







World Confederation of Underwater Activities Zone America Mexican Federation of Underwater Activities 6th. International Course of Scientific Diving FMAS-CMAS Zone America

With the participation of professionals and researchers from Mexico and Cuba, the 6th International Course of Scientific Diving MAS-CMAS Zone America, took place at the Reserva de la Biósfera de Banco Chinchorro in Quintana Roo México, one of the most pristine sites of the Mesoamerican reef, meeting the expectations of participants and directives of the Mexican and Cuban Federations of Underwater Activities..

The course was developed with the collaboration of the Reserva de la Biósfera de Banco Chinchorro and Parque Nacional Arrecifes de Xcalak, through the Nacional Commission of Protected Natural Areas in México (CONANP) From November 19 to 25, 2012 in Quintana Roo México, teaching load of 50 hours.

The inauguration of the event, took place under the direction of the CISD *María del Carmen García Rivas*, Director of the RBBCH and PNAX *and CISD Ma. Clotilde Zeckua Ramos* Director of the FMAS y CMAS Zona América Scientific Committee. Wishing to the course's participants, a week of collaborative work, and exchange of work methodology in the different areas of the scientific scope

During the course development, the applicants for the different degrees, made presentations in the areas of Biology, Oceanography, and Underwater Photography. The Work started with the presentations of the CMAS and the degrees of Scientific Diving, as well as the handling and conservation of the Protected Natural Areas of the RBBCH, under the charge of the course's Directors. Subsequently, the presented topics were: "Usage of the GPS for the localization of work areas to evaluate benthic communities" and "Alternative methods for Oceanographic measurements" under the charge of SD Francisco Uribe Osorio, researcher of the INAPESCA (CRIP-Ensenada), "Handling and control of the Lion fish in Cuba" and "Tips for underwater and land photography and how to correctly select the different lenses, depending on the work to be done". Under the charge of Biologist. Víctor M. Isla Lara, researcher and photographer of the National Aquarium of Cuba, "Handling and conservation of the pink snail and the Lion fish in the RBBCH" under the charge of Biologist Mateo Sabido Itzá, researcher of the Reserva RBBCH Y PNAX, "Technical inform about the handling and evaluation of the chocolata clam in the Estero de San José and Laguna Manuela in Baja California" under the charge of Ulises Uribe González, specialist in the benthic resources and researcher of INAPESCA (CRIP-Ensenada), as well as "Environmental Education Programs for the Communities" with Biologist Sara Fuentes, of Friends of Sian Ka'an.

The field work was developed in base to the presentation topics, performing the operative planning with the assignment of work groups, scuba diving zones, equipment and vessel preparation, as well as safety procedures for the performing of the correspondent practices in land and subsequently in the underwater field, to conclude with the processing of the obtained data.









The continuous development of instructors and scientific scuba divers in Mexico and Latin America, to achieve the professionalization of all those researchers that use scuba diving as a tool in the underwater scientific research, is, without a doubt, one of the Mexican Federation priorities.

The Scientific Committee of CMAS Zone America unites again Specialists from the different areas of Science and reaffirms its commitment to permeate the work and facilitate to the conforming Federations, the necessary orientation to achieve the certification of the professionals that participate in the multidisciplinary scientific teams, for the performance of the projects in the different underwater disciplines.



CSDI Ma. Clotilde Zeckua Ramos Scientific Committee Director FMAS/CMAS Zone America