

List of publications:

(a) Journals:

- [1] A.K. De, S. Bhattacharjee and B.K. Dutta, "Kinetics of phenol photo-oxidation by hydrogen peroxide and ultraviolet radiation", *Industrial & Engineering Chemistry Research*, 36 (1997) p3607-3612.
- [2] A.K. De, B. Chaudhuri and S. Bhattacharjee, "A comparative study of phenol degradation using reagents", *Institutions of Engrs. (I) Journal*, 79 (1998) p4-7.
- [3] A.K. De and B. Chaudhuri, "Waste Plastics : Their recycling and related issues", *Science and Culture* 64 (11-12) (1998) 249.
- [4] A.K. De, B. Chaudhuri and S. Bhattacharjee, "A kinetic study of the oxidation of phenol, o-chlorophenol and catechol by hydrogen peroxide between 298 K and 333 K : the effect of pH, temperature and ratio of oxidant to substrate", *Journal of Chemical Technology & Biotechnology*, 74 (1999) p162-168.
- [5] A.K. De, B. Chaudhuri, S. Bhattacharjee and B.K. Dutta, "Estimation of OH[•] radical reaction rate constants for phenol and chlorinated phenols using UV/H₂O₂ photo-oxidation", *Journal of Hazardous Materials*, B64 (1999) p91-104.
- [6] A.K. De, B. Chaudhuri, S. Bhattacharjee and B. K. Dutta, "A practical application of the advanced oxidation processes for wastewater treatment", *Indian Chemical Engineer*, A41(2) (1999) p63.
- [7] A. Mandal, K. Ojha, A. K. De and S. Bhattacharjee, "Removal of catechol from aqueous solution by advanced photo-oxidation process", *Chemical Engineering Journal*, 102 (2004) p203-208.
- [8] A. K. De, "Some studies on heat transfer in the riser section of a cyclone suspension preheater", *Journal of Enhanced Heat Transfer*, 12(3) (2005) 249.
- [9] A.K. De, S. Bhattacharjee and B.K. Dutta, "Reaction kinetics for the degradation of phenol and chlorinated phenols using Fenton's reagent", *Environmental Progress*, 25(1) (2006) p64-71.
- [10] A.K.De and S. Bhattacharjee, "Kinetics of the oxidative reaction of phenol and chlorinated phenols employing Fenton Reagent", *Prog. Env. Sc. & Technol*, 2(A), (2009) 410.

[11] A. K. De and A. De, "Role of color transformation during Fenton's oxidation of phenolic wastewater in a large scale continuous stirred tank reactor (CSTR)", J. Indian Chemical Society, 90, **(2013)** p1-9.

[12] A.K.De and A.De, "Oxidation kinetics of phenol and chlorinated phenols with hydrogen peroxide in a continuous stirred tank reactor", International Journal of Environmental Protection, 4(4), **(2014)** p36-47.

[13] A.K.De and A.De, "Reaction rate constants for hydrogen peroxide oxidation of phenol and chlorinated phenols in a continuous stirred tank reactor", International Journal of Engg. Res. & Tech., 3(6), **(2014)** p222-226.

[14] A.K.De, "Oxidative degradation of phenol and chlorophenols modified with homogeneous catalyst in a large scale CSTR", Intl. J. of Ind. Engg. & Tech., 4(3), **(2014)** p1-12.

[15] A.K.De, "UV-Enhanced oxidative degradation of industrial effluent", Intl. J. of Ind. Engg. & Tech., 4(3), **(2014)** p13-22.

[16] A.K.De, "A comparison on effectiveness of degradation of phenol and phenolic substrates by (i) UV Radiation (ii) H_2O_2 Oxidation, and Enhanced Oxidation by (iii) UV/ H_2O_2 (iv) $\text{H}_2\text{O}_2/\text{Fe}^{+2}$ and (v) UV/ $\text{H}_2\text{O}_2/\text{Fe}^{+2}$ ", J. Engg. & Technol., 5(2) (2015) p1-10.

[17] A. De, A.K. De, G.S.Panda and S.Haldar, "Synthesis of iron-based nanoparticles and comparison of their catalytic activity for degradation of phenolic waste water in a small-scale batch reactor", Desalination & Water Treatment, 57(52), **(2016)** p-25170-25180.

(b) Books/ book chapters :

"Control Technology for Volatile Organic Compounds: Recent Advances" by A.K. De and B.K. Dutta, Industrial Pollution – Technologies for Abatement and Control, p143-157, Allied Publishers Ltd., New Delhi, 2001.