

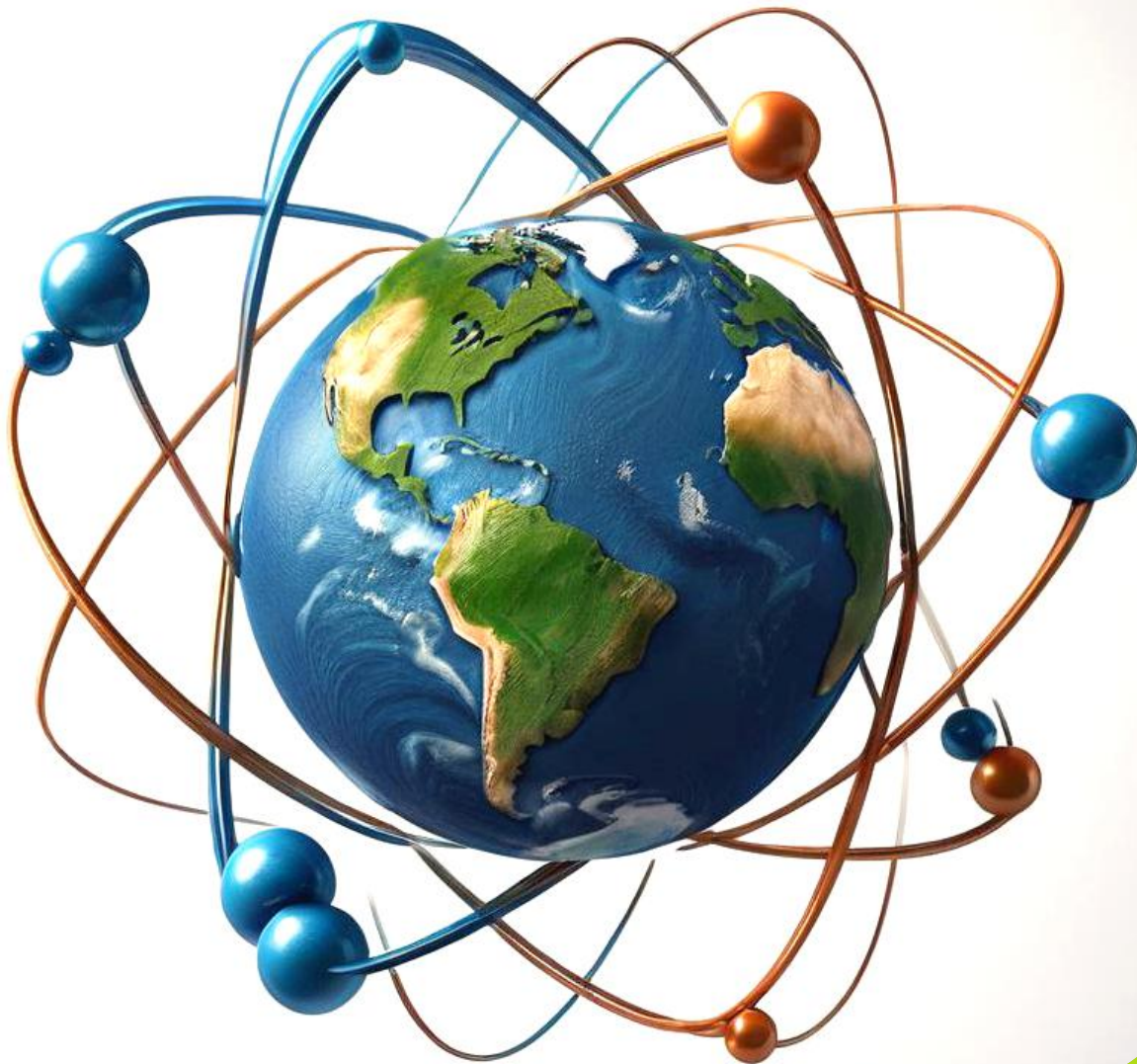
International Journal of Geoscience, Engineering and Technology

ISSN: 2675-2883

Volume 12

Nº 1

Year: 2025



International Journal of Geoscience, Engineering and Technology

Volume 12, Number 1, Octobre 2025.

