
Scheme-2 Reactor-2

Part-2, Case-11

*tend = 4500 sec
k1 = 0.1, k2 = 0.01*

NBt/NA_t = 1.1298

*Exponent a = 1
Exponent b = 1
Exponent c = 1.5
Exponent d = 0.5*

*WA = 200
WB = 56.4902
NB_t = 3.01281
V_t = 2.12825
Tot.Solv. = 2
Sola/(SolR+Sola) = 0.5*

*CA₀ = 1.25299
CB₀ = 1.41563*

*Total input = 256.49 kg
Total output = 256.491 kg*

Chemical Balance Error = 0.000372789 kg (% 1.45342e-06)

*Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)
Error tolerance: 0.01%*

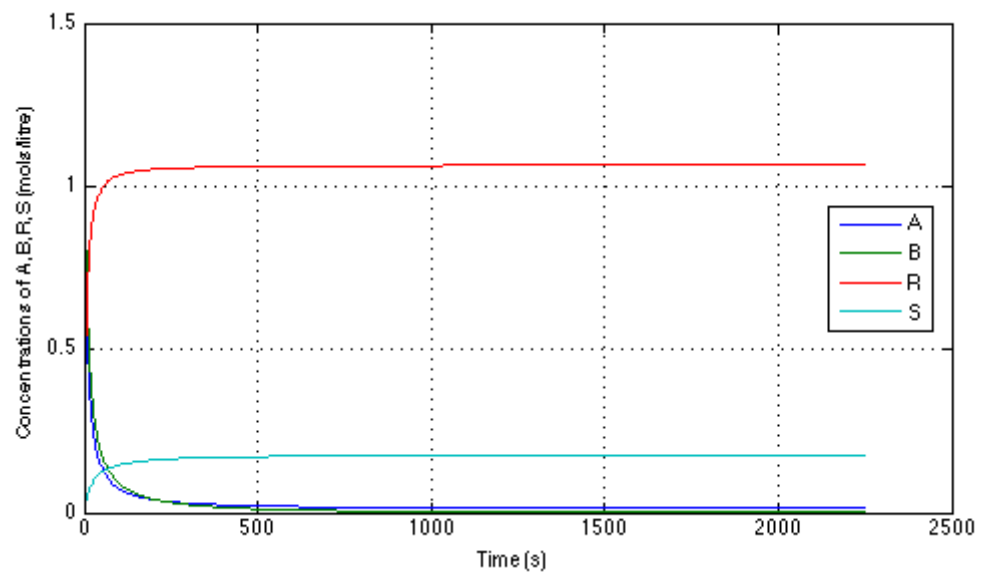
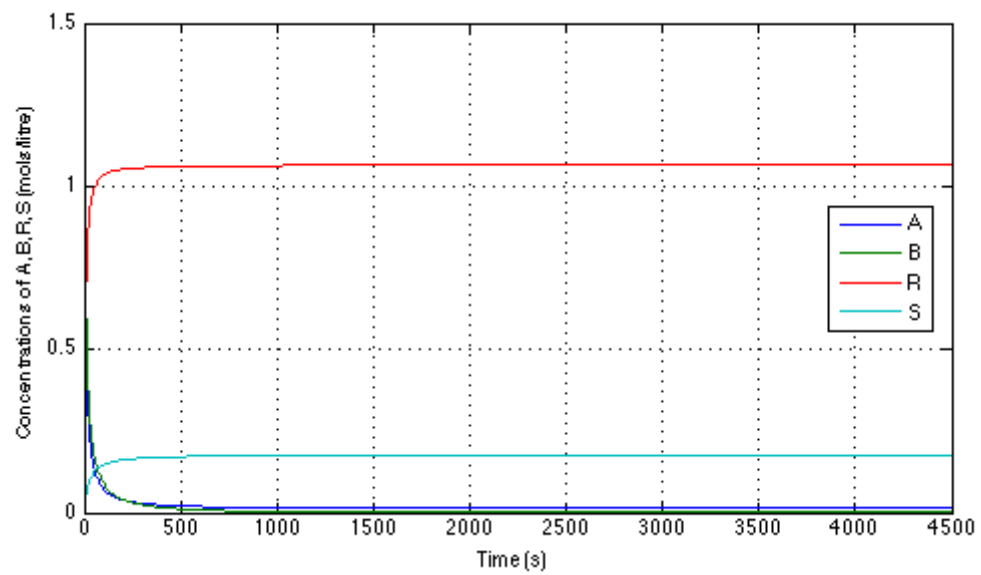
Final Concentrations with Step Size limited to 0.0001

*CA (final) = 0.012538
CB (final) = 1.80103e-05
CR (final) = 1.06529
CS (final) = 0.175163*

*CA @ 2250.0s = 0.0128719
CB @ 2250.0s = 0.000388576
CR @ 2250.0s = 1.06499
CS @ 2250.0s = 0.175126*

Final Concentrations with Step Size limited to 0.001

*CA (final) = 0.012538
CB (final) = 1.80103e-05
CR (final) = 1.06529
CS (final) = 0.175163*



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