

Preface

November is a traditionally miserable month for Venice, and unfortunately, 2012 has been no exception for *La Serenissima*.¹ Will this annual torment ever be quelled?

This book, Venice Shall Rise Again - Engineered Uplift of Venice through Seawater Injection, by Profs. Gambolati and Teatini, provides some thrilling answers. For decades, the authors have carefully studied the geology and the groundwater of the region and have recently proposed a daring, innovative engineering approach that could result in a substantial elevation of the ground surface of the region and, consequently, a mitigation of the future adverse effects of *acqua alta*.

The authors are top leaders in the field of computer simulation modeling of soil and groundwater phenomena. The results of their computer simulations are astonishingly encouraging: the goal is achievable; the cost is not tremendous; the risks seem inexistent.

However, the beauty of the book does not just lie in its explanation of the very rigorous and detailed computer simulations and numerical tests performed by the authors. The real beauty is in the huge and successful effort by the authors to present a beautiful, eclectic summary of the history of Venice, its artistic production, and its political evolution, as it relates to the hydraulic engineering challenges that Venetians have faced through the centuries, and the ways they have managed and modified their Lagoon.

This book is special indeed, not only for the importance of the treated subject, but because it will please both the readers with scientific knowledge and those who have difficulties in mastering scientific concepts. The great achievement of this book is the authors' ability to

¹ <http://www.youtube.com/watch?v=bAYnqgUGU1A>

present scientific material in a notably readable form; a goal often desired by scientists but seldom accomplished.

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