Polycarboxylic acids and esters

Q 0425 30- 085 Novel Pyridine-Catalyzed Reactions of Dimethyl Acetylenedicarboxylate (DMAD) and Arylmethylidenemalononitriles: A Stereoselective Synthesis of Highly Substituted Buta-1,3-dienes. — (NAIR*, V.; DEVI, B. R.; VIDYA, N.; MENON, R. S.; ABHILASH, N.; RATH, N. P.; Tetrahedron Lett. 45 (2004) 16, 3203-3205; Org. Chem. Div., Reg. Res. Lab., CSIR, Trivandrum 695 019, Kerala, India; Eng.) — Mais

E: -CO-O-Me

A): 20 mol% Py (cat.), DME, -10 -> +25°C

$$\begin{array}{c} Ar \xrightarrow{CN} & \underbrace{(II),A)}_{\begin{array}{c} [-> \ a-c] \ [3.5 \ h] \\ [-> \ d] \ [12 \ h] \end{array}} \xrightarrow{\begin{array}{c} E \xrightarrow{E} \\ Ar \xrightarrow{CN} \\ CN \\ \end{array}} \xrightarrow{\begin{array}{c} a \ Ar: \ -CI \\ b \ Ar: \ -CI \\ CI \\ c \ Ar: \ -F \\ O-Bn \end{array} \xrightarrow{\begin{array}{c} 82\% \\ O-Bn \end{array}}$$