

# Introduction

The first Symposium on the Pressuremeter and Its Marine Applications was held in Paris on April 19 and 20, 1982. It was organized by the Institut Francais du Petrole and the Laboratoires des Ponts et Chaussees. The proceedings are available from Editions Technip, 27 rue Ginoux, 75737, Paris, France. This Special Technical Publication (STP) is based on the Second International Symposium on the Pressuremeter and Its Marine Applications which took place at Texas A&M University on May 2 and 3, 1986. This Second International Symposium was sponsored by the American Society of Testing and Materials (ASTM), the Minerals Management Service/Technology Assessment and Research Program, and the U.S. Army Engineer Waterways Experiment Station. The coeditors suggest that this type of symposium become a regular event under the possible acronym of ISPA: International Symposium on the Pressuremeter and Its Applications.

The need for having a second symposium and for having it in the United States stemmed from the effort undertaken by ASTM Committee D.18 on Soil and Rock to prepare a standard on pressuremeter testing. The effort started in 1980 when Section D.18.02.07 on Pressuremeter Testing was created as a subdivision of Subcommittee D.18.02 on Sampling and Related Field Testing for Soil Investigations. Section D.18.02.07 focussed on developing a standard for the onshore pressuremeter test. Great progress has been made, but a consensus has not yet been reached. In 1983, ASTM Subcommittee D18.13 on Marine Geotechnics decided to start work on guidelines for the offshore pressuremeter test. Soon after, they realized the drastic difficulties that one would face in establishing such guidelines. It was then decided to organize this symposium in order to gather the latest information on the pressuremeter test. This information and the discussions which took place during the symposium will greatly help the work of Subcommittee D18.13 and Section D18.02.07.

Of the 47 abstracts received, papers from the USA, France, the United Kingdom, the Netherlands, Italy, Canada, and Thailand were finally accepted for publication in STP 950. They cover 5 different topics. The first topic is pressuremeter testing: these papers describe how the pressuremeter is deployed offshore and to some extent onshore, and how the test is run. The second topic is theory and the pressuremeter: these papers describe recent advances in the theoretical interpretation of the pressuremeter test. The third topic is soil properties from pressuremeter data: these papers describe what soil parameters can be obtained from pressuremeter data and how to obtain them. The fourth topic is foundation design using pressuremeter data: these papers describe using pressuremeter parameters for the design of deep and shallow foundations subjected to vertical loading. The fifth topic is pressuremeter and laterally loaded piles: these papers describe using the pressuremeter curve in the design of piles

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subjected to horizontal loading. Although many questions remain unanswered, this STP is a valuable tool for the engineers and researchers who seek current knowledge on the pressuremeter and its application.

Finally, the coeditors wish to sincerely thank the ASTM staff in Philadelphia for the flawless preparation of this symposium and for the timely completion of this publication.

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