



SCIENTECH

辛耘 (3583)

2017年12月13日

免責聲明

- 本簡報可能包含對於未來展望的表述。該類表述是基於對現況的預期，但同時又受限於已知或未知的風險與不確定性的影響。因此實際結果將可能不同於表述內容。
- 除法令要求外，公司並無義務因應新資訊的產生或未來事件的發生，主動更新對未來展望的表述。

基本資料

成立時間 1979/10/17

上市時間 2013/3/12

資本額 8.11億元

董事長 謝宏亮

總經理 許明棋

主要業務 自製設備、晶圓再生、設備代理

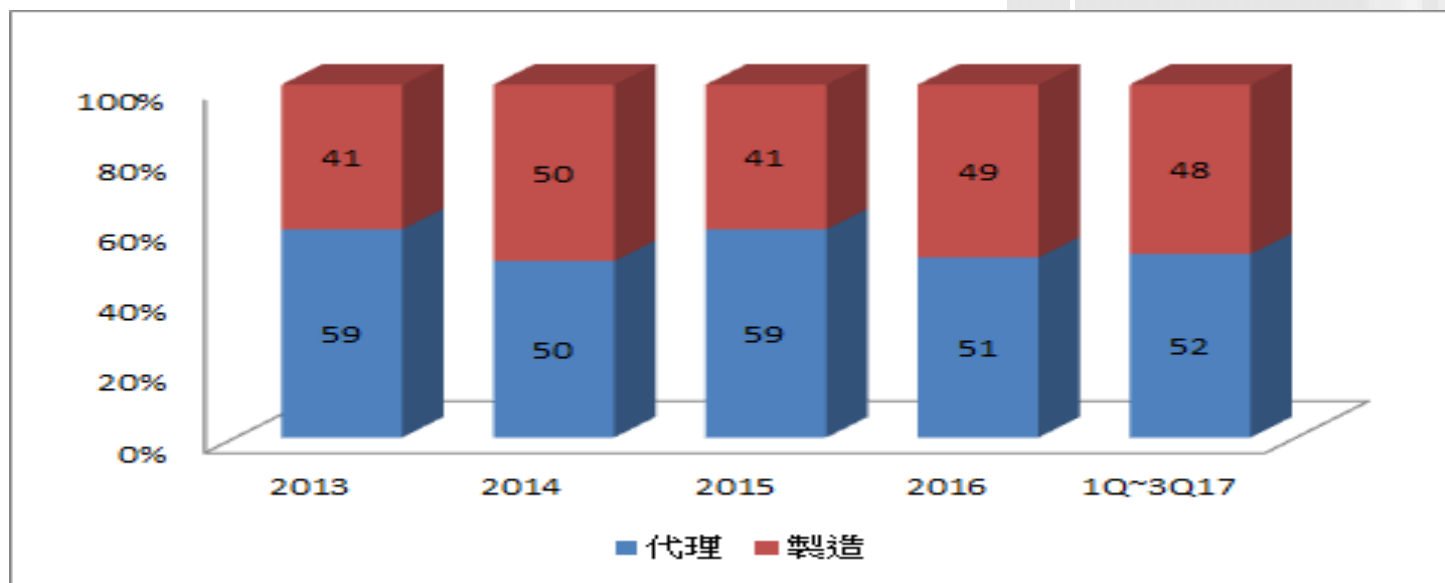
營運概況

主要產品

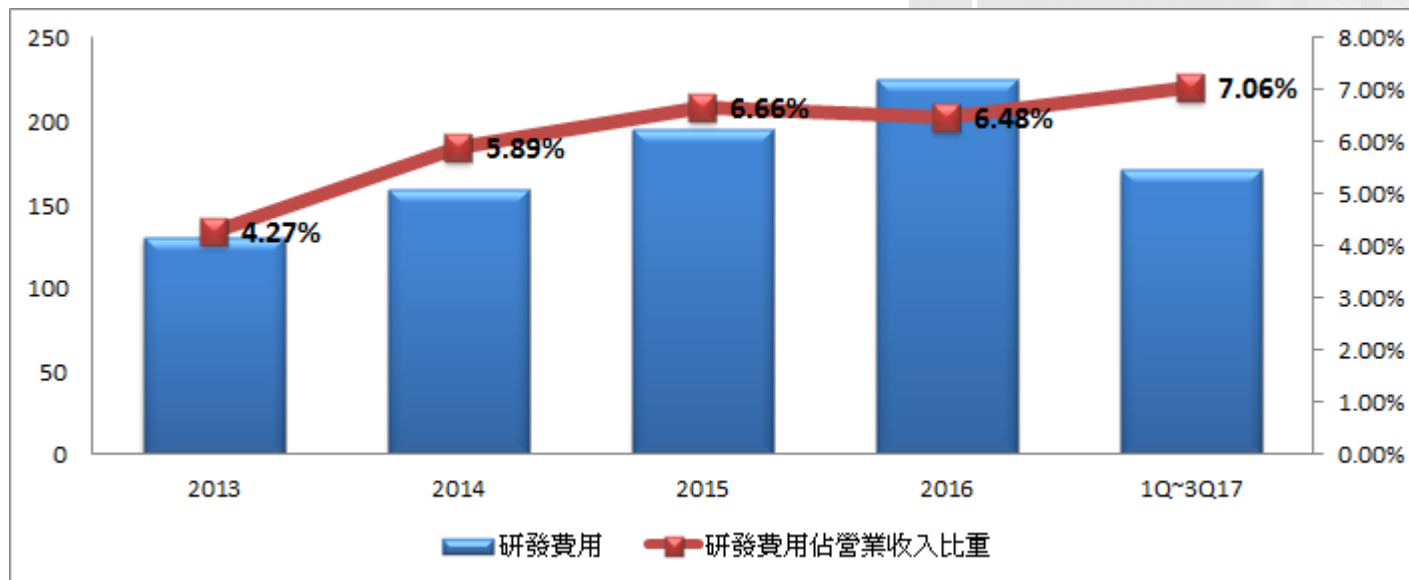
未來展望

單位：百萬	2013	2014	2015	2016	3Q17	1Q~3Q17
營業收入	3,068	2,717	2,942	3,495	885	2,428
營業毛利	983	970	903	1,178	335	864
營業費用	629	673	779	835	215	611
營業淨利	354	297	124	343	120	253
營業外收入及支出	(26)	20	(6)	21	(15)	(26)
稅前淨利	328	317	119	363	105	227
本期淨利	249	246	86	292	86	177
EPS(元)	3.11	3.04	1.06	3.60	1.06	2.18
