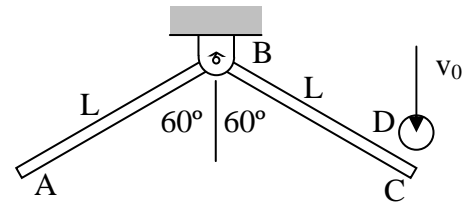**Problem P10**

Two slender bars of length, L, are welded together with an
angle of $120°$ between the bars as shown.  The welded object
is then pinned at B.   Each individual bar has a mass $m$ and a
mass moment of inertia of $I_G$.  A small glob of putty, D, of
mass $m_D$ strikes the end C of member ABC with a velocity $v_0$
and the putty sticks to the bar.



a) Determine the equations necessary to find:
   - angular velocity of ABC immediately after impact
   - the reactions at B immediately after the impact

You may assume the glob is a point mass.

b) Assuming that $v_0 = 1.5$ m/s, $m = 0.7$ kg, $L = 0.4$ m, and $m_D = 0.5$ kg determine numerical
   answers to part a).