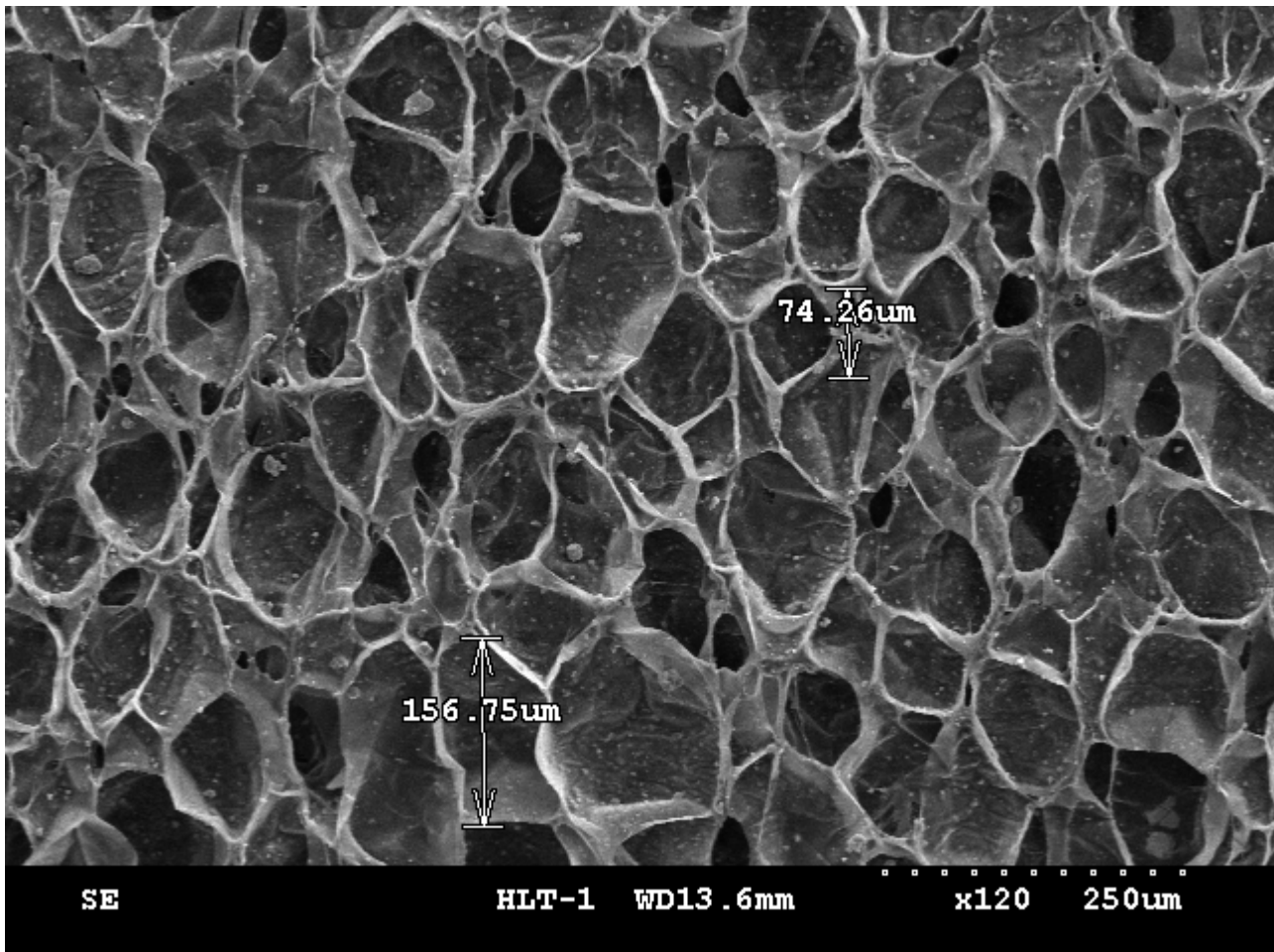


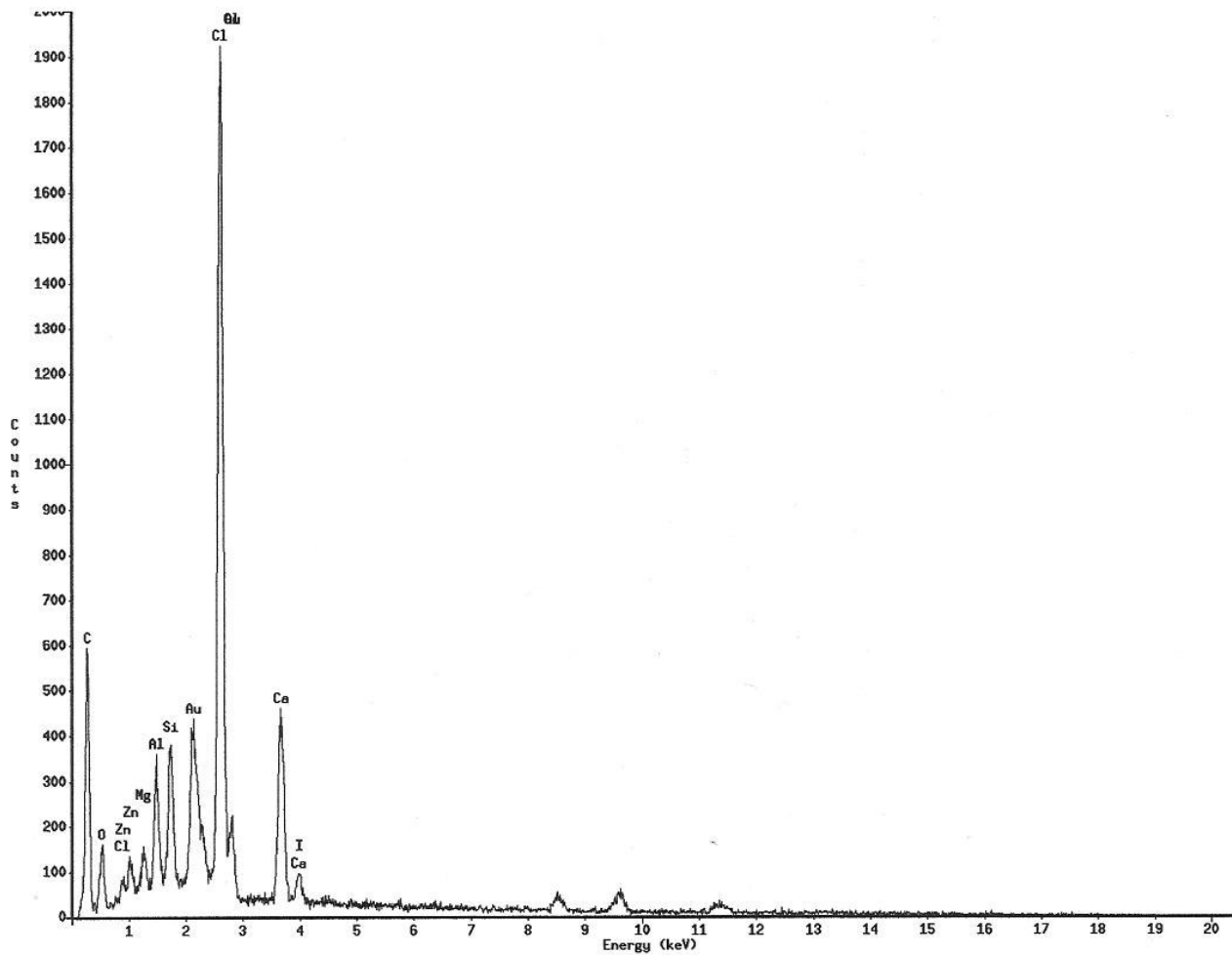
低溫隔熱王材質報告

低溫隔熱王內含橡膠，以下材質分析，圖一係使用 HITACHI S-3500N 掃描式電子顯微鏡拍攝低溫隔熱王發泡橡膠部分，粗細約在 74.26um 與 156.75um 之間，主成分是 Cl，其成分可由圖二之 EDS 圖譜得知，其他材質分別為

C(6),O(8),Al(13),Si(14),Cl(17),Ca(20),Ni(28) ,Zn(30) ,I(53) ,Mg(12) 其原始量測資料數據如附錄一 關於 Au 的部分係電子顯微鏡觀察前真空濺渡上去的。



圖一 低溫隔熱王發泡橡膠 電子顯微鏡(SEM) 120 倍放大圖



圖二 低溫隔熱王 材質分析圖(EDS)



附錄一 低溫隔熱王材質之原始量測資料數據

Wed Nov 16 15:32:37 2005

Livetime : 100.0 Sec.
Technique: Least Squares Fit

Elements Present:
C(6), O(8), Al(13), Si(14), Cl(17),
Ca(20), Ni(28), Zn(30), I(53), ~~Au(79)~~
Possible Additional Elements:
Mg(12)

Energy (keV)	Intensity (counts)	Elements Present	Elements Possible
0.270	4179	C Ka	
0.525	937	O Ka	
*0.882	203	Cl Si-ESC Zn Ln	
			Ni La1
1.030	614	Zn La	
*1.254	854		Mg Ka
1.483	2957	Al Ka	
1.734	3600	Si Ka	
2.134	3587	Au Ma1	
2.611	22671	Cl Ka	
2.829	676	Cl Kb Au M1-N3	
3.671	5209	Ca Ka	
3.984	769	Ca Kb1 I La1	
8.520	376	unidentified	
*9.609	481		Zn Kb1

* Check peak labels manually, or acquire additional data for better statistics and re-run Automatic Ident.

