
EQUIPO EDITORIAL / EDITORIAL TEAM / EQUIPA EDITORIAL

Editor Jefe / Editor in chief / Editor Chefe

Luis Alonso Dzul López. Universidad Internacional Iberoamericana, México

Roberto Alvarez. Universidad de Buenos Aires, Argentina

Editores Asociados / Associate Editors / Editores associados

Alina Eugenia Pascual Barrera. Universidad Internacional Iberoamericana, México

Ernesto Bautista Thompson. Universidad Internacional Iberoamericana, México

Lazaro Cremades Oliver. Universidad Politécnica de Cataluña

José del Carmen Zavala Loría. Universidad Internacional Iberoamericana, México

Santos Gracia Villar. Universidad Europea del Atlántico

Secretaria / Secretary / Secretário

Beatriz Berrios Aguayo. Universidad de Jaén, España

Consejo Científico Internacional / International scientific committee / Conselho científico internacional

Miguel Angel López Flores Instituto Politécnico Nacional, México

Brenda Brabo Diaz. Instituto Politécnico Nacional, México

Lázaro Cremades. Universidad Politécnica de Cataluña, España

Fermín Ferriol Sánchez. Universidad Internacional Iberoamericana, México

Miguel Ysrrael Ramírez Sánchez, Universidad Internacional Iberoamericana, México

Armando Anaya Hernández. Universidad Internacional Iberoamericana, México

Ramón Pali Casanova. Universidad Internacional Iberoamericana, México

Jorge Crespo. Universidad Europea del Atlántico, España

María Luisa Sámano, Centro de Investigación y Tecnología Industrial de Cantabria, España

Carmen Varela. Centro de Investigación y Tecnología Industrial de Cantabria, España

Alejandro Ruiz Marín, Universidad Autónoma del Carmen, México

Asteria Narváez García. Universidad Autónoma del Carmen, México

Ricardo Armando Barrera Cámara. Universidad Autónoma del Carmen, México

Claudia Gutiérrez Antonio. Universidad Autónoma de Querétaro, México

Felipe André Angst. Universidad Católica de Mozambique, Mozambique

Luis Borges Gouveia. Universidade Fernando Pessoa, Portugal

Rodrigo Florencio da Silva. Instituto Politécnico Nacional, México.

Charles Ysaacc da Silva Rodrigues. Universidad de Guanajuato, México.

Patrocinadores:

Funiber - Fundación Universitaria Iberoamericana

Universidad internacional Iberoamericana. Campeche (México)

Universidad Europea del Atlántico. Santander (España)

Universidad Internacional Iberoamericana. Puerto Rico (EE. UU)

Universidade Internacional do Cuanza. Cuito (Angola)

Colaboran:

Centro de Investigación en Tecnología Industrial de
Cantabria (CITICAN)

Grupo de Investigación IDEO (HUM 660) - Universidad de
Jaén

Centro de Innovación y Transferencia Tecnológica de
Campeche (CITTECAM) – México

SUMARIO ● SUMMARY ● RESUMO

- Editorial 5
- Indagación sistemática para la mejora continua de las herramientas de gestión de proyectos: el caso gestiona de la Universidad Estatal a Distancia 7
Systemic inquiry for the continuous improvement of project management tool: the case of gestiona of the Distance State University *Esterlyn Quesada Brenes, Andrés Segura Castillo. Universidad Estatal a Distancia / Universidad Internacional Iberoamericana (Costa Rica) / Centro Nacional de Alta Tecnología / Open University / Universidad Estatal a Distancia, Universidad de Costa Rica (Costa Rica).*
- O acesso à educação infantil no estado de Mato Grosso–Brasil: ao final do Plano Nacional de Educação (2014-2024) 27
Access to early childhood education in the state of Mato Grosso–Brazil: at the end of the national education plan (2014-2024)
Maria Cristiana da Silva Cadildé Vilela, Carlos Tadeu Quairoz de Moraes. Universidad Internacional Iberoamericana (Brasil).
- Análisis de ladrillos ecológicos fabricados con suelo limo-arenoso, cemento, viruta y papel, en base a resistencia, costo y deformación 37
Analysis of ecological bricks manufactured with silt-sandy soil, cement, wood-leftovers and paper, based on hardness, cost and disfigurement
Franklin Mauricio Campoverde Bustos, Xavier Nieto Cárdenas, Caori Patricia Takeuchi. Universidad Católica de Cuenca (Ecuador).
- Geotecnia y Arquitectura. Consideraciones sobre el paradigma actual en geotecnia y sus posibles desarrollos futuros 57
Geotechnics and Architecture. Considerations on the current paradigm in geotechnics and its possible future developments
Emilio Gastón Polo Friz. Universidad Nacional de Mar del Plata (Argentina).
- Método FORTE v. 1.0: una contribución a la gestión de megaproyectos de ingeniería en Brasil 66
Forte Method v. 1.0: a contribution to schedule management of engineering megaprojects in Brazil
Marcus Vinícius Forte Silva, Mirtha Silvana Garat de Marín. Universidad Europea del Atlántico (España) / Universidad Internacional Iberoamericana (Uruguay).
- Los proyectos de investigación como instrumentos de análisis de políticas públicas. Las políticas culturales multijurisdiccionales y sus modelos de gestión en la ciudad de Mar del Plata 81
Research projects as instruments for public policy analysis. Multijurisdictional cultural policies and their management models in the city of Mar del Plata

