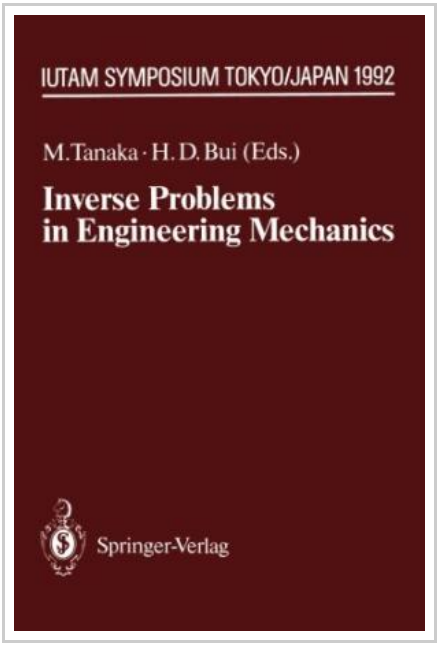

Inverse Problems in Engineering Mechanics

By Tanaka, Masataka / Bui, Huy D.

Book Condition: New. Publisher/Verlag: Springer, Berlin | IUTAM Symposium Tokyo, 1992 | Inverse problems occur in a wide variey of fields. In general, the inverse problem can be defined as one where one should estimate the cause from the result, while the direct problem is concerned with how to obtain the result from the cause. The aim of this symposium was to gather scientists and researchers in engineering mechanics concerned with inverse problems in order to exchange research result and develop computational and experimentalapproaches to solve inverse problems. The contributions in this volume cover the following subjects: mathematical and computational aspects of inverse problems, parameter or system identification, shape determination, sensitivity analysis, optimization, material property characterization, ultrasonic nondestructive testing, elastodynamic inverse problems, thermal inverse problems, and other miscellaneous engineering applications. | List of Contents.- 1 Mathematical Aspects.- On Regularization Methods within System Identification.- New Approaches to the Optimal Regularization.- A Method for Solving Inverse Boundary-Value Problems Using Symbolic Computation.- An Application of the Fuzzy Control for an Ill-posed Problem.- Inverse Filtering for Reverberant Transfer Functions.- 2 Computational Aspects.- Classification of Inverse Problems Arising in Field Problems and Their Treatments.- A Physically Based Method of Experimental Data-Concepts, Formulation and Application to...

Reviews

It is an amazing publication which i actually have at any time go through. It really is writter in easy words and phrases rather than hard to understand. Its been developed in an extremely easy way which is merely following i finished reading through this pdf in which actually changed me, affect the way i think.

-- ***Garry Lind***

This pdf may be worth acquiring. It can be writter in easy words and phrases and not hard to understand. I am pleased to tell you that this is basically the finest book i have read through during my personal existence and might be he greatest pdf for at any time.

-- ***Jeffry Tromp***