

Supporting information

Free radical induced selenoxide formation in isomeric organoselenium compounds: Role of chemical structure on antioxidant activity.

Beena G. Singh,^{*a,b}, Pavitra Kumar,^{a,b} P. Phadnis^c, Michio Iwaoka,^d and K. Indira Priyadarshini ^{b,c*}

^aRadiation & Photochemistry Division, Bhabha Atomic Research Centre, Trombay, Mumbai-400085, India., ^bHomi Bhabha National Institute, Anushaktinagar, Mumbai – 400092, India, ^cChemistry Division, Bhabha Atomic Research Centre, Trombay, Mumbai – 400085, ^dDepartment of Chemistry, School of Science, Tokai University, Kitakaname, Hiratsuka-shi, Kanagawa 259-1292, Japan.

*Corresponding authors: beenam@barc.gov.in; kindira@barc.gov.in .

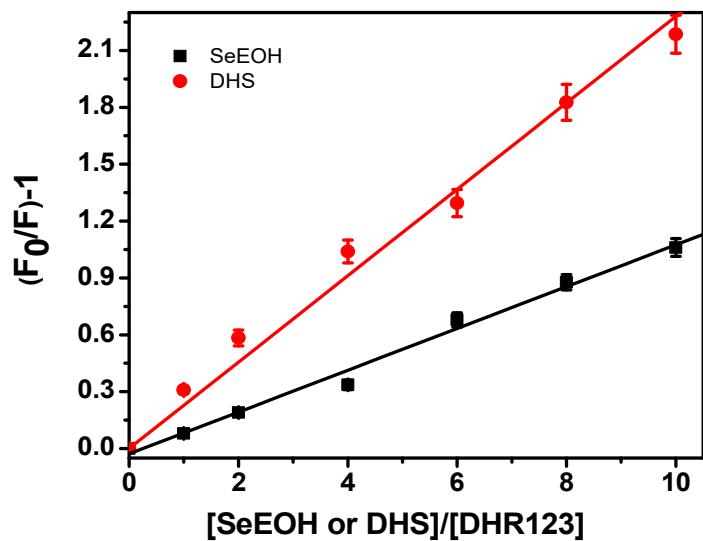


Figure S1: Linear plot for variation of $(F_0/F-1)$ as a function of concentration ratio of SeEOH/DHS and DHR123 $([SeEOH \text{ or } DHS]/[DHR123])$.

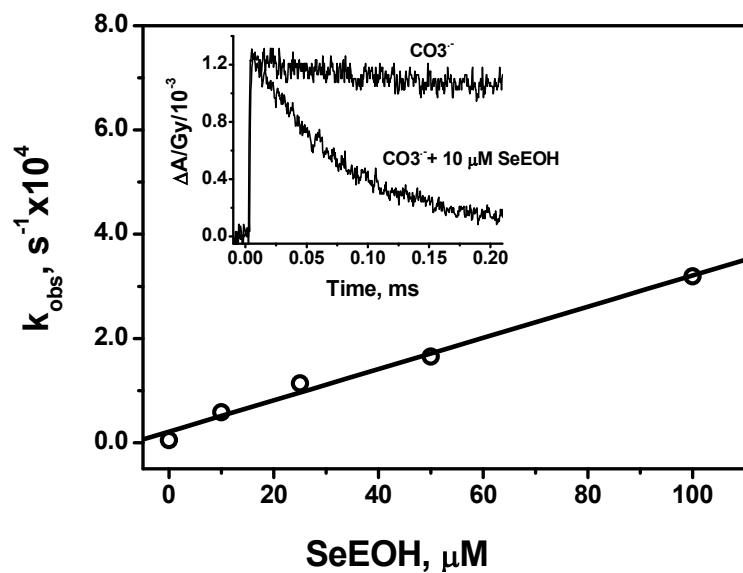


Figure S2: The absorption-time plot of $CO_3^{\bullet-}$ radical at 600 nm in absence and presence of $10 \mu\text{M}$ SeEOH at pH 7.5.

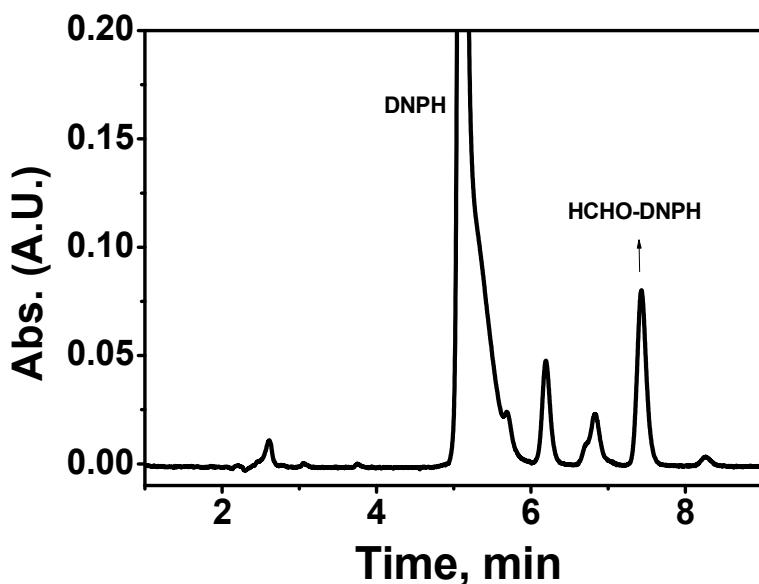


Figure S3: HPLC chromatograms generated by reaction of acidified DNPH (4 mM) with radiolyzed samples of 5 mM of SeEOH.

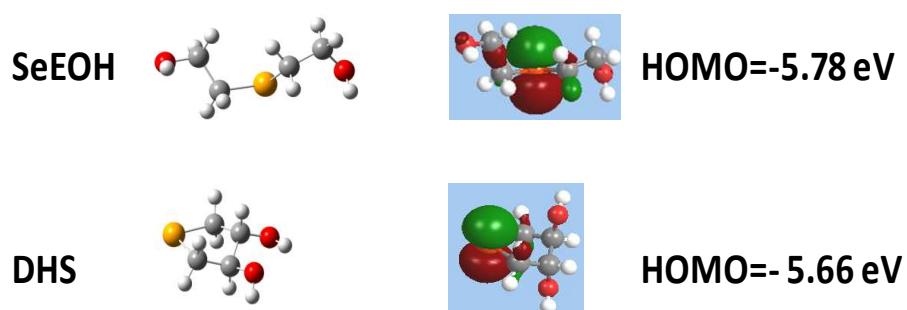


Figure S4: Optimized structures and HOMO levels of SeEOH and DHS in ground state.