The semicentenary of the first bathyscaphe for underwater research and works in Romania (Patent no.54936, Ro)

Ionel Miron

Member of the Academy of Romanian Scientists

Liviu-Dan Miron

Professor, University of Agricultural Sciences and

Veterinary Medicine of Iași, Romania

The European record of 36 days of being submerged with the L.S.- 1 bathyscaphe, was reconfirmed on 28th May 2018 in the Diving Almanac &Book of Records official (<u>http://divingalmanac.com/longest-stay-underwater-habitat-europe/</u>).

<mark>Foto</mark>

50 years ago, on the 9th of September, a national Commission chaired by a member of the Council of State and experts from the Romanian Academy, the Ministry of Education, the Ministry of Labour, the Ministry of Transport, the Ministry of Food Industry, has homologated the L.S.-1 bathyscaphe, invented by Constantin Ignătescu, Ionel Miron, Iuliu-Gavril Morariu, Theodor Nalbant and Mihai Sica (*www.mironionel.ro*).

Among the main results of the underwater research obtained with the L.S.-1 bathyscaphe, we may mention:

- Connected with the technical facilities of the "Emil Racoviță" research ship, the bathyscaphe has ensured the implementation of the methodology for scientifically fundamenting the ecological succession of the lake Bicaz, published in two monographies awarded by the Romanian Academy and the Academy of Romanian Scientists, and in over 100 articles published in national and international journals;
- the experimentation and application of the biotechnology of intensive trout farming in the floating salmonid farm on lake Bicaz; patent no. 94352, Ro. This involved the creation and application of some technical solutions specific to the biotechnological flux, which were also

homologated as inventions: no. 60938, 68329, 83387, 88335, 90915, 83386;

- the patenting in aquanautics of approx. 60 aspiring academics;
- didactic and scientific applications in the international environmental Campuses organized in partnership between the Paris VII, Konstanz and "Al. I. Cuza" Iași Universities, at the Biological Station of Potoci, Bicaz;
- research on the behaviour of some hydrobionts, water quality bioindicators, carried out within 11 doctoral theses.



Figure 1. Romanian Aquanauts Liviu Miron and Constantin Mihai, entering the L.S. -1 underwater laboratory, in the lake Bicaz, Romania, in 1995 (©Jeffrey Gallant, Diving Almanac, Canada).



Figure 2. Professor Ionel Miron, during LACUSTRIS 1995 (©Jeffrey Gallant, Diving Almanac, Canada).



Figure 3. L. S. -1 Underwater laboratory (Romania) (photo A. P. E. S. Romania).