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# Scheme-9 Reactor-2

*Part-2, Case-6*

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

*NBt/NA<sub>t</sub> = 1.42454*

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

*WA = 200  
WB = 71.227  
NB<sub>t</sub> = 3.79877  
V<sub>t</sub> = 2.13561  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA<sub>0</sub> = 1.24867  
CB<sub>0</sub> = 1.77877*

*Total input = 271.227 kg  
Total output = 271.228 kg*

*Chemical Balance Error = 0.00115758 kg (% 4.26794e-06)*

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

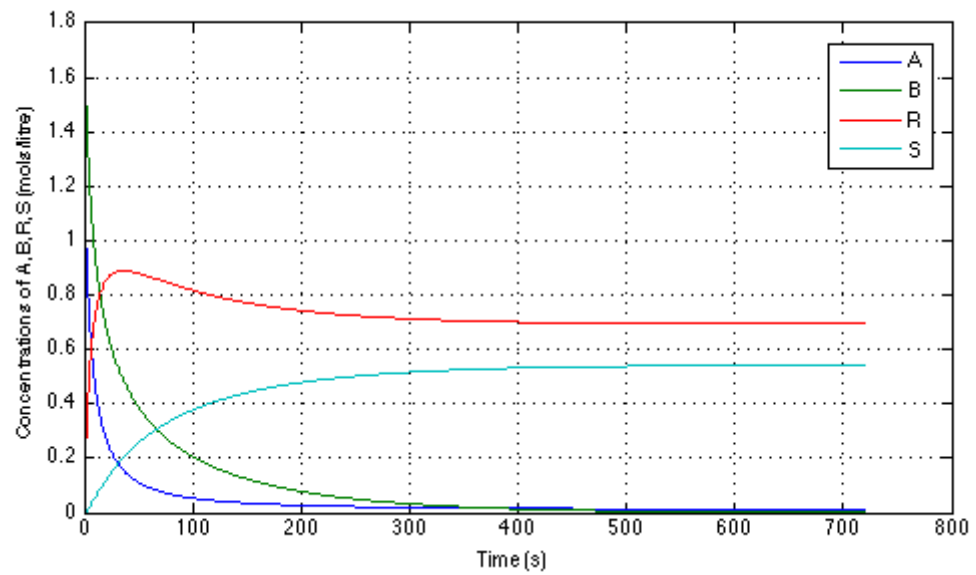
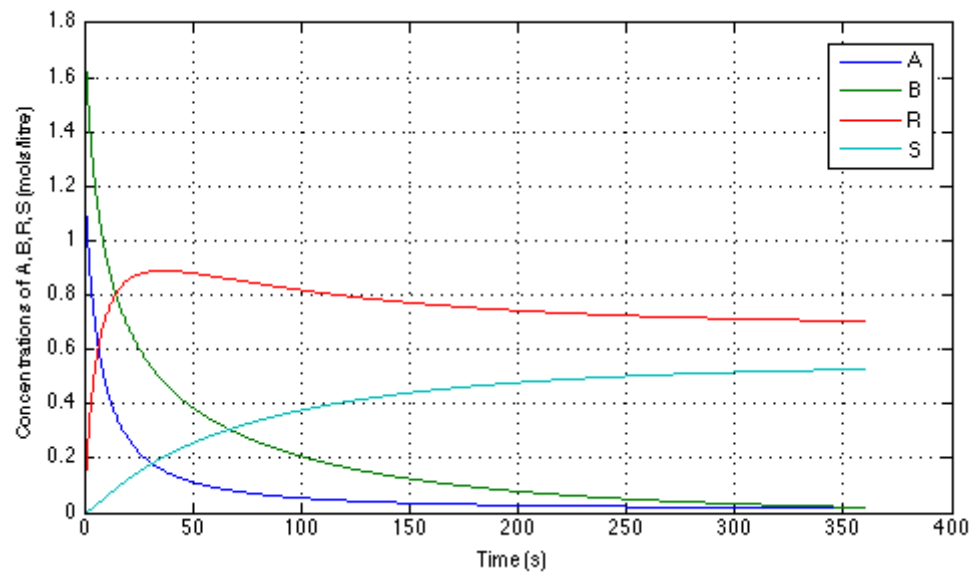
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0124923  
CB (final) = 0.000564752  
CR (final) = 0.694137  
CS (final) = 0.542036*

*CA @ 360.0s = 0.0168422  
CB @ 360.0s = 0.0196227  
CR @ 360.0s = 0.704495  
CS @ 360.0s = 0.527328*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0124923  
CB (final) = 0.000564752  
CR (final) = 0.694137  
CS (final) = 0.542036*



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