

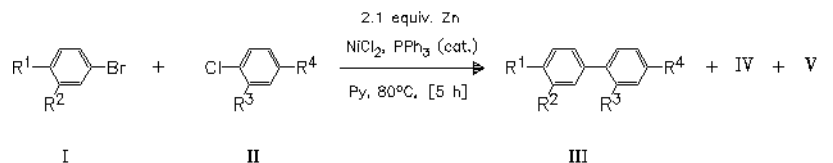
alkylation, arylation, dealkylation, dearylation, C-acylation, olefination

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Nickel-Catalyzed Cross-Coupling Reaction of Aryl Halides in Pyridine. A Practical Synthesis of 4'-Methylbiphenyl-2-carbonitrile as a Key Intermediate of Angiotensine II Receptor Antagonists. —

Nickel(0)-catalyzed cross-coupling of the aryl bromides (I) with the aryl chlorides (II) in pyridine yielding the biphenyl derivatives (III) proceeds with selectivities of up to 70%. The amount of the homo- coupling products (IV) and (V) strongly depends on the aryl halides, the phosphine ligand, and the solvent used. Further examples are given in the original paper. — (KAGEYAMA, H.; MIYAZAKI, T.; KIMURA, Y.; Synlett (1994) 5, 371-372; Res. Dev. Dep., Ihara Chem. Ind. Co., Ltd., Ihara-gun, Shizuoka 421-33, Japan; EN)



a R ¹ : -Me; R ² : -H; R ³ : -CN	69%	11%	12%
b R ¹ : -Me; R ² : -H; R ³ : -CO-O-Me	59%	11%	14%
c R ¹ : -H; R ² : -Me; R ³ : -CN	64%	11%	10%
d R ¹ : -O-Me; R ² : -H; R ³ : -CN	52%	11%	10%
e R ¹ : -Me; R ² : -H; R ³ : -CN	19%	31%	20%