毛利率	32.04%	35.71%	30.69%	33.71%	37.91%	35.60
營業淨利率	11.53%	10.93%	4.23%	9.80%	13.62%	10.44%
稅前淨利率	10.69%	11.68%	4.03%	10.40%	11.86%	9.33%

單位：%	2013	2014	2015	2016	1Q~3Q17	毛利率
代理	59	50	59	51	52	低於平均
製造	41	50	41	49	48	高於平均



單位：百萬	2013	2014	2015	2016	1Q~3Q17
研發費用	131	160	196	226	171
研發費用 佔營業收入比重	4.27%	5.89%	6.66%	6.48%	7.06%



自製
設備

濕製程設備

設備
代理

半導體暨光電
製程及量測設備

晶圓
再生

12吋晶圓再生

- 濕製程設備
 - 單晶圓/批次濕式製程設備
 - ◆ 12"/8" 先進封裝製程(Fan-out、Solder Bump、Copper Pillow、Bumping、Gold Bump、RDL、TSV ...等)
 - ◆ 6"/8"/12" 半導體前段成熟特殊製程 (IoT Sensor、Power IC、FP sensor、RF、CMOS、Touch Controller、MEMS)
 - ◆ **HBLED** 全自動前段製程 for 背光與照明
 - ◆ **III-V**族 for 無線通訊高頻 IC (PA 與射頻IC)
 - ◆ **MEMS** 微機電



● Scientech Corp.



