Appendix C

ACID DIGESTION

The acid digestion process for zeolite

- 1. Grinding the samples into fine powers and drying at 120°C.
- 2. Weighing 0.2 g of sample treated under step 1, putting it into a Teflon vessel and then adding 5 ml HF, 4 ml $HClO_4$ and 10 ml HCl (1:1 $HCl:H_2O$ v/v).
- 3. Heating the Teflon vessel under the low temperature ($<180^{\circ}$ C), until the fog of HClO₄ vapors was observed.
- 4. Cooling the vessel and putting 2 ml H_2O_2 . After waiting a few minutes, heat the vessel again until see the fog of $HClO_4$ vapors appears again.
- 5. Cooling it to the room temperature.
- 6. Adding 20 wt% HCl into the vessel to 25 ml.