

# **International Journal of Geoscience, Engineering and Technology**

Volume 8, Number 1, October 2023.

## **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

Suze Nei P. Guimarães - Brazil – UFRRJ

Guilherme Jorge Brigolini Silva - Brazil - UFOP

Caio César de Souza Alves - Brazil – UFVJM

Tânia Fernandes Bogutchi - Brazil - PUC MG

Jorge Luiz dos Santos Gomes - Brazil - UFVJM

Thiago Bomjardim Porto - Brazil - CEFET/MG

Antônio Jorge de Lima Gomes - Brazil - UFVJM

Cristiano Agenor Oliveira de Araújo - Brazil - UFRRJ

### ***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: October 30, 2023**

## CONTENTS

<b>Editorial to the eighth issue of the International Journal of Geoscience, Engineering and Technology .....</b>	<b>III</b>
<i>Antônio Jorge de Lima Gomes and Jorge Luiz dos Santos Gomes</i>	
<b>Urbanization Impact on Erosion and Streamflow Patterns in two different regions of Teófilo Otoni - MG .....</b>	<b>1</b>
<i>Rafael Alvarenga Almeida, Geraldo Lopes Neto, Sérgio Pereira Cerqueira, Thainá Moreira Chaves and Camila de Sousa Queiroz Almeida</i>	
<b>Upper Cretaceous Aeolian Depositional Systems: the Marilia Formation in the regions between Northwestern São Paulo and Southern Goiás.....</b>	<b>12</b>
<i>Pamela Vilela</i>	
<b>Automation of Brewing Pot with Arduino Microcontroller .....</b>	<b>40</b>
<i>Helen dos Santos Andrade, Yasmim Luiz Tavares, Cristiano Agenor Oliveira de Araújo, Thiago Alcântara Luiz and Thiago Freire Alves Ferreira</i>	
<b>Survey of geological and environmental risk areas in the Filadélfia neighborhood, city of Teófilo Otoni-MG .....</b>	<b>52</b>
<i>Celso Amaral Cordeiro, Fernanda Andrade Dutra, Rodrigo Esteves Ribeiro, Antonio Jorge de Lima Gomes and Jorge Luiz dos Santos Gomes</i>	
<b>Mapping of vegetation cover based on remote sensing data in the city of Teófilo Otoni - MG .....</b>	<b>59</b>
<i>Álison Miranda Reis, Jorge Luiz dos Santos Gomes, Anna Carolina de Souza Santos, Gabriel Fróis Fernandes de Oliveira, Rodrigo Esteves Ribeiro and Rafael Alvarenga Almeida</i>	
<b>Case study of landslides on Minervino de Castro Pinto Street in the municipality of Teófilo Otoni .....</b>	<b>64</b>
<i>Karine de Oliveira Santos, Pedro Henrique Amaral Lima and Antônio Jorge de Lima Gomes</i>	
<b>Development of an interactive spreadsheet for foundation type determination .....</b>	<b>70</b>
<i>Fabiana Alves Martins, Iandra Batista da Silva and Danilo Bento Oliveira</i>	
<b>Reducing The Block Effect In Color Images (RGB) Using Genetic Algorithms .....</b>	<b>80</b>
<i>Daniel Moraes Santos</i>	