SCIENTECH

■ 12" 晶圓再生

- ◆ 月產能: 12 萬片
- ◆ 銅製程與非銅製程產線分離

Advanced clean technology

- 65nm/ 45nm Particle
- Low trace metal (<1E10)



Complete particle inspection
(SP1-DLS & SP2)

Cleaning

Etching



Full Process
Optimization



Polishing

Grinding

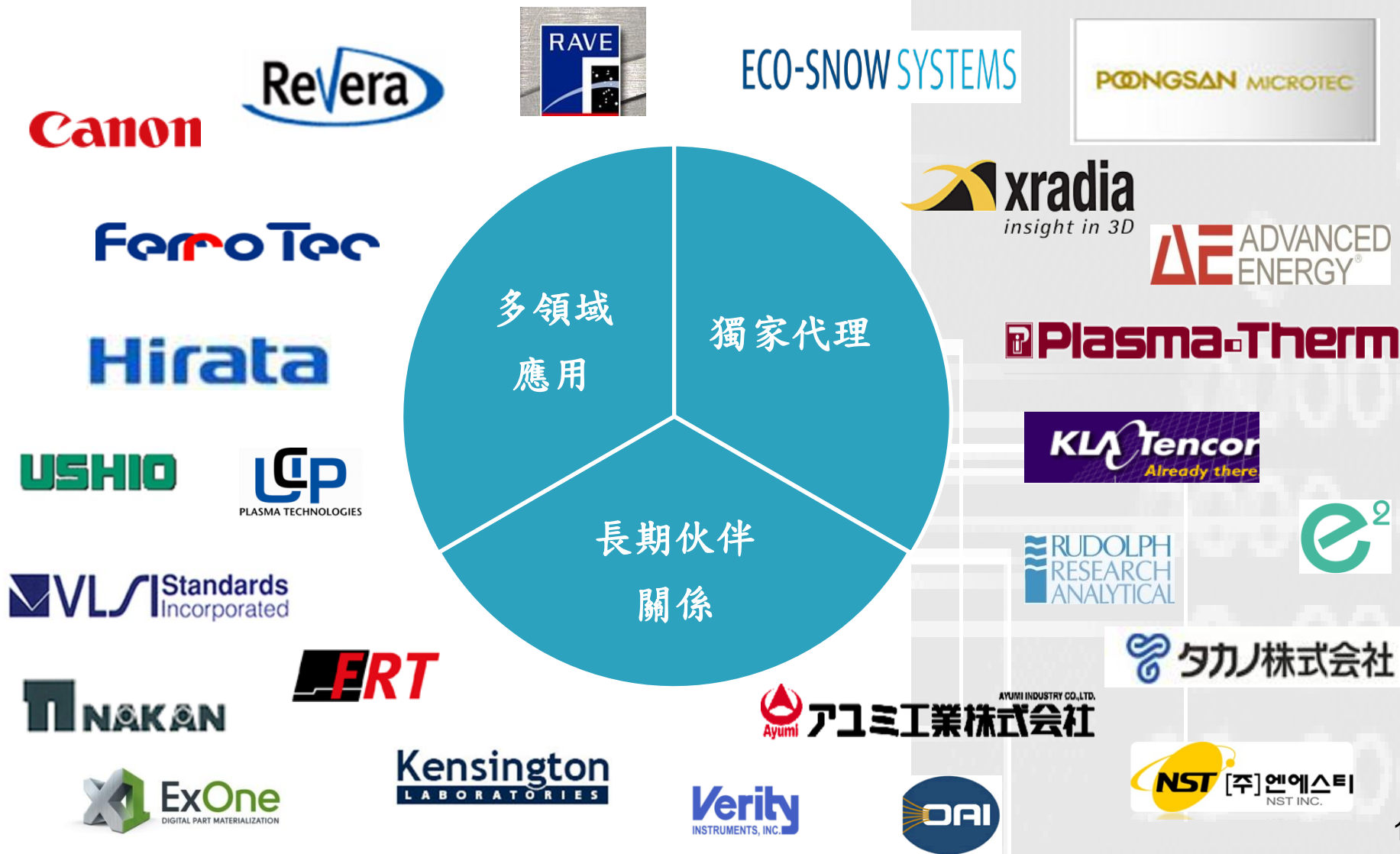
Complete polishing process

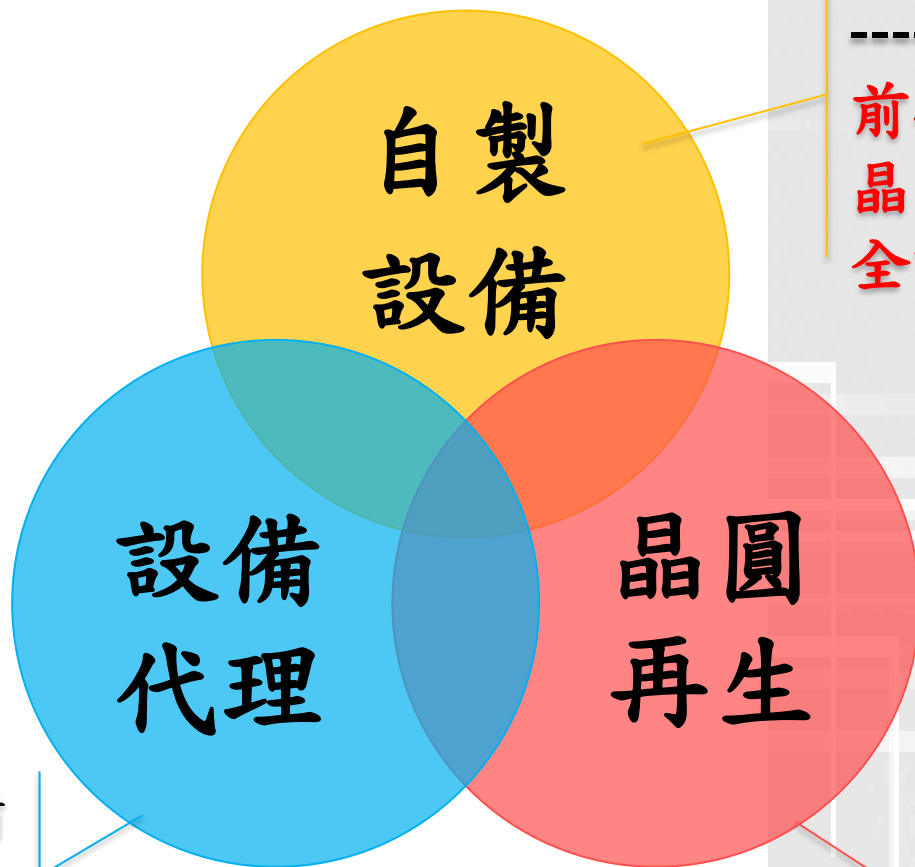


Super flatness
(GBIR<0.5 μ m)

