```
from GeneralModel import GeneralModel
import numpy as np
import matplotlib.pyplot as plt

B = np.array([0.45, 0.55, 0, 0, 0, 0, 0]).reshape([7,1])   # allocation

f31 = 0.72; f41 = 0.28; f42 = 1; f53 = 0.45; f54 = 0.275; f64 = 0.275;
f65 = 0.296; f75 = 0.004; f56 = 0.42; f76 = 0.03; f57 = 0.45;

A = np.array([-1, 0, 0, 0, 0, 0, 0,
              0, -1, 0, 0, 0, 0, 0,
              f31, 0, -1, 0, 0, 0, 0,
              f41, f42, 0, -1, 0, 0, 0,
              0, 0, f53, f54, -1, f56, f57,
              0, 0, 0, f64, f65, -1, 0,
              0, 0, 0, 0, f75, f76, -1]).reshape([7,7])   # tranfer


#turnover rate per day of pools: foliage, wood, metabolic litter, structural
#litter, soil microbial,slow soil, passive soil
temp = [0.00176, 0.000100104, 0.021468, 0.000845, 0.008534, 8.976e-005,
0.00000154782]

K = np.zeros(49).reshape([7, 7])

for i in range(0, 7):
    K[i][i] = temp[i]

#Unit of turnover rate from day^-1 to second^-1
#1 day = 86400 seconds
K = np.multiply(K, 1/86400)

# Cinput_const
input_fluxes = 0.00002245 #

nyear = 10000   # number of simulation years

times = np.linspace(0, nyear*365*86400, num = nyear)

iv_list = [0,0,0,0,0,0,0]

mod = GeneralModel(times, B, A, K, iv_list, input_fluxes)

res = mod.get_x()

fig = plt.figure(6*2, figsize=(14, 7.68))
plt.subplots_adjust(left  = 0.1, right = 0.95, bottom = 0.10, top = 0.9, wspace
=0.2, hspace =0)
x = list(range(1,nyear + 1, 1))

for i in range(1, 4):
    for j in range(1, 4):
        if ((i-1) * 3 + j) > 7 :
            break
        ax = plt.subplot(3, 3, (i-1) * 3 + j)
        ax.plot(x, res[(i-1) * 3 + j - 1,:])
plt.savefig("./test" + ".png", dpi = 500)
plt.show()

print(res[:,nyear-1])   # print result of the last year

#mod.write_output("./output.csv")
```