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UNIVERSIDAD NACIONAL DE COLOMBIA
SEDE BOGOTÁ
FACULTAD DE CIENCIAS
DEPARTAMENTO DE GEOCIENCIAS
RESEARCH GROUP IN GEOPHYSICS

Letter from Editor

Dear readers and contributors of the Earth Sciences Research Journal,

Thanks again to be part of this interesting professional journal. With pretty proud I want to present this new issue (17:1, June-2013) with interesting research products coming from Antarctic continent, Mexico, Botswana, India, Turkey, Nigeria and Iran. Currently, ESRJ is covered in the top scientific Index and Bibliographic Database as Academic Search Complete, DOAJ, Fuente Académica, GeoRef, Scopus, ISI web of Knowledge, Latindex, SciELO, Ulrich, Publindex, e-Revistas, and Academic One-File. And we expect in the future turn into one of the most referred journal in this field of knowledge.

The first article is related to Antarctic's crustal structure. "Reference crust-mantle density contrast beneath Antarctica based on the Vening Meinesz-Moritz isostatic problem and CRUST2.0 seismic model" looks for a Moho density accurate contrast in spite of the data lackness in this part of the world. Then, the authors used a combination of methods to reach their main objective and give us major features of the Antarctic's continental and surronding oceanic tectonic plate configuration.

Our second paper presents a Mexican inventory in seismic specialised software. "Contribution of software engineering in earthquake engineering", which is a suggestion for new development lines, prototypes in seismic software aimed to apply preventive actions related to seismic events in this country. Third manuscript comes from Botswana and presenting an electrical resistivity study carried out in the Thata Island, one of the numerous islands in the Okavango Delta. Based on seven data profiles, study indicates the centre of the Island had low resistivity values, while those values increase laterally outside the island. Results of this work showed how high salinity levels may have formed in near surface aquifers in natural inland delta environments in semi-arid areas.

Concerned about drinking water in Maharashtra province, in India, our authors have deployed an important study about Anjani and Jhiri rivers catchment area, which provide the Jalgaon district. Trace elements were analysed in ten groundwater samples and the results were compared to BIS drinking water standards. Concentration of lead, cadmium and nickel exceed the maximum permissible limit marked by BIS.

Coming from Turkey, other study shows the preparation of vulnerability maps to prevent contamination in aquifers. Using GIS techniques and the DRASTIC method, a vulnerability map is prepared for the basin in which the Gümüşhacıköy and Merzifon aquifers are located, across many villages characterised by intensive agricultural activity. This analysis ends with the conclusion the basin had a low contamination potential.

Located in a crude oil prospecting area of Ondo State in Nigeria, we present a speciation metals study aimed to assess the bioavailability, fate and mobility of As, Cd, Cr, Fe, Mn, Ni, Pb, and V. This paper divides the studied metal in five operationally-defined categories and follows their presence in different places of the area for being concluded that sediment from the crude oil prospecting zone may serve as non-point sources for metals contaminating the coastal system, they have higher metal bioavailability and higher toxicity risk potential than other sites. In Nigeria too, an active dumpsite was monitored to test natural attenuation efficiency in reducing contaminants by determining soil and groundwater biogeochemical and engineering properties within and around the site. After measuring

unsaturated zone thickness and permeability, and grading the soil as clay or silt according to Casagrande Plasticity Chart, study found that the concentration of contaminants in the soil are very high and inversely proportional to depth.

Our two last works in this edition were prepared in Iran. One of them is focused on the stratigraphy of the Permian-Triassic boundary in the Haftad Gholleh area. This boundary of erosional unconformity contains dolomitic limestone and shale and sandstone disconformably located below the Triassic sequence and represents a hiatus of about 10 million years. Finally, we close this edition with the work "Late Permian brachiopoda fauna in north-western Iran". This paper found in the area twenty-seven species from 13 brachiopoda genera. The recognised fossil community was compared to brachiopod communities in some regions of Iran, and they belong to the orders Athyris, Rhynconellida, Productida and Strophomenida. These interesting papers will constrain much better new stratigraphic correlations in this region of the world.

Carlos A. Vargas J.
Chief Editor
Departamento de Geociencias
Universidad Nacional de Colombia