主要產品

設備代理





濕製程設備

前段濕製程設備
晶圓承載設備
全譜質譜儀

半導體暨光電
製程及量測設備

AMOLED

先進製程微縮

12吋晶圓再生

SiC晶圓再生



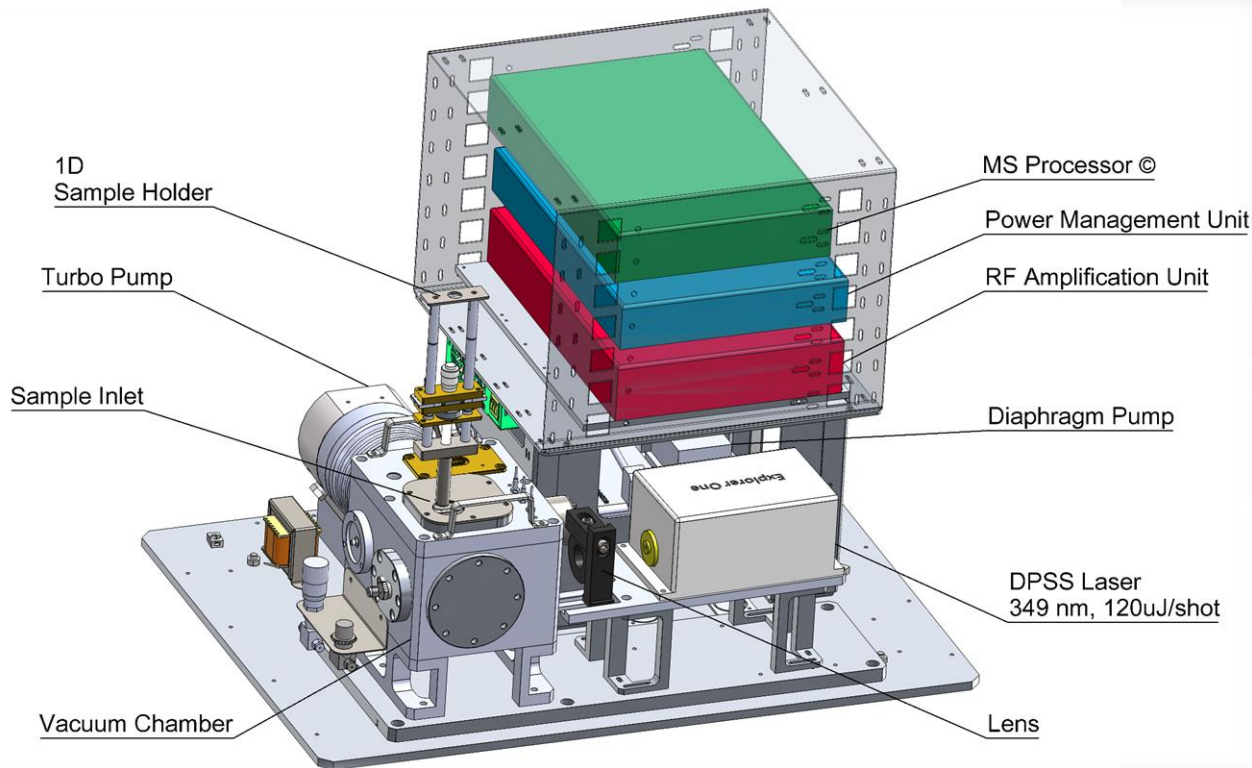
AI acromass

**AMS-200-1
inTrap MALDI
Mass Spectrometer**

