

# Exposition of themes



ENERGY

## Title

**On the potential of blue hydrogen production in Colombia: A fossil resource-based assessment for low-emission hydrogen**

## Authors

Sara Dominguez-Cardozo, Bernay Cifuentes, Felipe Bustamante-Londoño, Nelly M. Cantillo, César L. Barraza-Botet and Martha Cobo

**Replication of results: CFD modeling and experimental validation of an alkaline water electrolysis cell for Hydrogen production**

Pablo Ignacio Hernández Arango, Cesar Rubents Ramirez and Alejandro Carrada

**Experimental characterization of hydrokinetic turbines**

Fredys Romero-Menco, Juan D Pineda-Aguirre, Andrés J Chalaca-Salas, Ainhoa Rubio-Clemente and Edwin Chica-Arrieta

**Comparison of the performance of hydrofoils used in vertical-axis hydrokinetic turbines (VAHT) using computational fluid dynamics**

Andres Jahir Chalaca Salas, Laura Isabel Velásquez García and Edwin Chica

**Computational fluid dynamics modeling of air chamber of an oscillating water column**

Juan David Parra Quintero, Ainhoa Rubio Clemente and Edwin Chica Arrieta

**Analysis of mechanical energy transfer and dissipation in natural rubber – recycled EPDM blends with potential use in piezoelectric tile contact surfaces.**

Fabián Andrés Giraldo Agudelo, Valentina Arenas Arévalo, Kelly Geraldine Rivera Botia and Diego Hernán Giraldo Vásquez

**Effect of Solvent on Economic Feasibility of Biocrude Production by Hydrothermal Liquefaction**

David Ocampo, Elkin Gómez and Luis Rios

**Representative evaluation methodology of graphene transfer processes applied to inverted perovskite solar cell**

Kevin Ballestas, Juan Diego Zapata and Daniel Ramírez

**Improving the Stability of Methylammonium Lead Iodide Perovskite by Propionic Acid Doping**

Maria Pilar Montero-Rama, Daniel Ramirez, Franklin Jaramillo and Lluís Francesc Marsal

**(CsDMA)<sub>x</sub>Pb(BrI)<sub>3</sub> hybrid perovskite solar cells with improved stability**

Juan José Patiño López, Juan Felipe Montoya, Edwin Ramírez, Franklin Jaramillo and Daniel Ramírez

**IMPLEMENTATION Improving the Stability of Methylammonium Lead Iodide Perovskite by Propionic Acid Doping OF A PORT-FUEL INJECTED DUAL FUEL ENGINE IN A COMMERCIAL VEHICLE AND EVALUATION OF DIESEL SUBSTITUTION FOR TRANSIENT OPERATION IN MEDELLÍN-COLOMBIA.**

Jaime Fernando Zapata López, Iván Darío Bedoya Caro and Felipe Ruiz Zea