

## LIST OF SCHEMES

Scheme 1.1	Reaction of A and B to produce C,D,E,F and the selectivity of C. [C], [D],[E],[F] is concentration of C,D,E and F.
Scheme 1.2	Transformation A to B and C and the selectivity
Scheme 3.1	Overview of synthesis and testing workflow
Scheme 3.2	Preparation steps for MoVTeNbO <sub>x</sub> sample (as a standard recipe)
Scheme 4.1	Proposed oxidation pathway over Mo-V-Te-Nb-O catalyst (Lin 1999; Lin 2000)