分析範圍: 500-500kDa
解析度: 10Da@100kDa
精度: 100Da@100kDa
(於整體蛋白質分析)

AMS-200-1

Without any external pump & gas cylinder,
all modules are consolidated in a desktop !



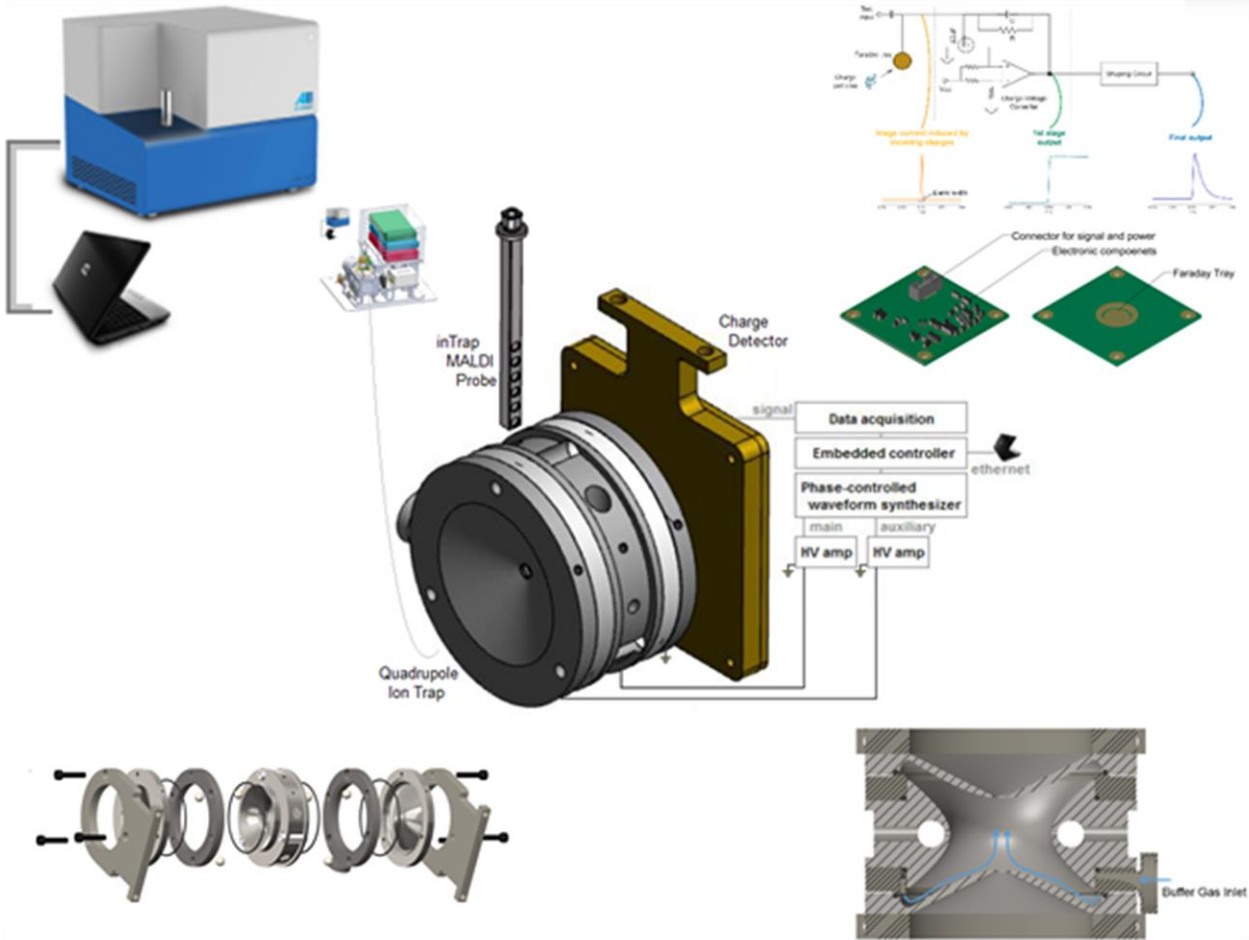
體積:

