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# Scheme-8 Reactor-2

*Part-2, Case-8*

*tend = 1200 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NA<sub>t</sub> = 1.216*

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

*WA = 200  
WB = 60.7998  
NBt = 3.24266  
Vt = 2.1304  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA0 = 1.25172  
CB0 = 1.52209*

*Total input = 260.8 kg  
Total output = 260.8 kg*

*Chemical Balance Error = 0.000602648 kg (% 2.31077e-06)*

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

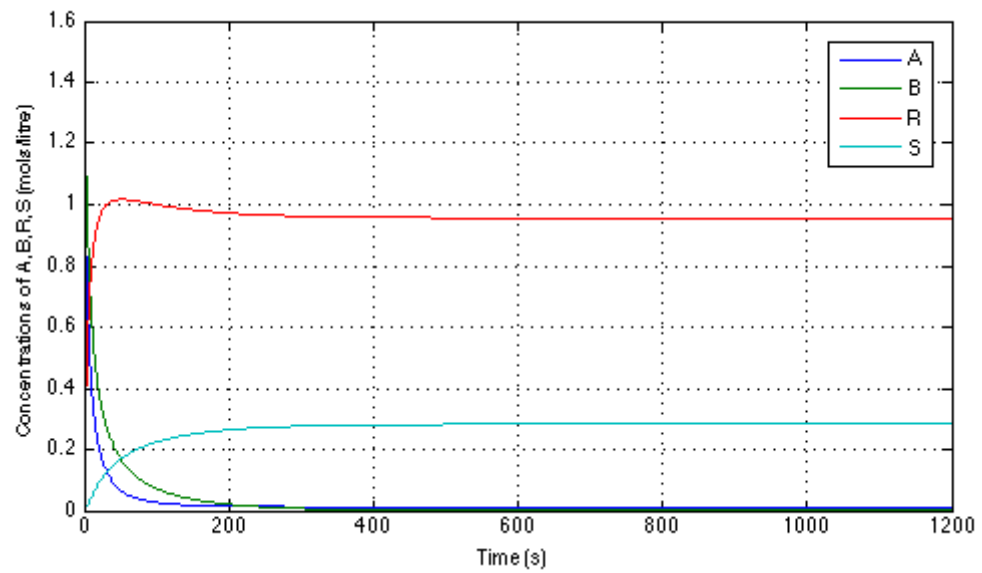
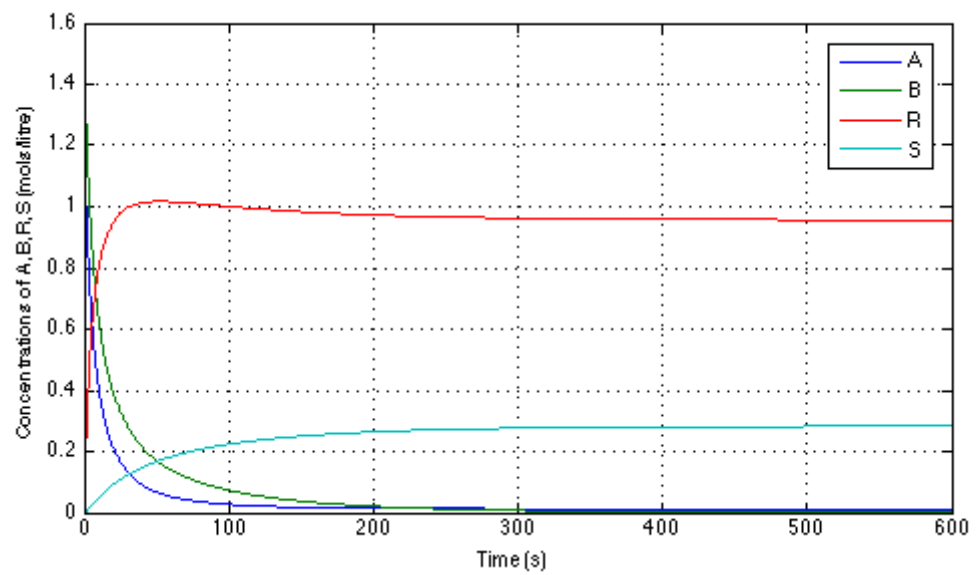
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0125135  
CB (final) = 1.05684e-06  
CR (final) = 0.956328  
CS (final) = 0.28288*

*CA @ 600.0s = 0.0125184  
CB @ 600.0s = 0.00034171  
CR @ 600.0s = 0.956659  
CS @ 600.0s = 0.282544*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0125135  
CB (final) = 1.05684e-06  
CR (final) = 0.956328  
CS (final) = 0.28288*



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