DESCRIPTION

Comprehensively covers the basic principles and practice of Operational Modal Analysis (OMA).

• Covers all important aspects that are needed to understand why OMA is a practical tool for modal testing

• Covers advanced topics, including closely spaced modes, mode shape scaling, mode shape expansion and estimation of stress and strain in operational responses

• Discusses practical applications of Operational Modal Analysis

• Includes examples supported by MATLAB® applications

• Accompanied by a website hosting a MATLAB® toolbox for Operational Modal Analysis

ABOUT THE AUTHOR

Rune Brincker is a civil engineer and received his M.Sc and Ph.D. from the Technical University of Denmark in 1977 and 1981, respectively. Since then he has been conducting research on various aspects of structural mechanics. Rune has been employed as associate and full professor at several Danish universities. Presently he is a Professor of Structural Dynamics at Aarhus University, Denmark. During the last 30 years his research has been focused on operational modal analysis (OMA), and one of his
major contributions to this field has been the development of the frequency domain decomposition (FDD) identification technique, which has been used in many practical applications of OMA. Rune Brincker is a co-founder of Structural Vibration Solutions (SVS) founded in 1999; and he is the founding chair of the International Operational Modal Analysis Conference (IOMAC) which started in 2005.

Carlos Ventura is a Civil Engineer with specializations in structural dynamics and earthquake engineering. He has been a faculty member of the Department of Civil Engineering at the University of British Columbia (UBC) in Canada since 1992. He is currently the Director of the Earthquake Engineering Research Facility (EERF) at UBC, and is the author of more than 450 papers and reports on earthquake engineering, structural dynamics and modal testing. He has conducted research about earthquakes and structural dynamics for more than thirty years. In addition to his academic activities, Carlos Ventura is a recognized international consultant on structural vibrations and safety of large Civil Engineering structures. He is a member of the Canadian Academy of Engineering and Fellow of Engineers Canada, also a member of several national and international professional societies, advisory committees and several building and bridge code committees.

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