Wed Nov 16 15:35:18 2005

Filter Fit Method
Chi-sqd = 33.73 Livetime = 100.0 Sec.
Standardless Analysis

Element	Relative k-ratio	Error (1-Sigma)	Net Counts	Error (1-Sigma)
Si-K	0.11966 +/-	0.00376	3691 +/-	116
O -K	---	---	1057 +/-	52
Al-K	0.07847 +/-	0.00330	2594 +/-	109
C -K	0.42963 +/-	0.00663	4475 +/-	69
Ca-K	0.35343 +/-	0.00884	5518 +/-	138
Mg-K	0.01881 +/-	0.00247	595 +/-	78

Adjustment Factors	K	L	M
Z-Balance:	0.00000	0.00000	0.00000
Shell:	1.00000	1.00000	1.00000

PROZA Correction Acc.Volt.= 15 kV Take-off Angle=35.00 deg
Number of Iterations = 8

Element k-ratio ZAF Atom % Element Wt % Err. Compound Compound



	(calc.)			Wt %	(1-Sigma)	Formula	Wt %
Si-K	0.0589	1.278	4.23	7.52	+/- 0.24	SiO2	16.09
Al-K	0.0386	1.365	3.09	5.27	+/- 0.22	Al	5.27
C -K	0.2113	2.713	75.45	57.33	+/- 0.88	C	57.33
Ca-K	0.1738	1.146	7.85	19.92	+/- 0.50	Ca	19.92
Mg-K	0.0093	1.506	0.91	1.39	+/- 0.18	Mg	1.39
O -K	---	7.013	8.47	8.57 S	---	---	---
Total			100.00	100.00			100.00

Table Symbols: S -- Wt.% calculated by Stoichiometry

※以上報告 特別感謝中央大學 超塑性實驗室 李雄老師 支持教導!!