

## \$VVHVPHQWV RI KHDY\ PHWDOV LQ VRLOV DQG SHUFHLYHG using XRF technique

K S Al-Mugren

3ULQFHVV 1RXUDK ELQW \$EGXOUDKPDQ 8QLYHUVLW\ 6DXGL \$UDELD

By using X-ray fluorescence (XRF) technique, We were evaluate the soil pollution with heavy metals like (As, Cr, Cu, Ni, Pb, V and Zn) in the Arti cial city at ALKHARJ, south west of Riyadh, Saudi Arabia. e soil samples were collected in an open areas at di erent depths, at di erent distances from the metallurgical plant. XRF analyses were carried out by using a low-energy mini-X-ray generator and a Si-PIN detector. e experimental results indicate that the concentrations of heavy elements decrease with the distance from the metallurgical works and they are greater than the levels detected in a contr soil collected from a zone situated far from tra c and industrial activity. For the majority of metals, pronounced maximum concentrations for all depths were detected in in uence zones of industrial objective with ferrous processing activities. Anthropogenic releases give rise to higher concentrations of the metals relative to the normal background values and in some locations their le4 (e di)3 (s)5.1 ( -1.2 Td [(in )4 (cenJ-.o)5 (b)11ir1p.(i)3 (i3 (i t)-6 (h)W.3ov5 (e)-5r1p5 (l ac)-6.9 (