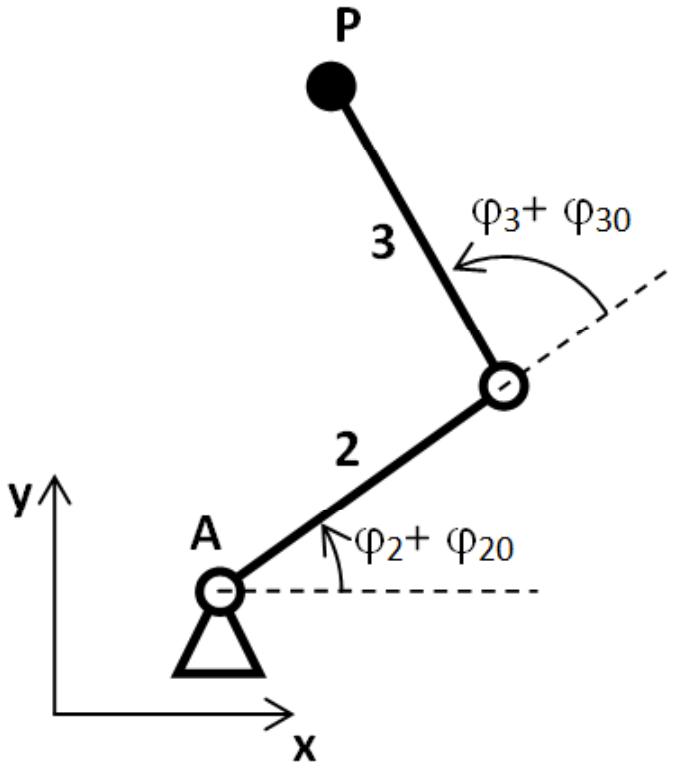
Example 4:

Calibrate parameters x_A, y_A, l_2, l_3, φ_{20}, φ_{30} of the system in the picture using measured positions of the end-effector P and corresponding joint angles φ_2, φ_3.



Design parameters:

$x_A = 0.1$ m

$y_A = 0.1$ m

$l_2 = 0.6$ m

$l_3 = 0.5$ m

$\varphi_{20} = 0°$

$\varphi_{30} = 0°$

(.mat files with measured data are available for download)