



Fig. 9 – During MEOR within sandstone core under varying temperature, salinity and pH conditions, using Microbe 3, $d_x = 2.88 \times 10^{-2} \text{ h}^{-1}$, $t_{\text{pulse}} = 57.6 \text{ h}$ and $k_d/k_d = 6.40$, temporal evolutions of the following parameters at $x = 0.004 \text{ m}$, 0.2 m , 0.4 m , 0.6 m , 0.8 m , 1.0 m and 1.1 m from the influent point are provided as follows: (a) alkalinity of the brine; (b) microbial maximum specific growth rate (μ_{max}); (c) microbial specific growth rate (μ_x); (d) microbial concentration (mg ml^{-1}); (e) carbon substrate (sucrose) concentration (mg ml^{-1}); (f) nitrogen substrate (ammonium sulphate) concentration (mg ml^{-1}); (g) total volume fraction of microbes attached reversibly and irreversibly onto sandstone porous rock surface; (h) effective porosity of the sandstone core; (i) intrinsic or absolute permeability (m^2) of the sandstone core; and (j) *in-Situ* produced biosurfactant concentration (mg ml^{-1}).