Book Review

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Global Clinical Engineering Journal has been dedicated to encourage the sharing of knowledge and the publication of engineering and scientific work in the clinical engineering field. In our continuous efforts we are initiating a new section of our Global Clinical Engineering journal www.GlobalCE.org we call *Book Review*. We hope that you will professionally gain from it and at the same time promote the submission of such reviews for the benefit of all our readers.

Clinical Engineering Handbook
Second Edition
Editor-in-Chief: Ernesto Iadanza
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Our first book review is about the Elsevier Academic Press newly published Clinical Engineering Handbook second edition with Ernesto Iadanza as editor-in-chief. Mr. Iadanza is Adjunct Professor in the University of Florence, Italy. He is currently also the IFMBE Health Technology Assessment Division chairman. Following the reach of the first edition of this handbook, the second edition provides expanded coverage of the wide spectrum of technology-related responsibilities that the modern clinical engineering field is tasked with. This handbook contains over 900 pages of content that, while it may range in its importance level, is all pertinent to every practitioner in the clinical engineering and healthcare technology management field. The handbook consists of 13 sections and 127 chapters. The long list of section editors and chapter contributors made up of academicians and practitioners, that together, represents an authoritative view of the current state of subject matter that each of them covered.

As noted in the Foreword written by Adriana Velazquez, Senior Advisor on Medical Devices, World Health Organization (WHO) "This book is a major contribution to the evolution of the profession itself, and serves as a call to institutional leaders to look to clinical engineering to expand the professional capabilities that healthcare systems need worldwide as they grapple with the often overwhelming complexities, always keeping the end-user perspectives of patients, and healthcare workers' needs globally."

The purpose of this handbook is noted in the introduction as "to provide a body of knowledge to all clinical engineers who intend to practice their profession." Indeed, the extended coverage of the handbook provides well for the many phases of the technology life cycle and for the professional practice guidelines. These subjects are fundamental for those who already manage the healthcare technology and a 'must read' for those who enter the field. For those who are at their mid-career practice, they stand to benefit from reading this handbook in preparation for their next career step.

Handbook organization that covers such a large scope of many career roles and tasks within the clinical engineering discipline can be structured in different styles. The style selected here could have been improved upon if, for example, Section 1 on Clinical Engineering would have been restructured so that chapters on Open-source medical devices and the RFID technology been reassigned into Section 7 on Medical devices, allowing for more logical grouping of a single subject matter. Few other similar restructurings of chapters' subject location should have been considered. Also regarding the style, some of chapters offer the benefit of "further reading"

segment that is very useful, but unfortunately, it is not uniformly incorporated throughout the book.

As one of the authors within the long list of colleagues who contributed material for this handbook, I personally witnessed the great deal of effort and burden that the editor-in-chief lived with over the couple of years that it took to make this second edition a reality. It is significant accomplishment and can easily serves as the main "go to" source about the clinical engineering field and be part of every library and healthcare related academic programs resource. Everyone that will examine the list of experts that contributed material for the handbook is surely to be overwhelmed with their knowledge of the subject matter, with their ability to present clear and easy to read content, and of the many locations around the world they represent. The contribution of so many well-known experts is making this handbook unique.

It is a challenge to produce a resource that can encompasses the vast volume of information like that which is contained with an encyclopedia and simultaneously keep the depth of each of the individual subjects being addressed at reasonable level. This handbook is successful in its ability to offer expansive coverage of subject matters while at the same time reaching sufficient depth to help educate the reader. In my review I found this characteristic of the handbook to be uniquely and properly done.

You can find the handbook at https://www.elsevier.com/books/clinical-engineering-handbook/iadanza/978-0-12-813467-2 at the current discounted price of US $170.00. It is unfortunate since this cost is considered a far reach by many in the low resources' regions of the world where such a handbook stands to make the most impact. I hope that the publisher will take this dilemma into consideration.