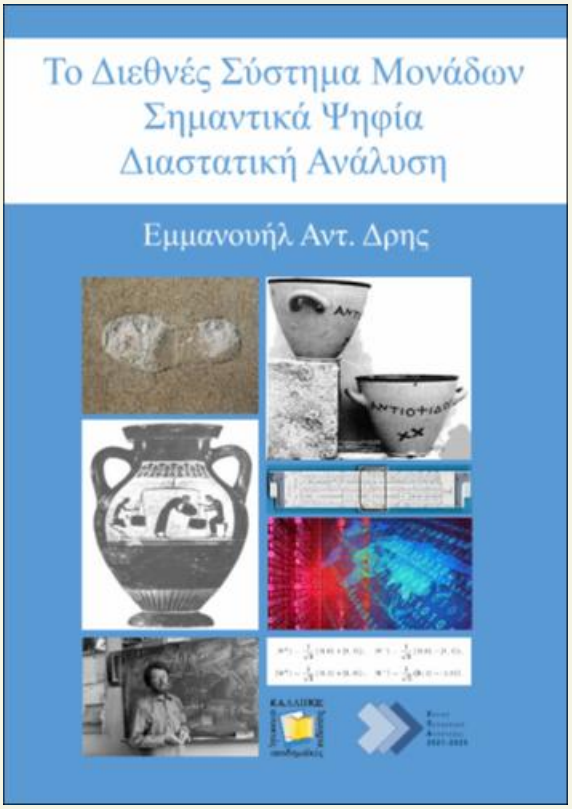

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Abstract

The book consists of three chapters that are named in the title. The purpose of the book is to cover the gap of such a book in Greek literature. There is not a systematic description of the three subjects in Greek. The first chapter which is the largest one, is dealing with the systems of units, and mainly with the International System of Units (SI). It is important that we refer to the latest version of the SI that is in use since May 20th 2019. The difference is that the SI is based on seven basic physical constants that define the fundamental units of measurement. The values of the constants are fixed, with no uncertainty. The derived units are defined from the fundamental units with the usual way. Precise definitions are given for the various concepts that are relevant to the subject. The second chapter which is the smallest one, is dealing with the significant figures. The meaning of significant digits is given precisely, as well as the use in calculations. Many people are confused to determine significant figures and decimal figures . The third chapter is dealing with the dimensional analysis. It is a fact that many physicists (mainly theorists) and engineers use dimensional analysis without knowing the theoretical background of the method. Engineers working with fluids are more experts in the subject and with deeper knowledge. This deeper knowledge assists in the better use of the method in more complicated problems. The book could be read by a single person or by more than one personsthat are related with subjects we referred to above.

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