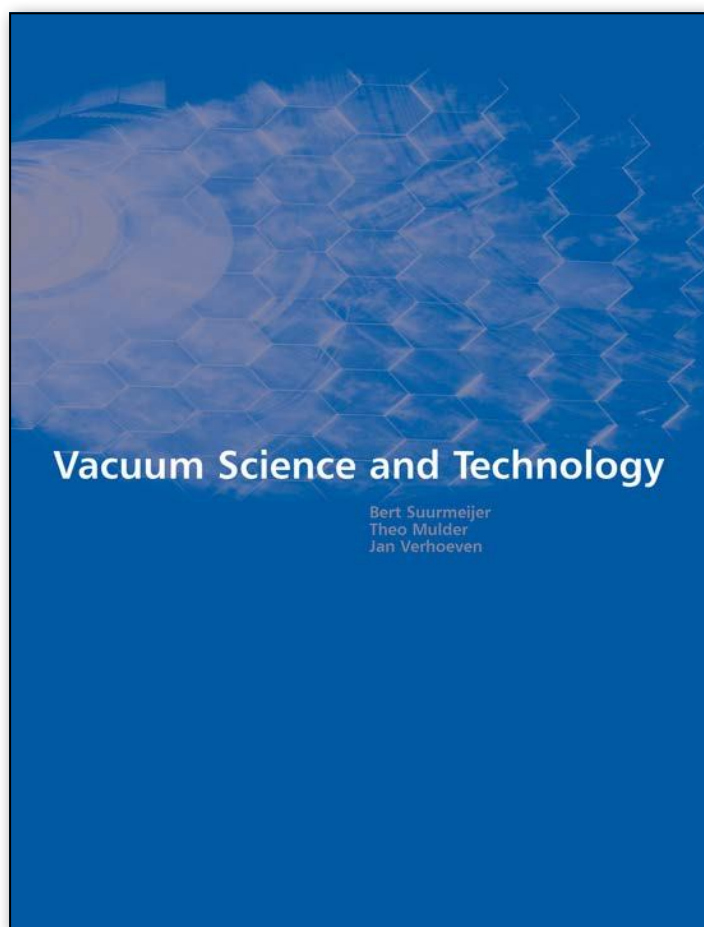


VACUUM SCIENCE AND TECHNOLOGY

'Vacuum Science and Technology' is an indispensable resource for scientists and engineers concerned with vacuum physics and technology. The book comprehensively covers all the relevant topics in the modern vacuum field. Throughout the volume, the emphasis is on simultaneously the basic physics which underlies present day technology, and on the practical application.



Vacuum Science and Technology
Authors: Bert Suurmeijer, Theo Mulder, Jan Verhoeven
Order: <http://www.book-vacuum-science-and-technology.com>
Price: 139,50 €

The book will enable the reader to understand the problems associated with vacuum system design, pressure measurement, leak detection, *etc.* It will also make the reader familiar with the tools available on the market.

Three introductory chapters deal with kinetic gas theory, gas laws, gas-surface interaction and flow phenomena. In this way the reader is prepared for the substantial middle part of the book which describes vacuum pumps and pumping systems, the gauging and gas analysis by which vacua are measured, characterized and controlled. To my opinion, chapter 6 with a clear explanation of the new Anharmonic Resonant Trap Mass Spectrometer (ARTMS) and an excellent section dealing with the analysis of a true residual gas spectrum with a unique way of argumentation deserve all the praise. These chapters are followed by descriptions of vacuum valves and components, from which complete systems are made and naturally lead to the consideration of system design. Obviously, the vacuum law of Ohm is present. Chapters on leak detection, cleaning and safety concerns and various appendices bring the book to the end.

As a reference book for the subject it serves its purpose well, providing all the information needed to make decisions in designing and maintaining simple vacuum systems. Relevant topics for practical problems are easy to find. As a textbook it is set up in a graded structure: a veritable find. I never saw such a simple solution with margin lines to distinguish between texts for the high and medium graduated reader. And both with and without margin texts the book is equally well legible. As it were two books in one.

The book style is clear, uncluttered and easy to read. Students, engineers and researchers entering the area will find this book an excellent introduction to modern vacuum physics and current practice. In terms of vacuum physics, the book goes beyond exclusively vacuum and explains all related physics backgrounds.

A 'must have' for all working with vacuum. ■

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