## The Fight against Pollution of Heavy Metals

Authors : K. Menad, A. Feddag, M. A. Hassnaoui

**Abstract :** We are living in a time and in a world heavily polluted. In the list of the great dangers awaiting the man can be placed on top of the list pollution by heavy metals: lead, mercury, cadmium, etc. Fatigue, Depression, Thyroid disorder, Alzheimer's, Parkinson's, Cancer, are some of the health problems caused by heavy metal pollution. The environmental protection has long since become a major political and economic issue. Among the priorities, include safeguarding water resources. All countries of the world are concerned either because they lack water or because they pollute it. There are several ways to remove these heavy metals; ion exchange by zeolites is one of these ways, which our work is based on. Zeolites were among the main clean up materials by either adsorption, ion exchange and catalysis. Lead and cadmium, heavy metals, is one of the main dangers fulminate the flora and fauna of our small planet, so many resources are deployed to remedy them. The elimination of lead and cadmium by ion exchange has been extensively studied. However, exchange capacity of more and larger formed a major challenge for researchers and industry.

1

Keywords : composite, ion excahnge, zeolite LTA, zeolite x

Conference Title : ICACCE 2016 : International Conference on Applied Chemistry and Chemical Engineering

**Conference Location :** Paris, France

Conference Dates : July 25-26, 2016