

Table of Contents

Preface

Soluble Salts Transport in Building Materials

A.P.R. Albuquerque and J.M.P.Q. Delgado

1

Moisture Diffusion in Passion Fruit Seeds under Infrared Drying

A.S. Batista, M.F.F. Souza and M.M. Prado

25

Impact of the Polarization Layer on the Hydrodynamics and Mechanical Performance of a Filtering Hydrocyclone Applied to Oily Water Separation

S.A. Nunes, H.L.F. Magalhães, R.S. Gomez, D.C.M. Cavalcante, G.L.O. Neto, N.G.N. de Oliveira, S.R.F. Neto, A.S. Pereira, A.K.F. Abreu and A.G.F. Almeida

33

Heat Transfer and Fluid Flow in Concentric Annular Ducts Using the Galerkin-Based Integral Method: A Numerical Study

V.A.S. Júnior, S.R.F. Neto and A.G.B. de Lima

53

Computational Fluid Dynamics Studies in the Drying of Industrial Clay Brick: The Effect of the Airflow Direction

M.V. Araújo, A.C. Sousa, M.R. Luiz, A.S. Cabral, T.R.B. Pessoa, P.C. Martins, A.M.V. da Silva, R.S. Santos, V.A.B. de Oliveira and A.G.B. de Lima

69

CFD Simulation of the Hydrodynamics of Core-Annular Flow of Oil, Gas and Water in Elliptic-Cylindrical Duct

J.L. de Oliveira, H.L.F. Magalhães, R.S. Gomez, D.C.M. Cavalcante, G.L.O. Neto, N.G.N. de Oliveira, F.A. Batista, R.M. Silva, A.K.F. Abreu, A.G.F. Almeida and A.G.B. de Lima

85

Impact of Heated Air Indirectly Produced by Photovoltaic Panels on Indoor Thermal Comfort

A.C.C. Oliveira, L. Rodrigues, A.S. Guimarães and J.M.P.Q. Delgado

105

Active and Passive Solutions for an Energy Efficient Building

G.P.L. Teixeira, A.S. Guimarães and J.M.P.Q. Delgado

125