Biophysical Bone Behaviour: Principles and Applications

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DESCRIPTION

Biophysical Bone Behaviour: Principles and Applications is the culmination of efforts to relate the biophysical phenomena in bone to bone growth and electrical behavior. Behari develops a bridge between physics and biology of bone leading to its clinical applications, primarily electro stimulations in fracture healing and osteoporosis. The book is based upon authors own research work and his review articles in the area, and updated with the latest research results.

• The first book dedicated to biophysical bone behavior
• Develops the relationship between the biophysics and biology of bone into an integral unit
• Spans basic biophysical studies and clinical applications
• Links the various topics together to give readers a holistic understanding of the area
• Presents all major research findings about bone and biophysics

Readers can access the full list of references at the companion website: www.wiley.com/go/behari

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Jitendra Behari is a Professor of at the School of Environmental Sciences at Jawaharlal Nehru University, New Delhi. His main research interests are in the area of bioelectromagnetics, with emphasis on applications of microwaves and solid state physics techniques in environmental sciences, which includes soil moisture measurement. He has generated over one hundred research publications, four patents, and has developed several instruments in the electromagnetic field. Previous appointments include Adjunct Faculty at Michigan State University and three years with the biomedical engineering unit of IIT and AIIMS, New Delhi. He is a Fellow of the Institution of Electronics and Telecommunications Engineers and the Ultrasonic Society of India, and is a Senior Member of the IEEE. He has served on the executive bodies of the Biomedical Engineering Society of India, the Indian Society of Biomechanics, the Indian Physics Association, the Indian Vacuum Society and the Indian chapters of the IEEE's Electron Device and Microwave Theory and Techniques societies. Behari has also been a member of numerous other commissions and societies, including: Commission K of Union Radio Scientifique Internationale, IEEE Engineering in Medicine and Biology Society, the Electromagnetics Academy (USA), and the Indian Science Congress Association. He has in the past received Fulbright and University Grant Commission fellowships. Behari holds a PhD in Physics and was conferred an honorary D.Sc. in Bioelectromagnetics from Ansted University, UK at Penang, Malaysia.