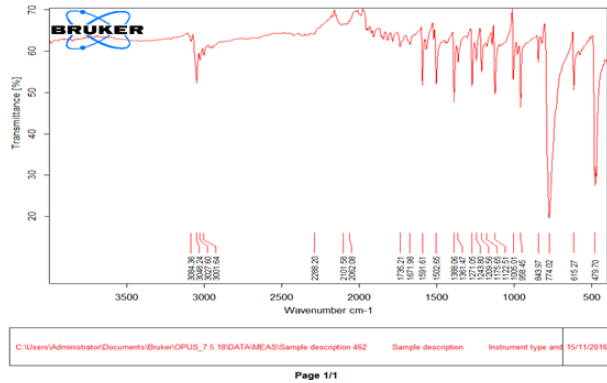
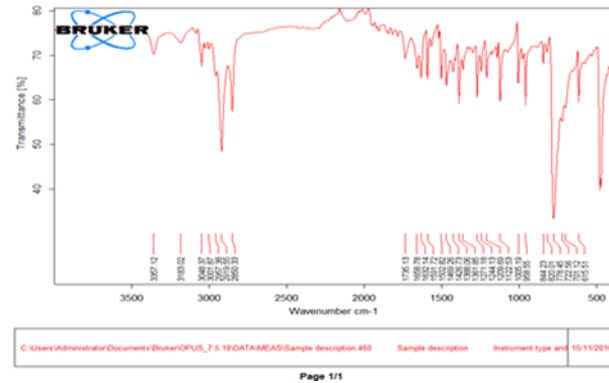


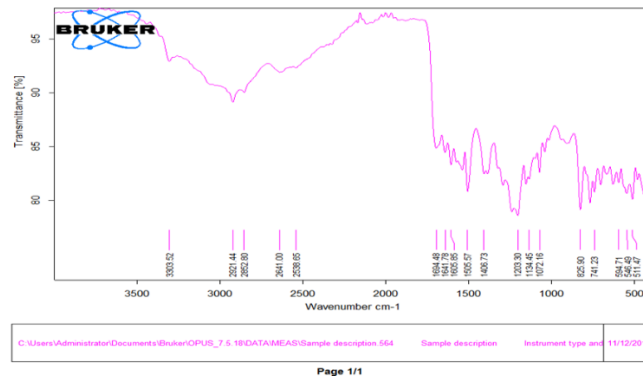
SUPPLEMENTARY FIGURES FOR STENOTROPHOMONAS SPECIES PEMSOL



a, Image from the FTIR spectrometry for Naphthalene

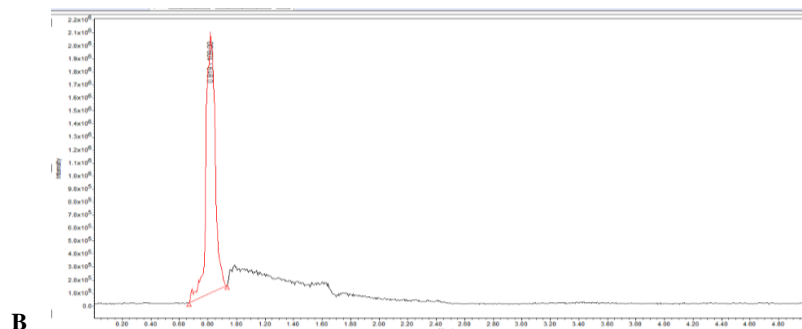
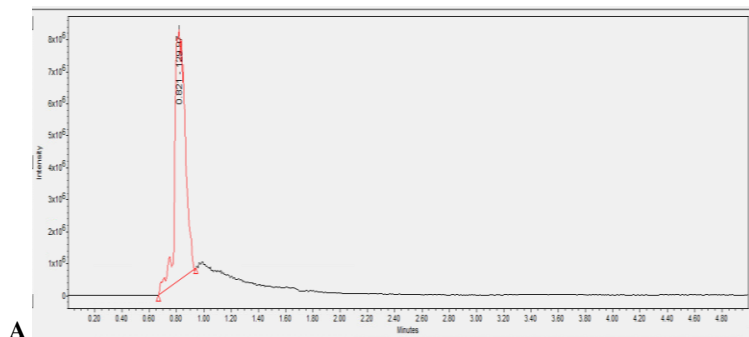


b, FTIR spectrometry for for the degradation of naphthalene after the 15th day of experiment



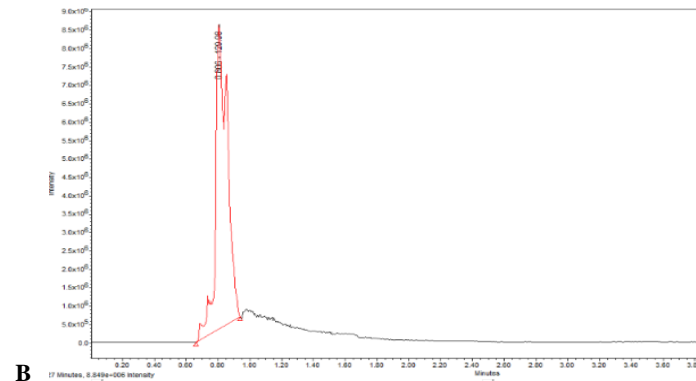
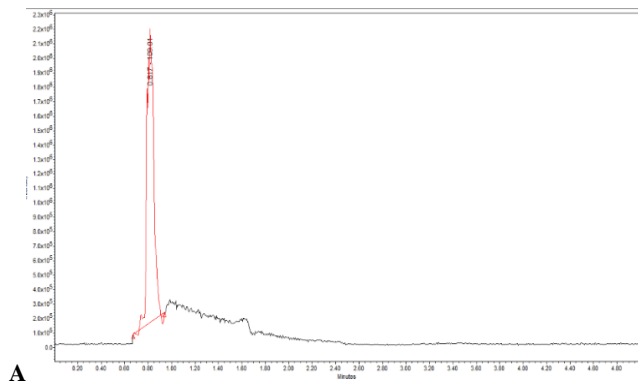
c, Image from the FTIR spectrometry for the degradation of naphthalene by *Stenotrophomonas* sp. pemsol

Figure S1: FTIR spectrometry analysis of the degradation activities of pemsol on Naphthalene and the controls



A. The UPLC MS/MS analysis spectrum of the control experiment after the 15th day of degradation study with molecular mass of 129.09 and retention time of 0.8minutes **B** UPLC MS/MS analysis spectrum of the test experiment after the 15th day of degradation studies with molecular mass of 109.95 and retention time of

Figure S2: UPLC mass spectrometry image for the metabolites formed from the degradation of Naphthalene by *Stenotrophomonas* sp. Pemsol after 15th day of degradation study.



A UPLC MS/MS Spectrum for the degradation of Naphthalene by *Stenotrophomonas* sp. Pemsol with molecular mass of 109.93 and retention time of 0.8

B UPLC MS/MS spectrum for Naphthalene in the control experiment after 30 days of experimental study on *Stenotrophomonas* species Pemsol's degradation of Naphthalene.

Figure S3 UPLC mass spectrometry image for the metabolites formed from the degradation of Naphthalene by *Stenotrophomonas* sp. Pemsol after 30th day of degradation study.