

# 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