

**E1-15: Photocatalytic removal of mercury and lead from contaminated water**

K Tennakone, U S Ketipearachchi, H M S B Herath  
(*Institute Fundamental Studies, Kandy*)

Inorganic mercury and lead, complexes with citrate ion. In oxidative photodegradation of these complexes with  $\text{TiO}_2$  as the catalyst, the metal (Hg or Pb) gets deposited on  $\text{TiO}_2$ . The reaction is sufficiently sensitive to sunlight and for practical applications,  $\text{TiO}_2$  can be confined in a transparent dialysis bag to facilitate the disposal of the extracted metal.