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Nota di contenuto	A Proper Perspective to Retrace the Evolution of Italian Mechanics, with a Focus on Solids and Structures -- Recognized Italian Scholars of Mechanics -- Mathematics and Engineering: A Fruitful Interaction -- Memoirs of a Few Senior AIMETA Officers -- Tribology within AIMETA -- New Challenges for Meccanica After 55 Years -- Italian Mechanics: Overviews, Viewpoints, Perspectives -- Kinematics of Machines: Contributions from Meccanica -- The AIMETA Contribution to the Development of Masonry Mechanics -- Dynamics and Stability: From an Ancillary to a Leading Role in the History of AIMETA -- Strain-difference Based Nonlocal Elasticity Theories: Formulations and Obtained Results -- On the Theory of Inhomogeneities in Continuum Mechanics 1950s – 1970s: Elastic Invariants and an Overlooked Paper by C. Eckart -- Configurational Forces on Elastic Structures -- Materials with Memory: Viscoelasticity and Hysteresis -- Fractional Calculus in

Sommario/riassunto

The book retraces the history of the Italian Association of Theoretical and Applied Mechanics (AIMETA) since its establishment in 1965. AIMETA is the official Italian association of mechanics adhering to IUTAM (International Union of Theoretical and Applied Mechanics), which organizes and coordinates a meaningful number of research activities, the most important of which are the biennial National Congress and the internationally renowned journal "Meccanica", published by Springer. Besides collecting and organizing all related important data and information, as far as possible, by distinguishing among the five scientific areas – general mechanics, solids, structures, fluids, machines – encompassed by AIMETA, the history of the association is assumed as a proper perspective to overview the evolution of theoretical and applied mechanics in Italy over about the last fifty years. This is accomplished in the first part of the book. with also a specific focus on the mechanics of solids and structures, where the biographies of a meaningful number of recognized Italian scholars of mechanics in all areas are also provided, along with testimonials and memories by a few senior people meaningfully involved with AIMETA and Italian mechanics. The second part gives an account, although unavoidably incomplete, of recent developments of mechanical sciences in Italy, as reflected also in the activities of AIMETA and with reference to the international context. Contributions by a number of invited senior scholars, still very active, consist of overviews on some scientific themes in the various areas, summaries of achievements of research groups, expressions of research viewpoints, prospects for future developments.

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