*Laura Isabel Romero, Guillermo Osvaldo Eciolaza, Emilio Gastón Polo Friz.
Universidad Nacional de Mar del Plata (Argentina).*

- Modelación de la cinética de reacción para la producción de polihidroxialcanoatos microbianos mediante *Bacillus megaterium* 89
Research projects as instruments for public policy analysis. Modeling reaction kinetics for the production of microbial polyhydroxyalkanoates by bacillus megaterium
José Luis Gómez Bravo, Silvia Cruz Ramales, María Oneida Rosado García, Alejandro Tzompazti Sánchez, Germán De los Santos Bañuelos. Universidad Tecnológica de Puebla (México).
- Desarrollo de competencias blandas en estudiantes de ingeniería: trabajo colaborativo 106
Development of soft skills in Engineering students: collaborative work Neydi Gabriela Alfaro Cazares. Universidad Autónoma de Nuevo León (México).

Editorial

This issue of MLS Project Design & Management emphasizes the importance of joint participation that connects with the diverse scientific disciplines of our collaborators. Innovation in scientific-technological development is a fundamental feature that demonstrates the main objectives of the journal in research and dissemination. This edition presents 8 selected articles. The teaching section presents two articles describing methodologies and tools for project management in education-related topics, demonstrating the importance and need to implement updates and new methods to promote the right to education and access to it. In addition, for the civil engineering and architecture branch, two relevant investigations are presented, the first one corresponds to the analysis of materials manufactured on site detailing their resistance, cost and deformation and the second one oriented to future developments in geotechnical engineering. The Project Management section presents research describing the timely development of engineering megaprojects in Brazil and the proposal of research projects as instruments of analysis for public policies, respectively. Finally, this issue presents kinetic modeling in the production of polyhydroxyalkanoates using *Bacillus megaterium*.

The first article demonstrates the effectiveness of systemic inquiry through continuous improvement of project management tools, applied and validated at the Universidad Estatal a Distancia (UNED), Mexico, providing emerging opportunities for improvement as a valuable characteristic of the systemic inquiry process.

The content of the second article, which shows a quantitative research, reflects the importance of the work carried out in the educational field on children's rights and access to the first stage of basic education, the methodology was implemented in the state of Mato Grosso-Brazil as part of the last year of the National Education Plan.

The analysis of ecological bricks presented in the third article shows that this material is able to deform and continue receiving loads, unlike traditional bricks that reach their maximum resistance without major deformation, allowing buildings to have greater elastic behavior and reducing some structural failures.

The fourth article, directed to geotechnical and architectural issues in the city of Mar del Plata in Argentina, establishes differentiated geotechnical characterization zones using a quantitative-qualitative methodology and systematization on a Geographic Information System (GIS), with interpretative and descriptive analysis of the structure.

The methodology implemented in the fifth article by applying a method of schedule analysis - the FORTE v Method. 1.0 - responsible for the first integrated initiative aimed at compliance, project management and corporate knowledge, adjusted to the reality of large engineering projects in Brazil, resulting in the optimization of project management and organizational hierarchy.

Through an application case that analyzes research projects as public policy instruments, the sixth article details the theoretical relevance of the research, allowing to contribute conceptual contents from an interdisciplinary approach in the field of culture in the analysis of public policies.

The seventh article focuses its research on the development of soft skills of engineering students through a collaborative work model, the results indicate the importance of including

in their work placements, effective communication, negotiation, empathy and leadership as necessary skills in the world of work.

Finally, the eighth article proposes a first stage of using mathematical simulation models for the kinetics applied in the production of microbial polyhydroxyalkanoates, demonstrating that bacteria can be isolated from the humus of the Californian red worm, and for the growth of biomass a logistic model is used that includes an inhibition factor and a constant associated with cell maintenance.

Before concluding this editorial, it is important for all of us who collaborate in this new project to thank the team of collaborators, IT and technical, as well as the Iberoamerican University Foundation (FUNIBER) and the Universities that have provided all the material support so that this issue can be carried out, with the conviction that we are on the right path towards international recognition.

Dr. Luis A. Dzul López

Dr. Roberto M. Alvarez

Editors-in-Chief