Part 3

SIMULATION TECHNOLOGIES

1. INVITED LECTURES

An overview of several formulations for multibody dynamics
P. Nikravesh

Dynamic models in multi-body systems: A product life cycle key technology
D. Talab and Cs. Antonya

Real-time MBS formulations: towards virtual engineering
J. Cuadrado, M. Gonzalez, R. Gutierrez and M.A. Naya

Multi-body dynamics: an evolution from constrained dynamics to a multi-physics interactive framework
M. Teodorescu, S. Theodossiades and H. Rahnejat

2. CONTRIBUTIONS

A collaborative simulation environment for multibody system analysis
M. González and J. Cuadrado

Design evaluation of multibody systems in virtual environment
Cs. Antonya and D. Talab

Spiral elevator modelling and analysis using ADAMS software
I. Batog

A new model to estimate friction torque in a ball screw system
D. Olaru, G. C. Puiu, L.C. Balan and V. Puiu