



Sic memorat

DESENVOLVIMENTO SUSTENTÁVEL DO OCEANO: UMA UTOPIA ÚTIL

SUSTAINABLE DEVELOPMENT OF THE OCEAN: A NECESSITY

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**DIREITO DO MAR
E INVESTIGAÇÃO
CIENTÍFICA MARINHA**

**LAW OF THE SEA
AND MARINE
SCIENTIFIC RESEARCH**

Professor Mário Ruivo played a noteworthy part in the design of the new law of the sea, and in its implementation both at the national, and the international level. As chairman of the Delegation of Portugal to the III UN Conference on the Law of the Sea (1974-78), Professor Ruivo helped shaping legal formulae meant to conciliate the interests of the international community and the specific interests of coastal states, together with emphasis placed on the relevance of international cooperation and of the role of international organizations for a better management and protection of the ocean, as well as for a more balanced distribution of marine science and technology at the world level. In Portugal, Professor Ruivo has chaired the Intersectorial Oceanographic Commission of the Ministry for Science, Technology and Higher Education (COI-MCTES) (1998-2017). Based on a preliminary analysis of data collected by COI-MCTES (2006-2016), interesting indications can be drawn regarding the dynamics of access by foreign research entities to the EEZ and the continental shelf of Portugal (Gonçalves and Gameiro).

Professor Ruivo has also been a pioneer at the world level in bringing environmental considerations into ocean science and ocean management. The proposal which underlay Law 17/2014, of 10 April, establishing the bases for a policy for the planning and management of the national maritime space, later on developed by Decree Law 38/2015, of 12 March, has been the object of a large public and political debate within and outside the Portuguese Parliament. In his quality as president of the National Council for the Environment and

Sustainable Development (CNADS), Professor Mário Ruivo was an active participant in this debate (Becker-Weinberg).

An illustration of a relevant international, multidisciplinary research project under the new ocean regime has been the IOC-sponsored Training Through Research (TTR) Floating University Program undertaken in the Gulf of Cadiz, focusing on large fields of mud volcanoes and other seafloor structures associated with gas seepage, hosting some of the most interesting deep-sea chemosynthetic ecosystems, and opening up potential alternative energy sources for the future, namely of methane release from depth, which may have had a significant impact on past climate change (Menezes Pinheiro).

Indeed, the deep ocean backs a wealth of supporting, provisioning, regulating and cultural functions and services, which hold benefits to mankind as a whole. Yet, a major contemporary challenge is managing the deep ocean sustainably. There is a risk that deep-sea mining will start without adequate environmental planning. Likewise, gaps in deep-ocean governance abound as most legal frameworks, both national and international, lack essential mechanisms to manage and protect ocean resources such as provisions for integrated, ecosystem-based and systematic planning and management. The legacy of Professor Ruivo for a sustainable use of the Ocean is especially relevant in this regard as he has always called for an integrated agenda combining scientific research, legal and policy tools, and awareness and global environmental justice (Hilário e Baker).

Maria Eduarda Gonçalves