EDITORIAL TEAM

Editorial Manager

Antônio Jorge de Lima Gomes (Brazil)

Publishing Editor

Jorge Luiz dos Santos Gomes (Brazil)

Editors

Mariana Rodrigues de Carvalho - Portugal - LNEC

Jairo Lisboa Rodrigues - Brazil - UFVJM

Guilherme Jorge Brigolini Silva - Brazil - UFOP

Caio César de Souza Alves - Brazil - UFVJM

Tânia Fernandes Bogutchi - Brazil - PUC MG

Suze Nei P. Guimarães - Brazil - UFRRJ

Jorge Luiz dos Santos Gomes - Brazil - UFVJM

Antônio Jorge de Lima Gomes - Brazil - UFVJM

Thiago Bomjardim Porto - Brazil - CEFET MG

Cristiano Agenor Oliveira de Araújo - Brazil - UFRRJ

Cherif Asli – France - Université Evry Paris Saclay

Advisory Council

Thiago Bomjardim Porto (CEFET/MG - Brazil)

Caio César de Souza Alves (UFVJM - Brazil)

Antônio Jorge de Lima Gomes (UFVJM - Brazil)

Jorge Luiz dos Santos Gomes (UFVJM - Brazil)

Published: Octobre 31, 2025.

CONTENTS

Editorial to the twelfth issue of International Journal of Geoscience, Engineering and Technology	IV
<i>Antônio Jorge de Lima Gomes and Jorge Luiz dos Santos Gomes</i>	
Valuation of Lithium Mining Waste for Water Treatment: An Experimental Study and Broader Implications of Residual Aluminum Silicate (Al₂SiO₅) as an Artificial Zeolite	1
<i>Thiago Heron de Queiroz Rodrigues, Luana Gonzaga de Carvalho Silva, Lucas Faria da Silva, Márcia Cristina da Silva Faria and Alexandre Sylvio Vieira da Costa</i>	
Comparative Analysis Between the Empirical DNIT Method and the Mechanistic-Empirical MeDiNa in Flexible Pavement Design: A Case Study on BR-135 (Itacarambi–Manga Section)	15
<i>Cinthia Emanuelle Alves de Souza, Alana Ellen Valeriano Rocha, Paulo Cesar Mendes Junior and Breno Alcântara Silva</i>	
Zoning of forest fire risk in the city of Teófilo Otoni, Mucuri Valley, Minas Gerais, Brazil	25
<i>Guilherme Ribeiro Amorim, Heder Alves dos Reis, Lucas Pereira Cerqueira, Leonidas Soares Murta Júnior and Erica Karolina Barros de Oliveira</i>	
Assessment of the Genotoxic Potential of 17β-estradiol in Different Filters Using the Comet Assay	39
<i>Alice Camilo Duarte, Edipaula Barbosa Franco, Fernanda Junger Schaper, Sthefany Burmann Soares, Jairo Lisboa Rodrigues and Márcia da Silva Faria</i>	
Analysis of Seasonal Variation in the Vegetation Carbon Flux in Quiterianópolis, Ceará, Brazil	52
<i>Douglas Cavalcante Holanda</i>	
Vagão Sustentável: Extension Practices for the SDGs - Insights from a UFVJM Experience in the Mucuri Valley	61
<i>Eric Mendes Ramos, Nívia Lisboa dos Santos, Francisco César Dalmo, Luan Brioschi Giovanelli, Izabel Cristina Marques and Jakelyne Viana Coelho</i>	
Correlation between Compressive Strength and Cement Content in Soil-Cement Blocks	66
<i>Demisson Renato Ferreira, João Luiz da Cruz Junior, Lucas Felype Silva, Luís Otávio Rocha Porto, Frank Alison de Carvalho, Rosana Passos Cambraia and Bernat Vinolas Prat</i>	

National Solid Waste Policy: analysis of final disposal in Teófilo Otoni/MG and the surrounding area	78
<i>Pedro Henrique Oliveira; Luiz Gustavo Magalhães Keller; Francisco César Dalmo and Jakelyne Viana Coelho</i>	
The first hydrographic and forest survey of the Mucuri Valley in the 19th century	90
<i>Antonio Jorge de Lima Gomes</i>	
Areas of geohydrological risk in the urban perimeter of the Municipality of Coluna in the State of Minas Gerais	96
<i>Marcelo Bredoff Azevedo, Antônio Jorge de Lima Gomes and Jorge Luiz dos Santos Gomes</i>	