru
Honor Member of Academy
of Scientists of Romania
"Ovidius" University of
Constantza