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# Scheme-2 Reactor-2

*Part-2, Case-6*

*tend = 720 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NA<sub>t</sub> = 1.1452*

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

*WA = 200  
WB = 57.26  
NB<sub>t</sub> = 3.05387  
V<sub>t</sub> = 2.12863  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA<sub>0</sub> = 1.25276  
CB<sub>0</sub> = 1.43466*

*Total input = 257.26 kg  
Total output = 257.26 kg*

*Chemical Balance Error = 0.000395758 kg (% 1.53836e-06)*

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

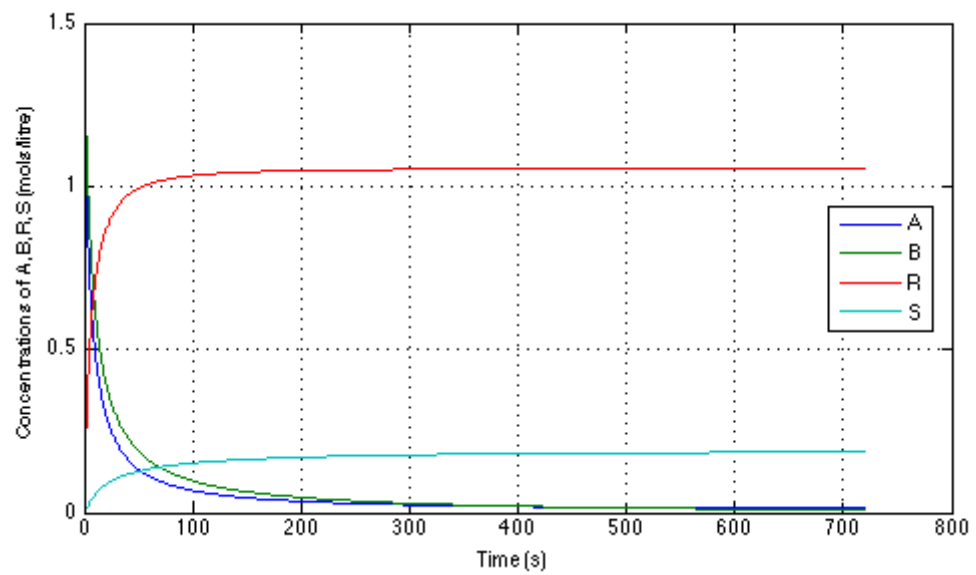
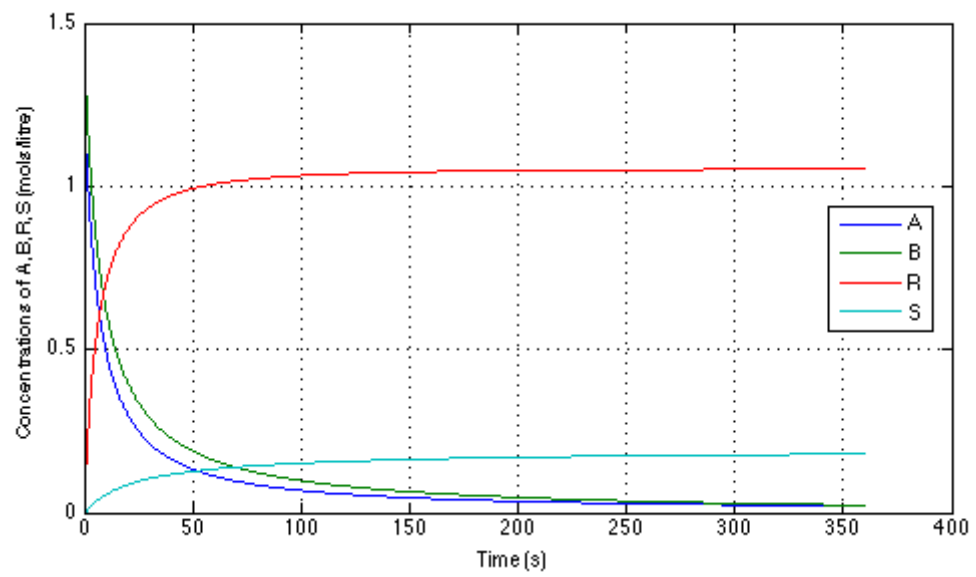
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0125198  
CB (final) = 0.00849957  
CR (final) = 1.05432  
CS (final) = 0.185921*

*CA @ 360.0s = 0.0207023  
CB @ 360.0s = 0.0229718  
CR @ 360.0s = 1.05243  
CS @ 360.0s = 0.179632*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0125198  
CB (final) = 0.00849957  
CR (final) = 1.05432  
CS (final) = 0.185921*



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