

PREFACE

I feel it is extremely important to keep in mind that the first International Towing Tank Conference (ITTC) was organized in 1933. Nowadays it happens every three years. The ITTC 2011 will be held in Rio de Janeiro, Brazil. The ITTC 2014 will be held in Copenhagen, Denmark. As each continent hosts it subsequently, it will take a while before ITTC comes back to the Americas. Therefore, we shall say that the present ITTC2011, held in Brazil, will be a unique event in a century! This is thanks to the ITTC2008 EC that chose Brazil to host it, maybe recognizing that the country has experienced a significant development in our field.

In fact, in the seventies, Brazil was one of the leading countries in the shipbuilding industry. However, after several years of bad management (to say the least) this industry almost died. Only thanks to the offshore oil discoveries, the relationship between man and the sea stayed strongly alive here. These days, it is clear in Brazil that a concentrated effort should be made to bring the ship industry back to high productivity in order to profit with the offshore activities specially now with the pre-salt hydrocarbon discoveries. In this scenario, it has been happening naturally the construction of such a model basin as LabOceano (in COPPE/UFRJ – Federal University of Rio de Janeiro), the refurbishment of the IPT Towing Tank (in São Paulo State Research Institute), the implementation of the USP Numerical Wave Tank with its supporting Model Basin (in University of São Paulo) and, the upcoming UniCamp LabRiser (in University of Campinas). All of these institutions are independent R&D organizations but are coordinated by and strongly supported by a keen superstructure called Archimedes Network (Rede Arquimedes) under the leadership of Petrobras, the Brazilian Energy Company. These R&D organizations are members of the ITTC2011 local organizing committee and should also be properly acknowledged.

This year we are trying to make a point inducing the presence of the senior participants. We believe that their long term contributions yield a strong basis for the future. In fact, sometimes, it seems that this ‘future’ has already arrived due to the recent improvements of both instrumentation and computations capabilities. These, when professionally combined lead to unforeseen phenomena which can eventually become problematic, and can be surpassed long before the first prototype. This is, indeed, the ITTC business.

The present proceedings summarize an effort made by several committees that have met for the past three years all over the world. All of these committees share each local culture, local technology and, of course, local wine, leading to an international product. It is almost impossible that such combination fails as it will be proved on the following pages.

Finally, I would like to confess that I have learned a lot during these years of preparation for the ITTC 2011. Hence, I have to mention the person that firstly waved the path to follow, who is the present Dean of UFRJ Prof. Carlos Levi, former Executive Director of LabOceano (another sign of the importance of the offshore achievements in Brazil). On top of that, Prof. Marcelo Neves’ support should also be mentioned due to his high level of professionalism, sensibility and joie-de-vivre.

I hope you will enjoy ITTC2011 both technically and socially and also your stay in the Marvelous City.

Rio de Janeiro, August 28th, 2011

A handwritten signature in blue ink that reads 'Antonio Carlos Fernandes'.

Dr. Antonio Carlos Fernandes
Local Chairman of the 26th ITTC
Deputy Director of LabOceano/COPPE/UFRJ