Scheme-3 Reactor-2

Part-2, Case-7

tend = 100 sec
k1 = 0.1, k2 = 0.01

NBt/NAt = 1.49735

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

WA = 200
WB = 74.8673
NBt = 3.99292
Vt = 2.13743
Tot.Solv. = 2
SolA/(SolR+SolA) = 0.5

CA0 = 1.2476
CB0 = 1.86809

Total input = 274.867 kg
Total output = 274.868 kg

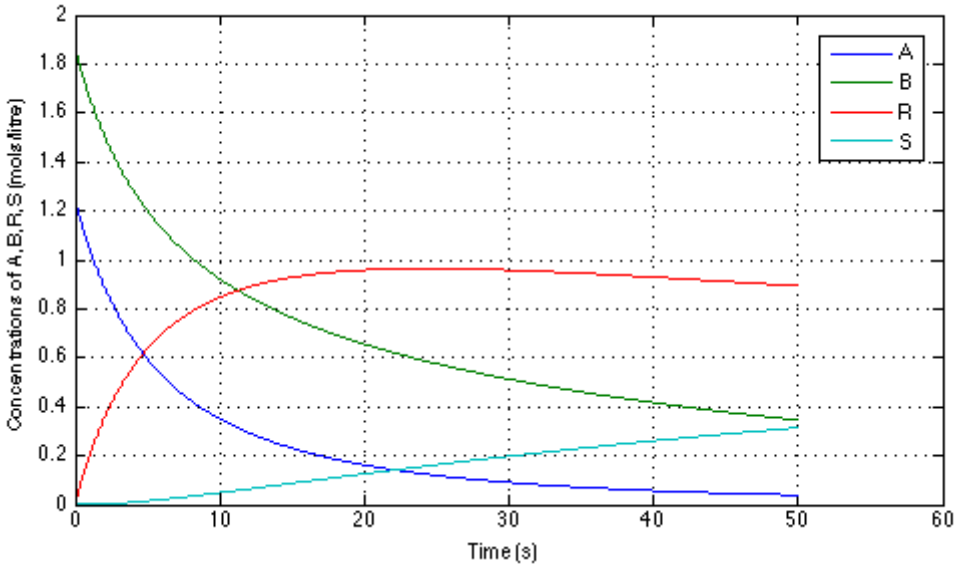
Chemical Balance Error = 0.0010481 kg (% 3.8131e-06)

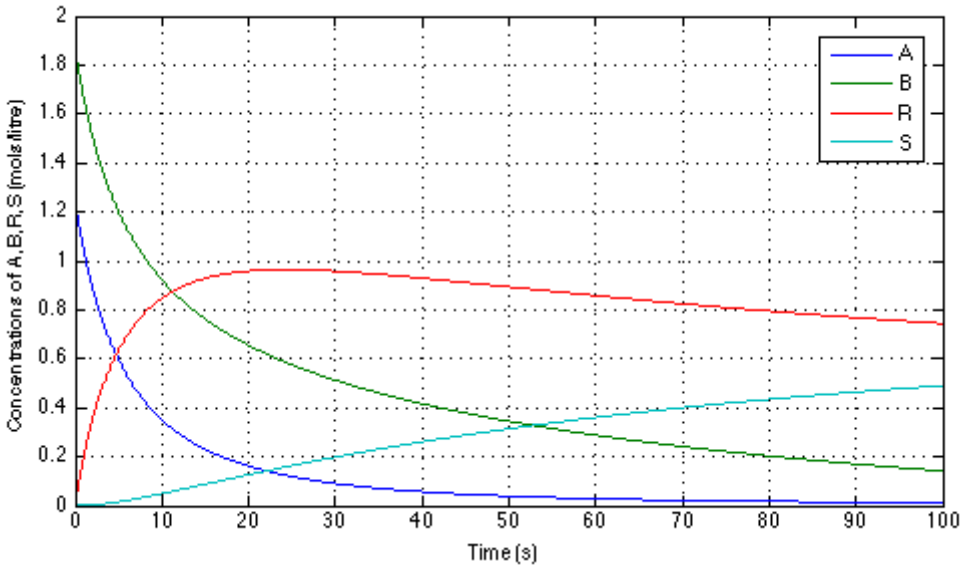
Solver: Explicit Runge-Kutta (4,5) Variable step (Dormand-Prince Pair)
Error tolerance: 0.01%

Final Concentrations with Step Size limited to 0.0001
CA (final) = 0.0124782
CB (final) = 0.142616
CR (final) = 0.74477
CS (final) = 0.490353

CA @ 50.0s = 0.0392751
CB @ 50.0s = 0.345612
CR @ 50.0s = 0.894172
CS @ 50.0s = 0.314155

Final Concentrations with Step Size limited to 0.001
CA (final) = 0.0124782
CB (final) = 0.142616
CR (final) = 0.74477
CS (final) = 0.490353





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