

MODELAREA ȘI SIMULAREA MIȘCĂRII PE O PLATFORMĂ MULTIFUNCȚIONALĂ PENTRU STUDIUL ENERGIEI

MODELLING AND SIMULATING THE MOTION OF A MULTIFUNCTIONAL PLATFORM FOR THE STUDY OF ENERGY

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Abstract: Obtaining energy from conventional sources and especially from renewable sources is a matter of great interest. The applications made on this topic in the educational environment add value to the research activity carried out in the field of energy. The use of Lego Education components allows the modeling of complex applications in laboratory conditions, which can solve real world problems. CAD representation and dynamic simulation of the systems enable the functional analysis of motion elements and the increase of design productivity. The multifunctional platform allows to understand the integration mode of the matter, energy and information into mechatronic systems. The information gives complex system attributes to mechatronic systems.

Keywords: mechatronic systems, Lego platforms, wind energy, solar energy, CAD design, dynamic simulation.