Test result sheet

Subject	The BLACK HOLE Mosquito control & air cleaning Test (Client of Bio-Trap)
Date	27.Februlry.2002
Target Spec.	Organic analysis reaction of PPOF module
Summary	▫**Test condition (Black Hole in PPOF unit sticking)** Photo catalysis: P-25 (5 wt %) chemical reactor: 10ℓ Analysis object: Acetaldehyde (CH_3CHO, 1200ppm) Light source: UV BLB4W,2EA Measurement: FT-IR(BOMEM 100) POF: Ø=1mm, 500EA, L=7cm ▫**Test result**
Remark	

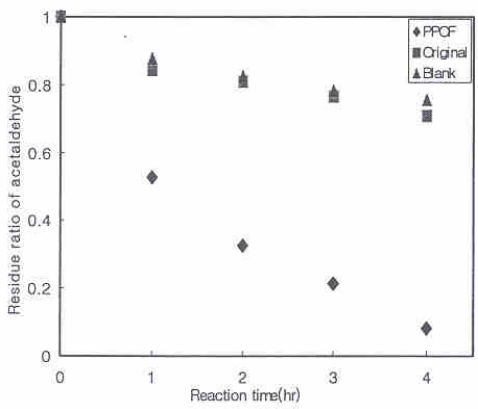

Fig. 1. Photocatalytic degradation of Acetaldehyde with reaction time.

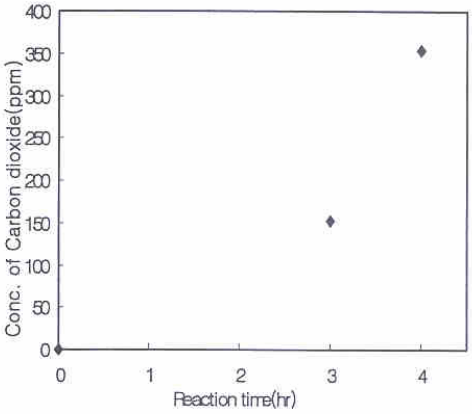

Fig. 2. Formation of carbon dioxide by Photocatalytic degradation.

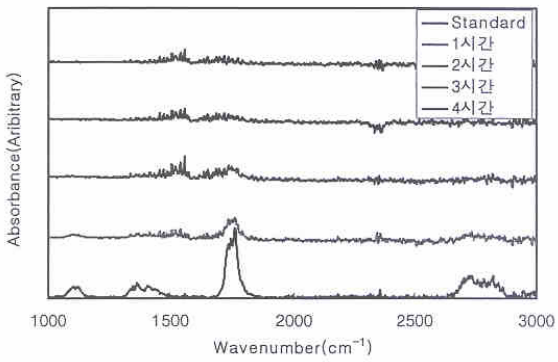

Fig. 3. FT-IR analysis of photocatalytic degradation of Acetaldehyde

▫**Test condition (Black Hole in PPOF unit sticking)**

Photo catalysis: P-25 (5 wt %, Slide Glass)

chemical reactor: 125 mℓ

Analysis object: Ammonia (NH_3)

Light source: UV-A Lamp(15W,2EA)

Measurement: FT-IR(BOMEM 100)

▫**Test result**

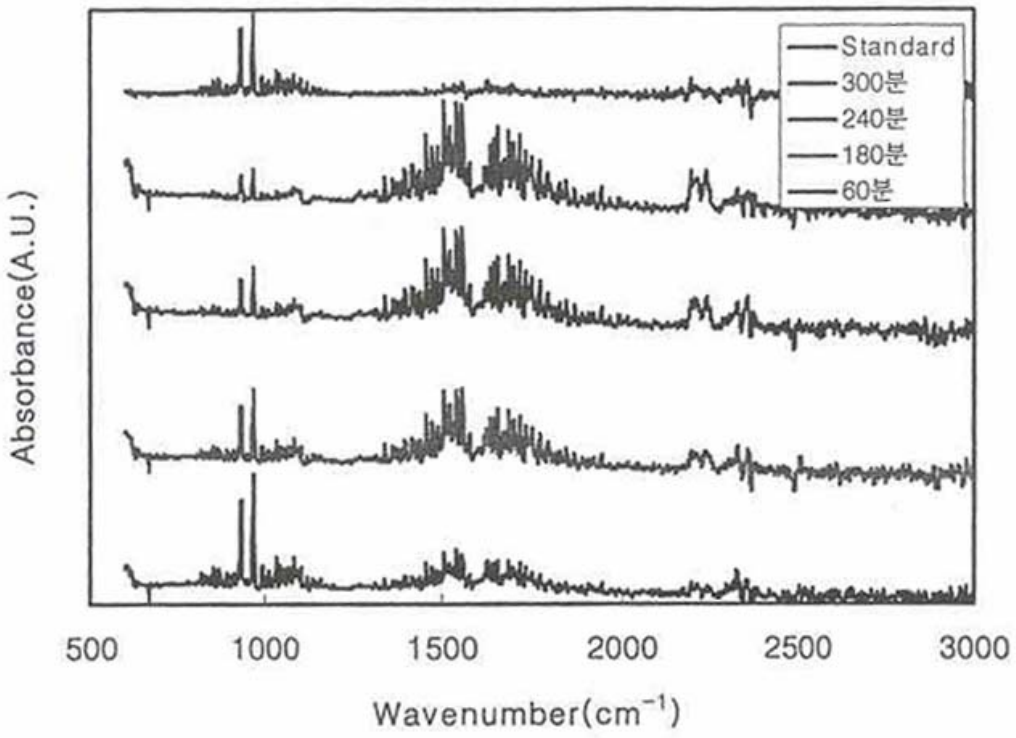

Fig. 4. FT-IR analysis of photocatalytic degradation of ammonia.

CONCLUSION

1. PPOF analysis capacity excellent for Acetaldehyde
2. Circumstance of Ammonia is analysis capacity takes time.
3. Measurement of CO_2 (The minimum)
4. PPOF unit durability analysis capacity excellent

Test by ENVIO Laboratory