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# Scheme-4 Reactor-2

*Part-2, Case-6*

*tend = 240 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NA<sub>t</sub> = 1.31326*

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

*WA = 200  
WB = 65.663  
NBt = 3.50203  
Vt = 2.13283  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA0 = 1.25029  
CB0 = 1.64196*

*Total input = 265.663 kg  
Total output = 265.664 kg*

*Chemical Balance Error = 0.00086204 kg (% 3.24486e-06)*

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

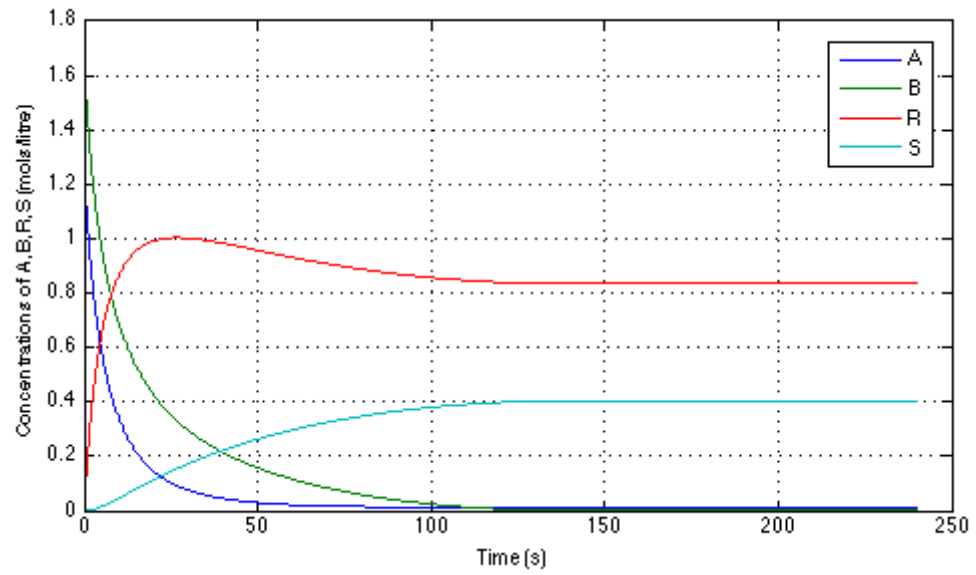
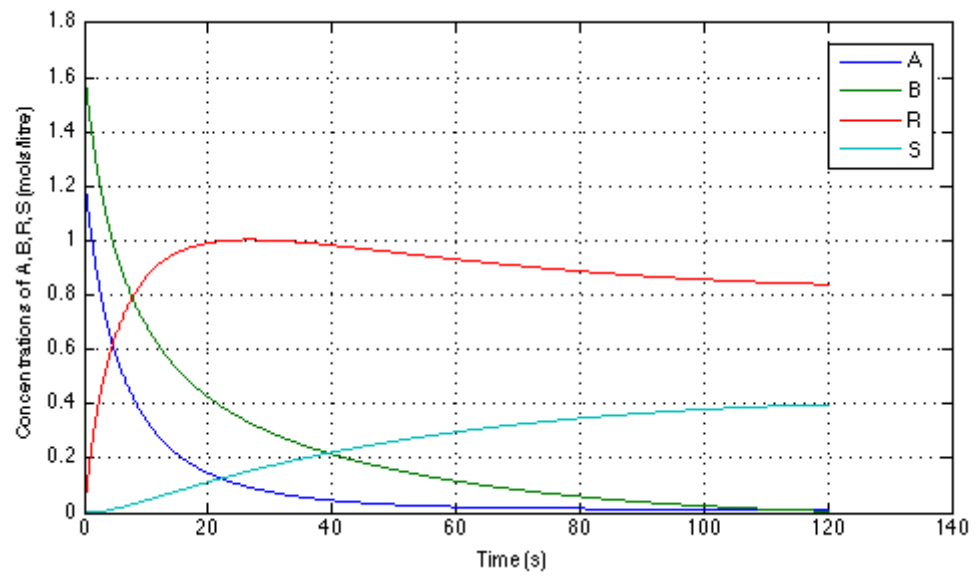
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0125093  
CB (final) = 5.44537e-14  
CR (final) = 0.833608  
CS (final) = 0.404176*

*CA @ 120.0s = 0.0125362  
CB @ 120.0s = 0.00608977  
CR @ 120.0s = 0.839644  
CS @ 120.0s = 0.398114*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0125093  
CB (final) = 5.44643e-12  
CR (final) = 0.833608  
CS (final) = 0.404176*



Published with MATLAB® 7.12