



*Smart Structures and Materials 1994*

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in Smart Structures***

**H. Thomas Banks**

*Chair/Editor*

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# Smart Structures And Materials 1994

**Padhraic Smyth**



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materials such as piezoelectrics shape memory alloys electro and magneto strictive materials and polyelectrolyte gels have been reviewed in Part I Application examples are also provided and research issues reported on While the first part focuses primarily on materials and structures Part II emphasizes control applications and intelligent systems With the information provided in this two volume book scientists and researchers can easily grasp the state of the art of smart materials and structronic systems and are ready to pursue their own research and development endeavors

*Petroleum Engineering Explained* David Shallcross, 2020-04-20 Assuming no mathematical or chemistry knowledge this book introduces complete beginners to the field of petroleum engineering Written in a straightforward style the author takes a practical approach to the subject avoiding complex mathematics to achieve a text that is robust without being intimidating Covering traditional petroleum engineering topics readers of this book will learn about the formation and characteristics of petroleum reservoirs the chemical properties of petroleum the processes involved in the exploitation of reservoirs post extraction processing industrial safety and the long term outlook for the oil and gas production The descriptions and discussions are informed by considering the production histories of several fields including the Ekofisk field in the North Sea the Wyburn Field in Canada the Manifa Field in Saudi Arabia and the Wilmington Field off the Californian Coast The factors leading up to the well blowouts on board the Deepwater Horizon in the Gulf of Mexico and in the Mantara Field in the Timor Sea are also examined With a glossary to explain key words and concepts this book is a perfect introduction for newcomers to a petroleum engineering course as well as non specialists in industry Professor David Shallcross is one of the foremost practitioners in chemical engineering education worldwide Readers of this book will find his previous book *Chemical Engineering Explained* a useful companion

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