**Response to reviewer**

Line 32: (page 1) Word 'will' can be removed, or replaced by word 'could'

**It is corrected**

Lines 42-44: (page 2) Ambiguous sentence.

**It is modified**

Line 209: (page 8) There is a strange word at the end of the line.

**It is corrected**  
Line 226: (page 9) A typing error.

**It is corrected**

**Suggestions of reviewer**

The proposed papers by Warne, M.St.J.et al. 1990, Cornel Catana, et al. 2005, were added as reference in the introduction, although the last paper of Zahra Garkani-Nejad, et al. (2011) treat QSRR model of phenols but using the same approach adopted in our work. However the work by Aniel Burant et al.(2016) which is about the partitioning coefficients of organic compounds between water and supercritical CO2 ( SC-CO2 ) is not taken in consideration.

**Comments**

The novelty of our work is that has never been studied before (solubility of phenols); the model was validated by internal and external methods to prove that the developed model is stable and has a high predictive capacity. Hence The MLR model and ANN were validated for accurate prediction of solubility of phenols. The advantage of our work is that our models are based on simple, fast, and accurate methods.

**References**

Warne, M.St.J.; Connell,D.W.; Hawker, D.W. and Schüürmann, G.; Chemosphere, Vol.21, No.7, pp 877-888, 1990   
Cornel Catana, Hua Gao, Christian Orrenius and Pieter F. W. Stouten; J. Chem. Inf. Model. 2005, 45, 170-176  
Aniela Burant, Christopher Thompson, Gregory V. Lowry, and Athanasios K. Karamalidis: Environ. Sci. Technol. 2016, 50, 5135−5142. DOI:10.1021/acs.est.6b00301   
Zahra Garkani-Nejad & Mohammad Ahmadvand (2011): Separation Science and Technology, 46:6, 1034-1044.: http://dx.doi.org/10.1080/01496395.2010.539587