



## I. Introduction

The invention of the four-element theory of matter (earth, air, water and fire) is attributed to Empedocles of Agrigentum (around 450 BC). Two and a half millennia after, in our age, there is general recognition and concern that the first three of these ancient elements have become polluted by human activity, often involving the fourth ancient element as Sign in to Continue Reading an agent [1]. Environmental concerns are so deeply felt that they have become the basis for organized political activity at national and international levels. Today, "mankind" must address serious problems connected to the natural resources exhausting, environmental pollution, and ecosystem destruction.

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