**General Procedure A: (for the synthesis of Imidazopyridine)**

Pyridin-2-amine derivate (1 eq.) ytterbium(III) trifluoromethanesulfonate (0.03 eq.), aldehyde (2 eq. ), and isocyanide (2 eq.) were combined in a microwave vial and heated to 120° C for 30 mins.

**General Procedure B: (for the synthesis of Isocyanides)**

To the vigorously stirred solution of a 50% sodium hydroxide solution (12 mL) was added TEBA chloride (0.125 g), The reaction mixture was efficiently stirred and heated at 40°C and a solution of the selected amine (1 eq.), chloroform (1.05 eq.) in DCM (12 mL) was added dropwise in 50’ period. The reaction mixture was efficiently stirred and heated at 40◦C (gently refluxing) for 3–8 h. The progress of the reaction was thoroughly monitored by means of TLC. The reaction mixture was allowed to cool to r.t., and cold water (50–100 mL) was added. The aqueous phase was extracted with methylene chloride. The organic layer was washed with concentrated brine solution and dried over sodium sulphate. The drying agent was filtered off, and the solvent was evaporated under reduced pressure. The residue was subjected to the next step without purification