

Contents

Part I Project Management

Comprehensive Reorganization of Project Management: A Case Study	3
Unai Apaolaza and Aitor Lizarralde	

Part II Civil Engineering, Urbanism and Urban Planning. Building and Architecture

The Dilemma of Innovation in the Construction Company: A Decade of Lessons Learned	21
Eugenio Pellicer, Víctor Yepes, Christian Luis Correa and Luis Fernando Alarcón	

Part III Product and Process Engineering and Industrial Design

Study on the Influence of Fresh White Cheese Packaging Design Variables on Users' Perception	37
Ignacio Gil, Rubén Rebollar, Iván Lidón and Javier Martín	
Study, Design, Development and Construction of a Linear Tribometer for Testing Human Skin	51
Eurico Seabra, Luís F. Silva, José Martins and Mário Lima	
3D Myocardial Modelling by Computational Geometry Techniques. Analysing Performance	67
F. Cavas, F.J.F. Cañavate, J. Nieto and D.G. Fernández-Pacheco	

Part IV Environmental Engineering and Natural Resource Management

Study of the Energy Recovery of the Reject Materials from Municipal Solid Waste Treatment Plants in Spain	81
I. Sánchez-López, A. Gallardo and N. Edo-Alcón	

Review of Options for Solving Problems of Frazil Ice in Industrial Water Intakes	95
R. Luiña Fernández, M.A. Vigil Berrocal, J.M. Mesa Fernández and A. Fernández Iglesias	
Environmental Behaviour of an Element of the Construction Sector	109
Maria Luz Garcia Ceballos, José Ramón de Andres Diaz and Francisco Pinto Oliver	
Identification and Measurement of Complementarity Variables in Strategic Projects of Water Irrigation from the Sustainability Practices. Case: Republic of Ecuador	121
Galo Fernando Gallardo Carrillo, Elena Melia Martí, Marta García Mollá and Miguel Ángel Artacho Ramírez	
Part V Energy Efficiency and Renewable Energies	
Aging Model for Re-used Electric Vehicle Batteries in Second Life Stationary Applications	139
Lluc Canals Casals, Beatriz Amante García and Maria Margarita González Benítez	
Assessing the Energy Saving Potential for Building Stock and Choice of Rehabilitation Strategy by a Multicriteria System	153
Sergio Muñoz Gómez, Sagrario Conejero, Bernardino Morillo Merino, Rubén Gregori and José-Luis Vivancos	
Adapting Buildings to the Current CTE-DB-HE: A Single-Family Housing Development in Logroño (La Rioja)	167
Luis M. López-González, César García-Lozano, Jesús Las-Heras-Casas and Luis María López-Ochoa	
Geographic Information System for Optimization and Integration of Photovoltaic Solar Energy in Agricultural Areas with Energy Deficiency and Water Scarcity	181
Álvaro Rubio-Aliaga, M. Socorro García-Cascales, Ángel Molina-García and Juan M. Sánchez-Lozano	
Part VI Rural Development and Development Co-operation Projects	
<i>Guadua angustifolia</i> as a Structural Material for Greenhouse Design	201
Eduardo Garzón, Manuel Cano García, Luis Pérez-Villarejo, Sergio Martínez-Martínez and Pedro José Sánchez-Soto	

Part VII IT and Communications. Software Engineering

Evaluation of the State of Cutting Tools According to Its Texture Using LOSIB and LBP Variants 217

Oscar García-Olalla, Laura Fernández-Robles,
Eduardo Fidalgo, Víctor González-Castro and Enrique Alegre

Part VIII Safety, Labour Risks and Ergonomics

SAFEBUS: A New Active Safety System for Pedestrian Detection in Public Passenger Buses 231

Juan F. Dols Ruiz, Leopoldo Armesto, Vicent Girbés
and Laura Arnal

Part IX Training in Project Engineering

Implementation of BIM in the Subject Technical Industrial Projects—Degree in Industrial Technologies Engineering—University of Valladolid 247

Moisés Blanco Caballero, Patricia Zulueta Pérez,
Ignacio Alonso Fernández-Coppel and Alberto Sánchez Lite

Technological Immersion in Industrial Engineering for a Project Management Course to Develop Dual Use Technology 261

José Luis Roca-González, Juan Miguel Sánchez-Lozano,
Germán Rodríguez-Bermúdez, Pedro José García-Laencina
and Antonio Juan Briones-Peñalver

Quantitative and Qualitative Analysis of Project-Based Learning to Acquire Competencies in Project Management 275

Dante A. Guerrero Chanduví, María del Carmen Barreto Pérez,
Catherin Girón Escobar and Diego Saavedra Agurto

Project Management and Engineering Research

AEIPRO 2016

Ayuso Muñoz, J.L.; Yagüe Blanco, J.L.; Capuz Rizo, S.

(Eds.)

2017, IX, 289 p. 126 illus., 101 illus. in color., Hardcover

ISBN: 978-3-319-51858-9