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# Scheme-2 Reactor-2

*Part-2, Case-9*

*tend = 2400 sec  
k1 = 0.1, k2 = 0.01*

*NBt/NA<sub>t</sub> = 1.13052*

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

*WA = 200  
WB = 56.5258  
NBt = 3.01471  
Vt = 2.12826  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA0 = 1.25298  
CB0 = 1.41651*

*Total input = 256.526 kg  
Total output = 256.526 kg*

*Chemical Balance Error = 0.000374019 kg (% 1.45802e-06)*

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

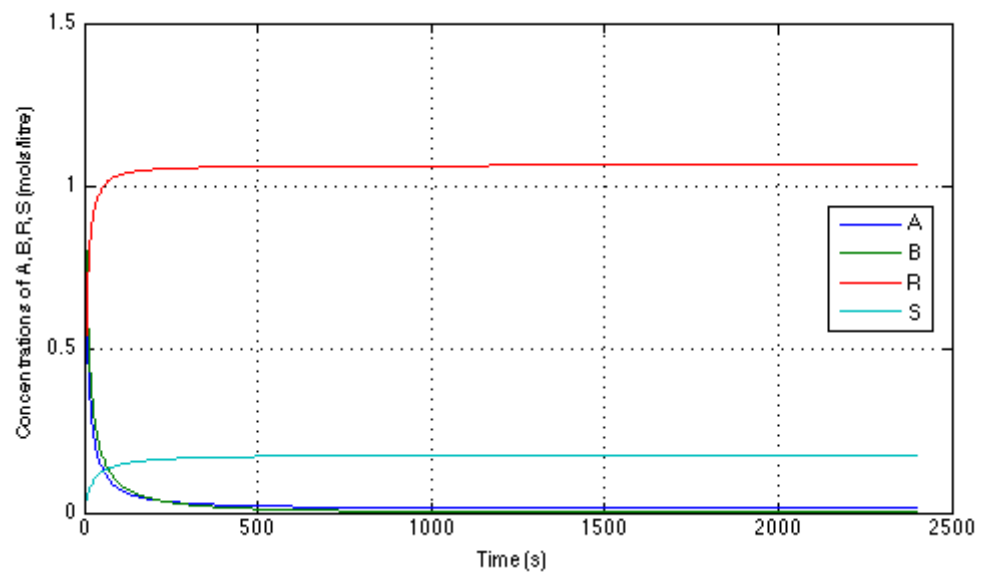
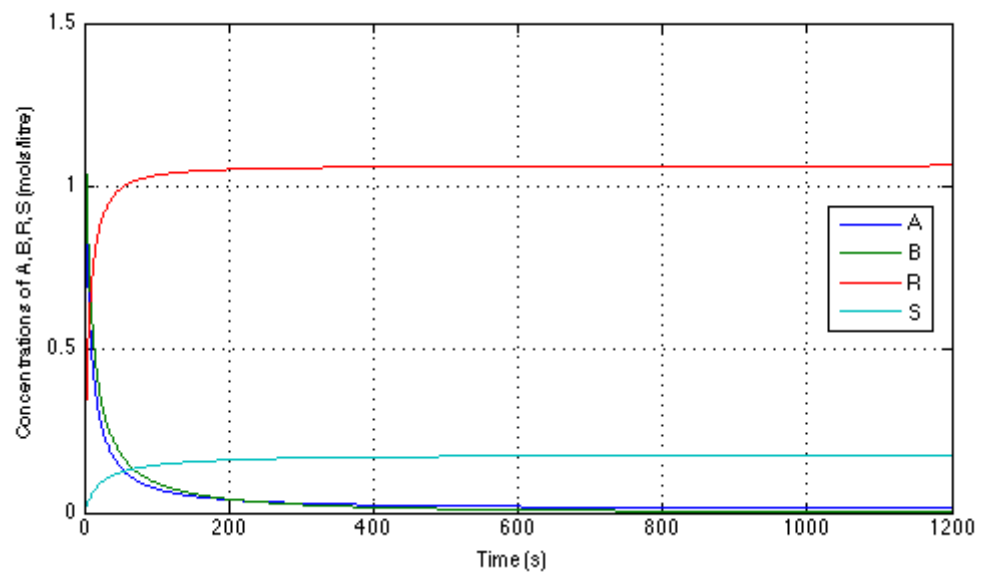
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0125332  
CB (final) = 0.000327179  
CR (final) = 1.06471  
CS (final) = 0.175739*

*CA @ 1200.0s = 0.0140635  
CB @ 1200.0s = 0.00226647  
CR @ 1200.0s = 1.06358  
CS @ 1200.0s = 0.17533*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0125332  
CB (final) = 0.000327179  
CR (final) = 1.06471  
CS (final) = 0.175739*



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