## ONE HUNDRED YEARS OF ROMANIAN OCEANOLOGY

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More than a century ago now, Adrien de Gerlache (1866-1934), the Belgian Naval officer leading the Belgica Antarctic Expedition invited Emil Racovitza (1868-1947), a biologist, to turn his attention to the sea. From this, Racovitza became the founder of Romanian oceanography. In turn Racovitza motivated two other Romanian scientists, Professor Ioan. Borcea (1879-1936) the zoologist, and Dr. Grigore Antipa (1867-1944) the marine ichthyologist, to dedicate their work to the development of marine sciences in the Black Sea and Mediterranean.

Figure 1 The Marine Zoological Station *I. Borcea* at Agigea

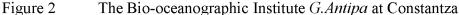


Source: the authors

In 1926, I. Borcea created the Marine Zoological Station at Agigea (Constantza) (figure 1). He specialized in anatomy, embryology, crustacea, applied entomology, and marine and general biology. Among his numerous achievements, Romanians recognize Borcea for the introduction of biology in high school education (including zoology courses), practical training in marine biology, promotion of the theory of evolution, organization of scientific research, and methodological contributions in the biological fight against noxious insects. Romanians also know him as a humanist, animateur of the younger generation, and a promoter of social progress. He became dean of the Faculty of Natural Sciences at the University of Iassy, director of that city's Museum of Natural History, and minister of Culture and Public Instructions. He was a founding member of the Academy of Sciences of Romania (since 2007 re-named the Academy of Romanian Scientists), and a corresponding

member of the Academy. As a member of the Zoological Society of France he rose to its post of honorary chairman, and there became a knight of the "Légion d'Honneur".

Through 1894, 1895 and 1896, Antipa initiated major research into the Black Sea on board the cruiser *Elisabeta*. This work brought him major public duties as first organizer, then director general, and eventually chief inspector of the State Fisheries of Romania. Due to his growing reputation, in 1925 H.S.H. Prince Albert I of Monaco invited him to join the Commission Internationale pour l'Exploration Scientifique de la Mer Méditerranée (CIESM). Thank to his prodigious activity, CIESM designated him reporter for the Black Sea in 1927, which area it extended the following year to the entire environs of the Eastern Mediterranean. Then in 1932 he founded the Bio-oceanographic Institute at Constantza (figure 2). CIESM held a general assembly and congress at Bucharest in 1935, which Antipa organised, and a second at Bucharest – Constantza in 1966





Source: the authors

After 1945, Mihail C. Bacescu (1908-1999) the biologist, led most of the marine research, in both field and laboratory. This Academician served as director of the Museum of Natural History *Grigore Antipa* at Bucharest for twenty-four years from 1964, and between 1954 and 1970 led the Sector of Marine Biology at the Constantza Academy. He rose to become Vice-President of CIESM in 1963 and served there as the national delegate from 1966 to 1999. In co-operation with the Mediterranean Association of Marine Biology and Oceanography, he and his fellow Academician and biologist, Eugen A. Pora (1909-1981), of the University of Cluj-Napoca, organised an international course on the biology of Black Sea brackish waters. The lectures included in the course also rose to publication in French.<sup>27</sup> In 1964, Professor Nicolae Panin, (1938-) a marine geologist and geophysicist, created the Laboratory of marine sedimentology at Constantza / Agigea; and three years later Doctor of

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<sup>&</sup>lt;sup>27</sup> *Biologie des eaux saumâtres*, 2 volumes, IRCM, (Constantza, 1977).

Engineering Constantin Bondar (1931-) the potamologist and marine hydrologist, created the Oceanographic research station at Constantza. At some point the Fisheries Research Station *Dr. G. Antipa* succeeded the Bio-oceanographic Institute. Then in 1970 at the initiative of Bacescu and Pora, they and the two other marine research related institutions along the Romanian littoral, the Marine Zoological Station *Prof. I. Borcea* and the Sector of Marine biology, all merged into the Romanian Marine Research Institute (RMRI), located in Constantza. This development to the RMRI facilitated Romanian research among the cruises carried out off the coasts of Libya, Argentina, and Somalia.

In 1999, the Romanian government took the decision to reorganise the RMRI as the National Institute for Marine Research and Development *Grigore Antipa* (NIMRD). As the leading or associate partner, and as the organizer or co-organizer of various scientific events, and as a participant in congresses, conferences, workshops, exhibitions, and trade fairs in both Romania and abroad, NIMRD's achievements so far comprise various aspects of R&D and training activities.

On October 29<sup>th</sup> 2010, NIMRD celebrated its 40th anniversary by a symposium on its premises. Dr. Hans Dahlin, the Director of EUROGOOS, Dr. Violeta Velikova of the Black Sea Commission at Istanbul, Turkey, Prof. Roger H. Charlier of the Free University of Brussels, Belgium, Prof. Bayram Öztürk of the University of Istanbul & TUDAV, Turkey, Prof. Bouchta El Moumni of the University Abdelmalek Essaadi Larache, Kingdom of Morocco, and the representatives of marine research institutions around the Black Sea were among the invited personalities. This event was also devoted to the International Black Sea Day of October 31<sup>st</sup>.