#### In this issue

### **Research Article**

Open Access Research Article PTZAID:AEST-8-179

# Heavy Metals in Tree Parts (Roots, Bark, Leaves) and Fruits Grown in Mechanic Workshops in Nigeria

Published On: September 28, 2024 | Pages: 057 - 063

Author(s): Olayemi A Odunlami\*, Gloria O Ayeni, Olalekan O Olabode, Olanrewaju A Olabode, Temitayo E Oladimeji, Olufemi G Olaniyi, Oseremen T Alen and Victoria O Olatunde

The day-to-day activities carried out at the mechanic workshop like panel beating, welding, and automobile battery servicing may result in high amounts of heavy metals in the soil near mechanic workshops. Spent engine oils also emit a huge number of toxic metals, when disposed of on the floor at workshops, they settle on soil and are absorbed into nearby trees and pla ...

Abstract View Full Article View DOI: 10.17352/aest.000079

Open Access Research Article PTZAID:AEST-8-178

# Applying a novel generalized model of sedimentation to the design of settlers and thickeners: Integration and extension of the classical procedures

Published On: June 25, 2024 | Pages: 043 - 056

Author(s): JL Bueno-de-las-Heras\*, A Gutiérrez-Lavín and MM Mahamud-López

A new generalized procedure previously introduced and justified by the authors, based on the simultaneous integration of the macroscopic and microscopic differential mass balances by introducing the concept of separation units as an extension of the transfer unit concept was applied here to sedimentation. This similarity leads to a broader analogy with basic transfer ...

Abstract View Full Article View DOI: 10.17352/aest.000078

Open Access Research Article PTZAID:AEST-8-176

### **Content of heavy metals in Carpathian soils (Poland)**

Published On: May 21, 2024 | Pages: 019 - 021

Author(s): Joanna Korzeniowska\* and Sawomir Dorocki

The article addresses determining the concentration of six chemical elements: Cd, Cr, Cu, Ni, Pb, and Zn in the soils of the southern slope of the Jaworzyna Krynicka mountain in the Beskid Mountains. The research consisted of determining the diversity of metal content in soil samples taken at different altitudes (500, 600, 700, 800, 900, 1000, and 1100 m MSL). The tes ...

Abstract View Full Article View DOI: 10.17352/aest.000076

Open Access Research Article PTZAID:AEST-8-174

## Improving crop productivity in low land through crop intensification in **Bangladesh**

Published On: January 09, 2024 | Pages: 001 - 005

Author(s): MAK Mian\* and AA Begum

Two experiments were conducted at Chalan Beel (Experiment-1: Sirajgonj) and at Monglar Beel (Experiment-2: Faridpur) to improve the rice-based cropping system in the lowlands during 2021 - 2022. ...

Abstract View Full Article View DOI: 10.17352/aest.000074

### **Review Article**

Open Access Review Article PTZAID:AEST-8-181

## Indigenous Advocacy: A Historical Overview of Environmental Movements in India

Published On: December 06, 2024 | Pages: 068 - 073

Author(s): Karem Sasidhar\*

In the rich tapestry of India's environmental movements, the threads of indigenous advocacy are woven intricately, embodying centuries-old connections between land, culture, and sustainability. As we embark on this exploration of environmental activism in India, it is imperative to acknowledge the profound role that indigenous communities have played in shaping the co ...

Abstract View Full Article View DOI: 10.17352/aest.000081

Open Access Review Article PTZAID:AEST-8-177

## Determination of the number and width of class intervals using R

Published On: June 24, 2024 | Pages: 022 - 042

Author(s): José Moral de la Rubia\*

The histogram and frequency table are fundamental tools for describing continuous variables or discrete variables with many values. Most statistical programs are not flexible, nor do they explicitly state the rules they use to construct histograms or provide guidelines for constructing interval tables. However, by programming or applying the appropriate procedures, th ...

Abstract View Full Article View DOI: 10.17352/aest.000077

Open Access Review Article PTZAID:AEST-8-175

## A critical review of biomarkers in toxicology and risk assessment of environmental pollutants

Published On: March 02, 2024 | Pages: 006 - 018

Author(s): Youssef Salama\*, Mohammed Chennaoui

Over the last 30 years, the study of biomarkers has experienced significant growth. Biomarkers serve as essential tools in monitoring toxicology and risk assessment of environmental pollutants by providing early and specific endpoints. This expansion in the field has enabled researchers to better understand the impact of various environmental pollutants on living orga ...

Abstract View Full Article View DOI: 10.17352/aest.000075

#### **Short Communication**

Open Access Short Communication PTZAID:AEST-8-182

# Transition Pathways Towards 100% Sustainable Electricity Generation for **America Using Demand and Supply-side Determinants**

Published On: December 14, 2024 | Pages: 074 - 076

Author(s): Mark Agyei-Sakyi\*

In most countries, energy resources and electricity generation have become the engine of economic growth. This study analyses effective and sustainable energy transition pathways and supply and highlights the commitments of the 2015 Paris Agreement by the United States of America in combating the challenges of global warming. The transition pathways are designed to re ...

Abstract View Full Article View DOI: 10.17352/aest.000082

### Mini Review

Open Access Mini Review PTZAID:AEST-8-180

### **Multidisciplinarity in Geoscientific Research**

Published On: October 30, 2024 | Pages: 064 - 067

Author(s): Olívia Maria Cordeiro de Oliveira\*, Antônio Fernando de Souza Queiroz, Ícaro Thiago Andrade Moreira, Karina dos Santos Garcia, José Roberto Cerqueira, Aristides Pavani Filho and Agostinho Gomes Cascardo

The multidisciplinary approach of geoscientific research in the academic setting underscores the increasing necessity of integrating diverse fields of knowledge to tackle complex interconnected issues. This multidisciplinary field seeks to uncover the complex operations of the Earth, encompassing the analysis of its past movements of tectonic plates, historical climat ...

Abstract View Full Article View DOI: 10.17352/aest.000080