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# Scheme-7 Reactor-1

*Part-2, Case-8*

*ta = 3600 sec, tm = 1200 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NAt = 1.006*

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

*WA = 200  
WB = 50.2998  
NBt = 2.68266  
Vt = 2.12515  
Vat = 1.02515  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*NA0 = 2.66667  
NB0 = 0*

*Total input = 250.3 kg  
Total output = 250.3 kg*

*Chemical Balance Error = 4.08192e-05 kg (% 1.63081e-07)*

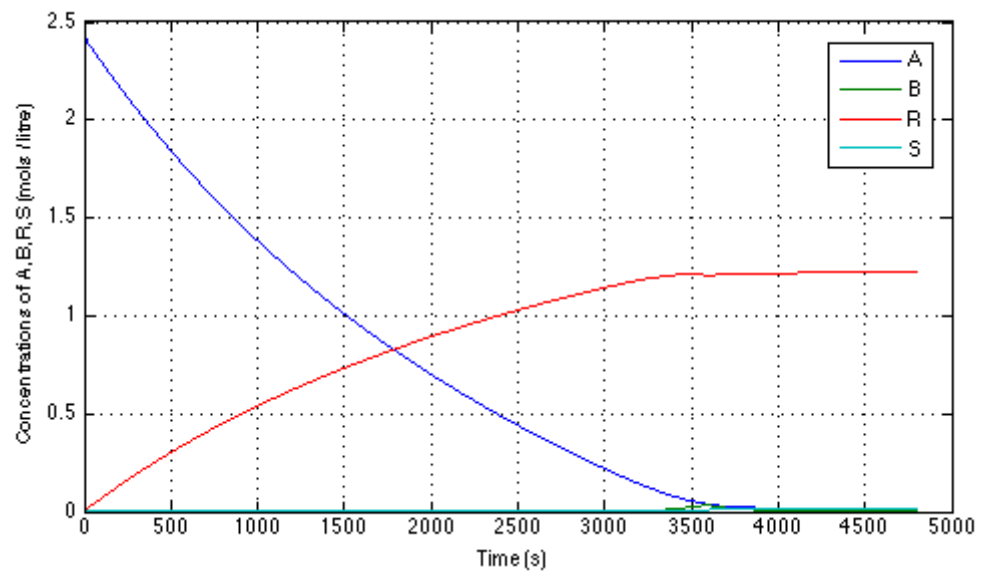
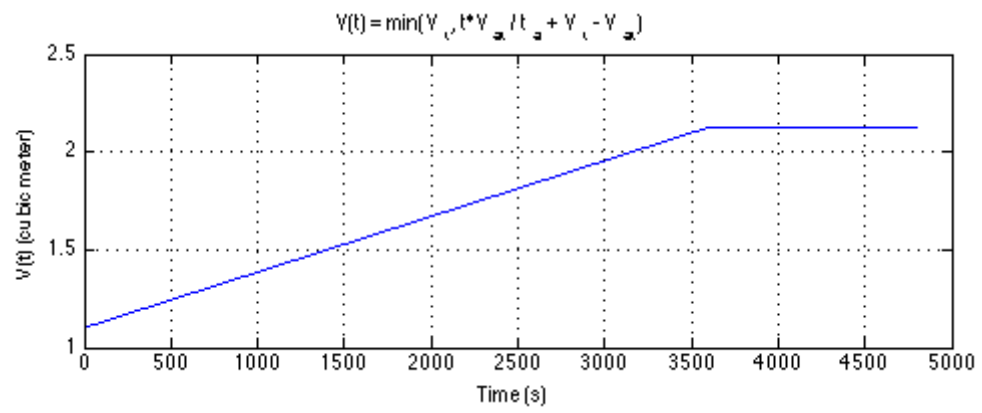
*Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)  
Error tolerance: 0.01%*

*Final Concentrations with Step Size limited to 0.001*

*NA (final) = 0.0266715  
NB (final) = 1.35874e-05  
NR (final) = 2.59735  
NS (final) = 0.0426489*

*Final Concentrations with Step Size limited to 0.01*

*NA (final) = 0.0266718  
NB (final) = 1.35721e-05  
NR (final) = 2.59735  
NS (final) = 0.0426484*



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