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# Scheme-9 Reactor-1

*Part-2, Case-10*

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

*NBt/NAt = 1.34041*

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

*WA = 200  
WB = 67.0203  
NBt = 3.57441  
Vt = 2.13351  
Vat = 1.03351  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*NA0 = 2.66667  
NB0 = 0*

*Total input = 267.02 kg  
Total output = 267.021 kg*

*Chemical Balance Error = 0.00089784 kg (% 3.36244e-06)*

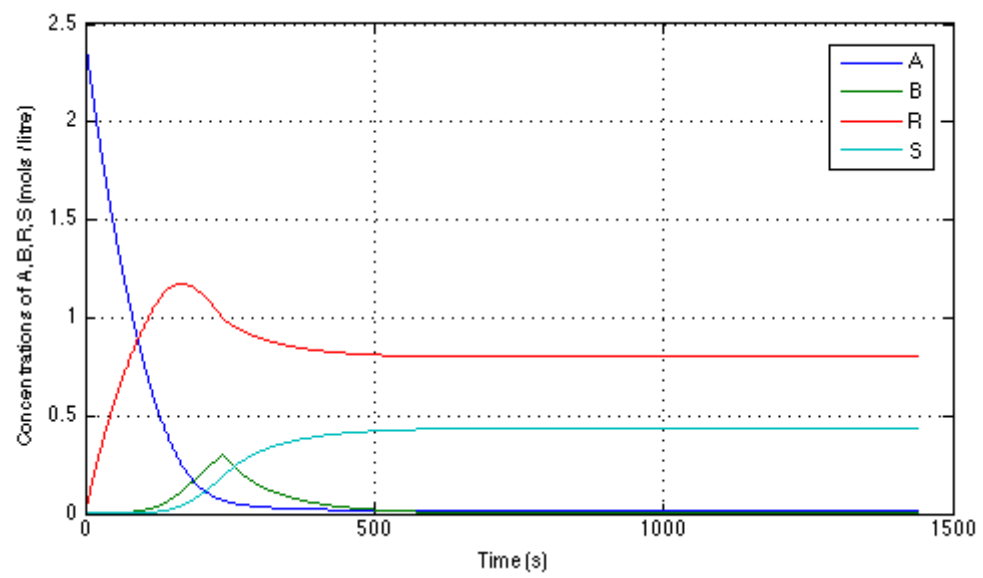
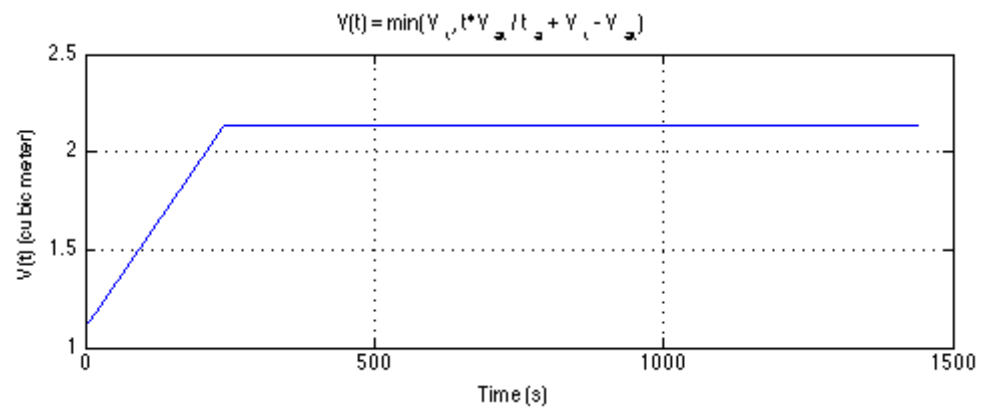
*Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)  
Error tolerance: 0.01%*

*Final Concentrations with Step Size limited to 0.001*

*NA (final) = 0.0266619  
NB (final) = 3.91449e-15  
NR (final) = 1.7056  
NS (final) = 0.934408*

*Final Concentrations with Step Size limited to 0.01*

*NA (final) = 0.0266612  
NB (final) = 3.91467e-13  
NR (final) = 1.70558  
NS (final) = 0.934423*



*Published with MATLAB® 7.12*