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# Scheme-9 Reactor-2

*Part-2, Case-10*

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

*NBt/NA<sub>t</sub> = 1.41884*

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

*WA = 200  
WB = 70.9419  
NBt = 3.78357  
Vt = 2.13547  
Tot.Solv. = 2  
Sola/(SolR+Sola) = 0.5*

*CA0 = 1.24875  
CB0 = 1.77177*

*Total input = 270.942 kg  
Total output = 270.943 kg*

*Chemical Balance Error = 0.00114358 kg (% 4.22075e-06)*

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

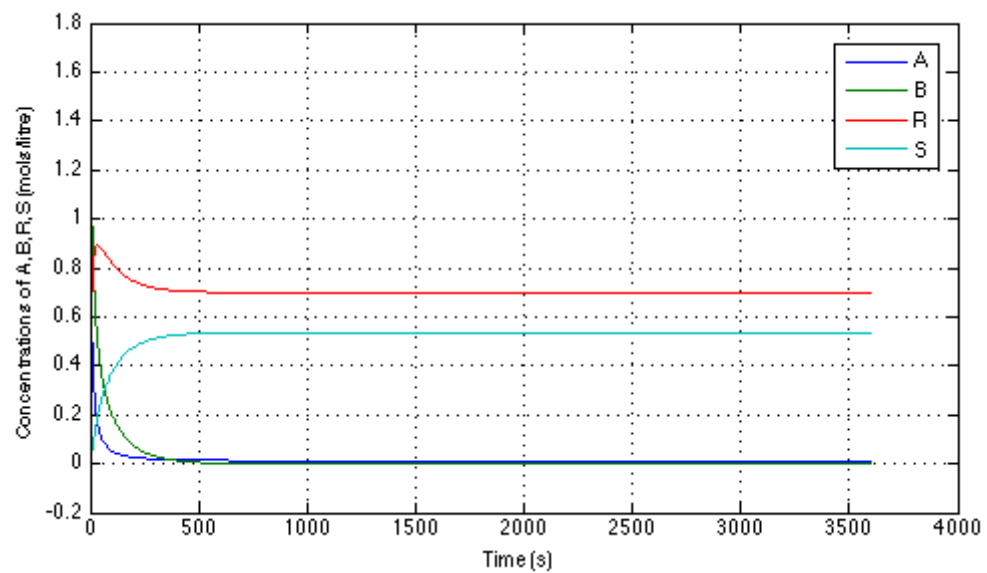
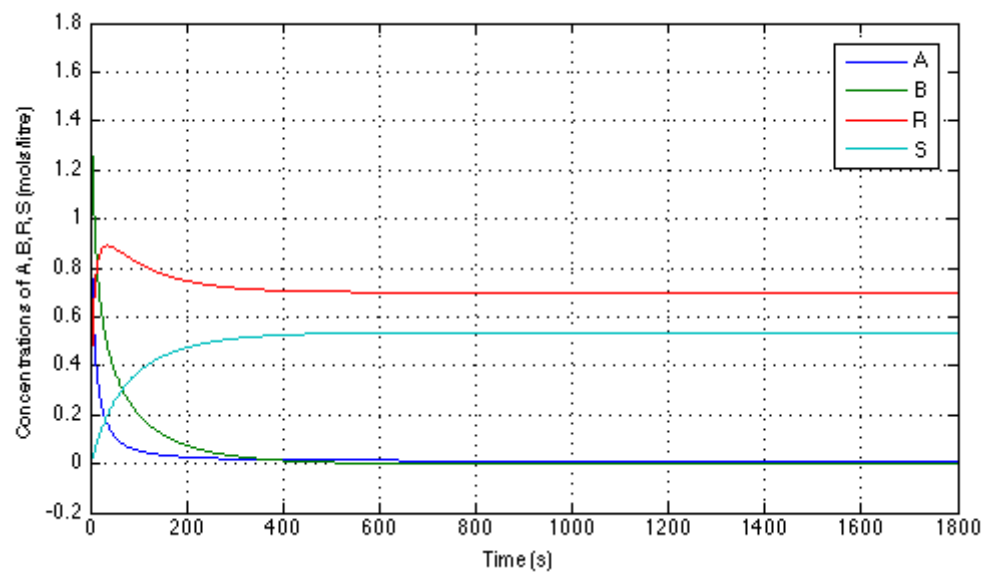
*Final Concentrations with Step Size limited to 0.0001*

*CA (final) = 0.0124921  
CB (final) = -1.6971e-17  
CR (final) = 0.700741  
CS (final) = 0.535515*

*CA @ 1800.0s = 0.0124921  
CB @ 1800.0s = -1.83288e-17  
CR @ 1800.0s = 0.700741  
CS @ 1800.0s = 0.535515*

*Final Concentrations with Step Size limited to 0.001*

*CA (final) = 0.0124921  
CB (final) = 1.83144e-15  
CR (final) = 0.700741  
CS (final) = 0.535515*



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