60 cm 寬
x 50 cm 深
x 50 cm 高

重量:

< 40 Kg

High-precision miniature assembly of all-hOMEMADE key components ---



多樣品進樣!

高精度
質量分析器!

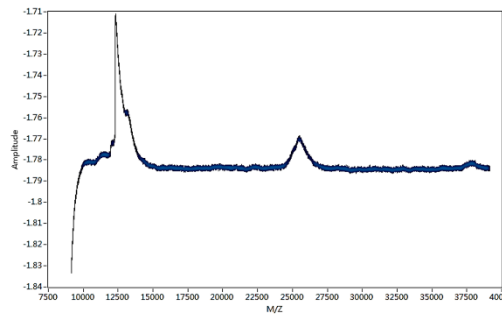
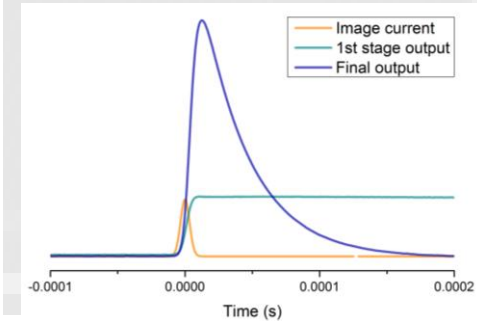
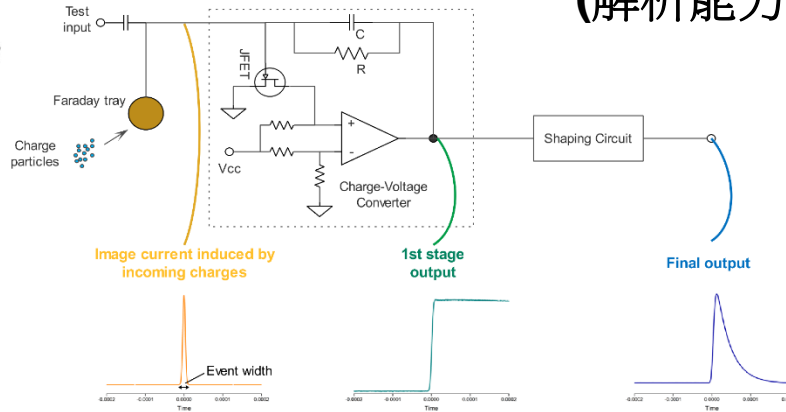
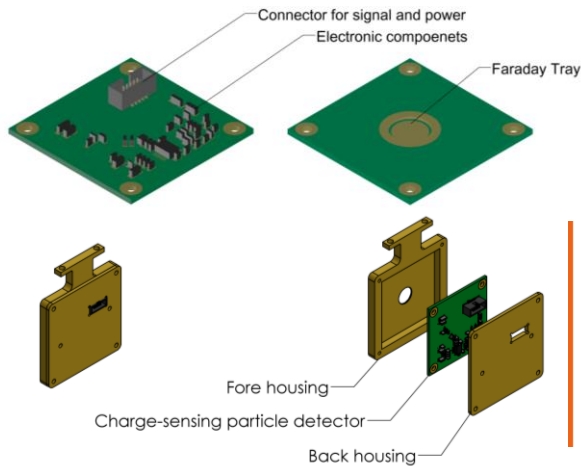
3D-列印
克努森流體
氣流噴嘴!

