

Contributions to Keep the Atmosphere Balanced: Application of Scientific Fundamentals to Design a Magnetic Efficient Minimizer of Emissions from Mobile sources

Raul Guerrero Torres¹, Mehrab Mehrvar²

¹ Faculty of Engineering, University of Cartagena, Cartagena de Indias, Colombia
E-mail: rguerrerotores1@unicartagena.edu.co

² Department of Chemical Engineering, Ryerson University, 350 Victoria Street, Toronto, ON, Canada M5B 2K3
E-mail: mmehrvar@ryerson.ca

Abstract

Following up the ideas, presented to RTESE in previous papers, facing the current Global Warming-Climate Change threat, we present in this paper, application of scientific fundamentals to design a MEB minimizer for a Hyundai and a Renault car. Before referring to the applications, we point out how scientific fundamentals determine the design of a magnetic minimizer. In gasoline, a non-polar fluid, changes due to direct magnetic action cannot be explained by Classical Physics theory. Those changes belong to the Quantum Physics reign and based on magnetic interactions within hydrogen atoms in presence of an external magnetic field. Energy change per hydrogen atom is determined and total energy provided to hydrogen atoms in the volume of fuel comprised between a couple of permanent Neodymium Magnets is calculated. Then, using concepts and laws of Physics as well as General Chemistry, calculation of magnetic induction B of the magnetic field between the magnets, main design variable, can be performed. We also highlight processes as: the natural evolution of the earth's atmosphere, chemical and thermodynamic processes, among others, and how they interact each other according to natural laws that must be strictly fulfilled to keep the atmosphere balanced. These applications belong to a commented first stage of formally regulated CO and HC reductions from mobile sources, focusing in optimizing combustion by magnetic action to keep the carbon cycle balanced. Consequently, continuously Clean Air and Global Warming reduction can be obtained. The more we prove the magnetic action works, closer we are to changing the apocalyptic vision of earth, favoring synergistic work and additionally, trying to attract attention of institutions regulating the Earth's environmental protection to considering the global implementation of this proven action, that could help to save the planet. This paper reinforces the ideas explained in papers 145 and 149 presented to RTESE'20.

Keywords: Magnetic Field Energy Density, Magnetic Induction, Magnetic Efficient Balanced Minimizer, Zeeman's effect, Hamiltonian Operator.