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# Scheme-7 Reactor-2

*Part-2, Case-10*

*tend = 3600 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NA<sub>t</sub> = 1.13932*

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

*WA = 200  
WB = 56.9659  
NB<sub>t</sub> = 3.03818  
V<sub>t</sub> = 2.12848  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA<sub>0</sub> = 1.25285  
CB<sub>0</sub> = 1.42739*

*Total input = 256.966 kg  
Total output = 256.966 kg*

*Chemical Balance Error = 0.000398171 kg (% 1.54951e-06)*

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

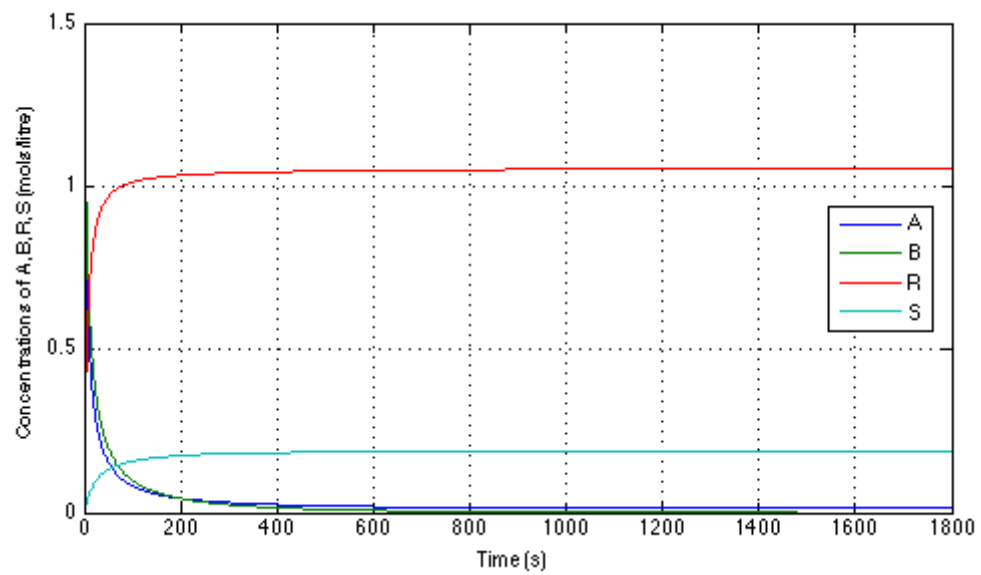
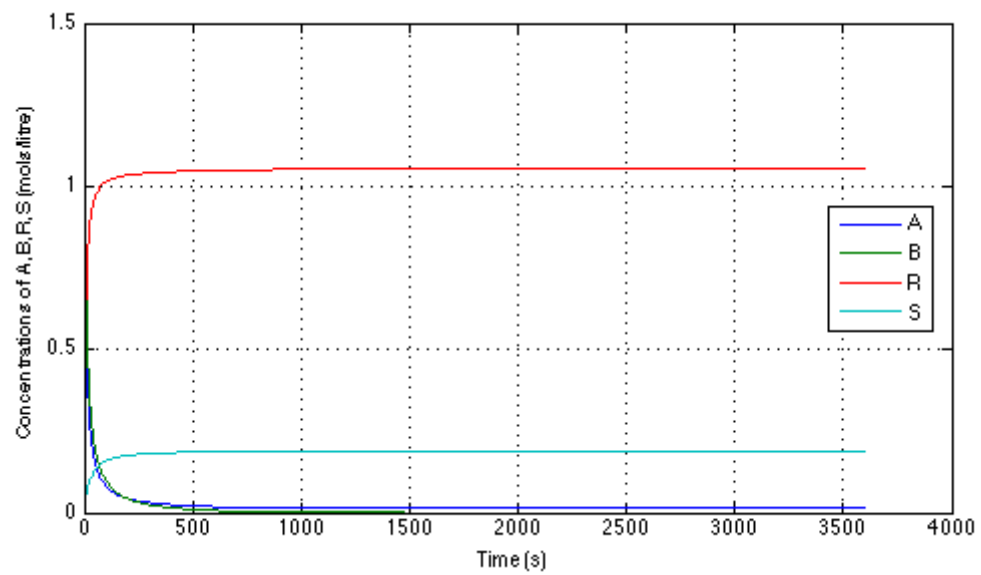
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0125247  
CB (final) = 1.71041e-17  
CR (final) = 1.05326  
CS (final) = 0.187068*

*CA @ 1800.0s = 0.0125247  
CB @ 1800.0s = 1.84726e-17  
CR @ 1800.0s = 1.05326  
CS @ 1800.0s = 0.187068*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0125247  
CB (final) = 1.84581e-15  
CR (final) = 1.05326  
CS (final) = 0.187068*



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