

**00-3 IUTAM Symposium on Mechanical Waves for Composite Structures Characterization, Chania, Greece, 14-17 June 2000**

Chair: Dimitrios A. Sotiropoulos (USA) This report is on the International Union of Theoretical and Applied Mechanics Symposium "Mechanical waves for composite structures characterization". The Symposium took place June 14-17, 2000 in Chania, Crete, Greece. The Symposium covered a wide variety of areas and subjects that fall under its title-theme. As the symposium theme is interdisciplinary in nature, participants were invited from diverse fields such as Applied Mathematics, Applied Physics, Biomedical Engineering, Civil Engineering, Electrical Engineering, Fluid and Solid Mechanics, Materials Engineering, Mechanical Engineering, and Seismology. The symposium covered analytical, computational, numerical, theoretical and experimental aspects from state-of-the-art fundamental research to applied research and applications in emerging technologies. The topics include body waves, elastic waves, guided waves, inhomogeneous waves, rays, surface waves, and ultrasound in composite materials which are fiber-reinforced, laminated, or homogeneous containing bonds, coatings, cracks, defects, or thin films. The symposium participants, more than fifty, represented four continents. In addition, they were from across the board in terms of experience in the field: from Ph.D. students to Postdocs to renowned scientists. The papers presented can be placed in five thematic categories: the first category includes papers that deal with waves or rays from localized/plastic sources in layered media. In the second category, papers deal explicitly with discontinuities (e. g. dislocations, cracks). The third category encompasses papers in which experimental investigations are of primary interest. The fourth category includes papers that concentrate on waves in multilayered structures. Finally, papers included in the fifth category deal exclusively with elastic waves and interfaces. The contributing authors and participants are hereby gratefully acknowledged. The Symposium extended beyond its focused theme to an excursion that included the Archeological Museum in Heraklion, the Ancient City of Knossos, and lunch at Matala in the southern coast of Crete. I would also like to

take this opportunity to express my sincere gratitude to Professor M. A. Hayes the ex-Secretary General of the International Union of Theoretical and Applied Mechanics and a member of the Symposium's Scientific Committee. His constant encouragement and support made the Symposium not only possible but also successful. To the success also contributed all the members of the Symposium's Scientific Committee which I had the honor to chair. I express my appreciation to each one of them who are: Professor J. D. Achenbach (USA), Professor M. A. Hayes (Ireland), Professor K. J. Langenberg (Germany), Professor A. K. Mal (USA), Professor X. Markenscoff (USA), Professor S. Nair (USA), Professor R. W. Ogden (UK), Professor G. J. Quentin (France), and Professor F. Ziegler (Austria). Finally, the financial support of Unesco, Iutam, and the US Army Research Laboratory-Europe Office is gratefully acknowledged

**Report composed by Dimitrios A. Sotiropoulos**