
Scheme-2 Reactor-1

art-2, Case-10

*ta = 240 sec, tm = 1200 sec
k1 = 0.1, k2 = 0.01*

NBt/NA_t = 1.08406

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

*WA = 200
WB = 54.2031
NB_t = 2.89083
V_t = 2.1271
V_{at} = 1.0271
Tot.Solv. = 2
Sola/(SolR+Sola) = 0.5*

*NA₀ = 2.66667
NB₀ = 0*

*Total input = 254.203 kg
Total output = 254.203 kg*

Chemical Balance Error = 0.000216372 kg (% 8.51177e-07)

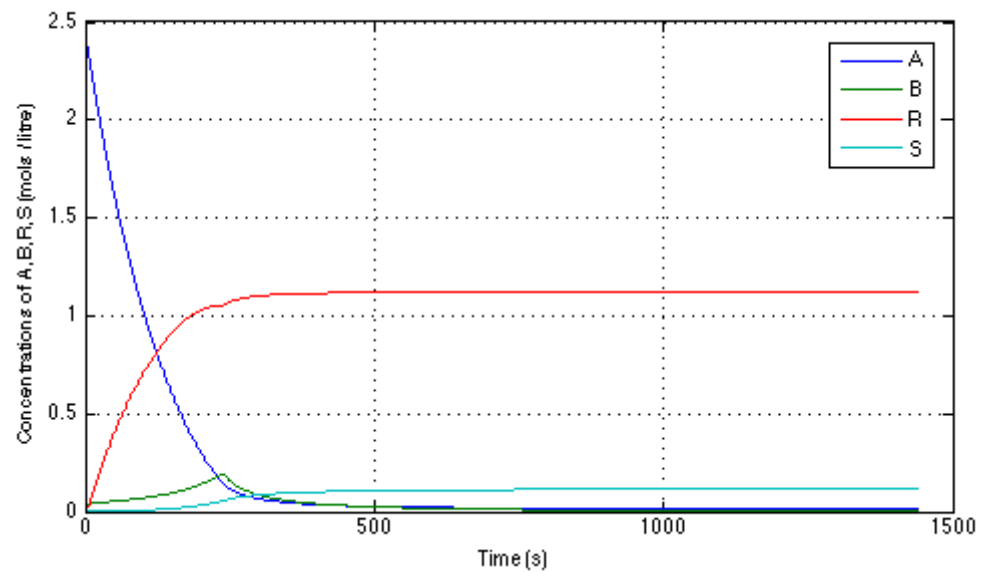
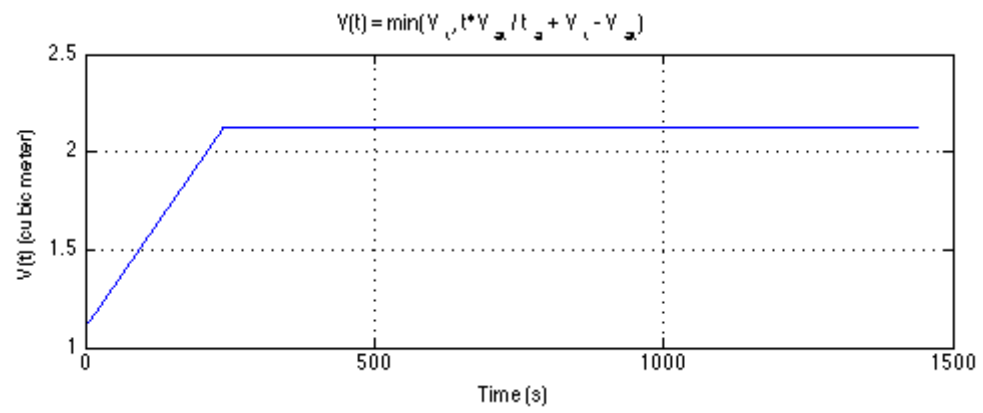
*Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)
Error tolerance: 0.01%*

Final Concentrations with Step Size limited to 0.001

*NA (final) = 0.0267358
NB (final) = 0.00495113
NR (final) = 2.39398
NS (final) = 0.245947*

Final Concentrations with Step Size limited to 0.01

*NA (final) = 0.0267322
NB (final) = 0.00495198
NR (final) = 2.39398
NS (final) = 0.245955*



Published with MATLAB® 7.12