&

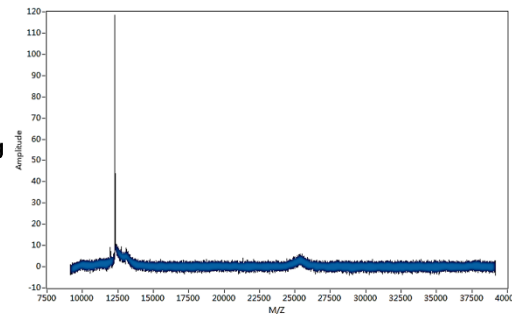
高感度
電荷偵測!!!

“Very-Simple” *proprietary* charge detector ...
no HV bias, no high vacuum required !

(解析能力: 10Da@100kDa)



Reconstruction & filtering



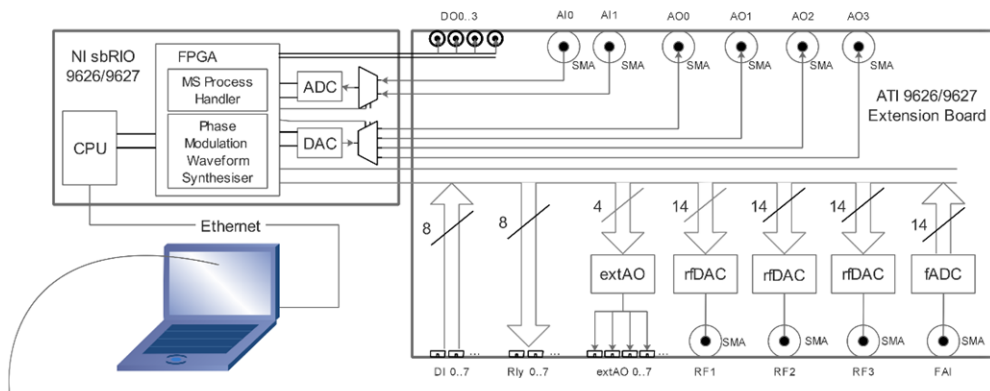
Raw 1st stage of CSPD™ signal

- Good response to ion quantity.
- It consists of ion information and circuit property as the falling of peak.

Reconstructed & filtered signal

- The circuit property has removed. The signal responding to the detecting ions.
- Bad linearity to ion number

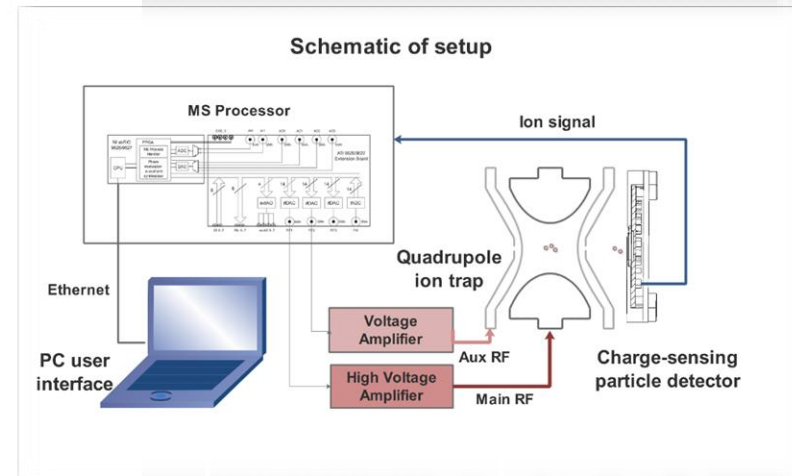
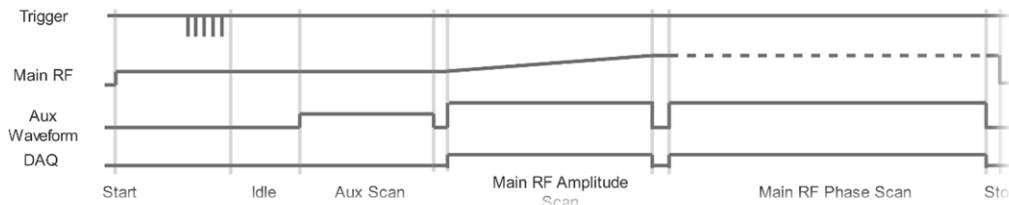
Versatile waveform via ion-trap dynamics for *proprietary* mass spectrometry ---



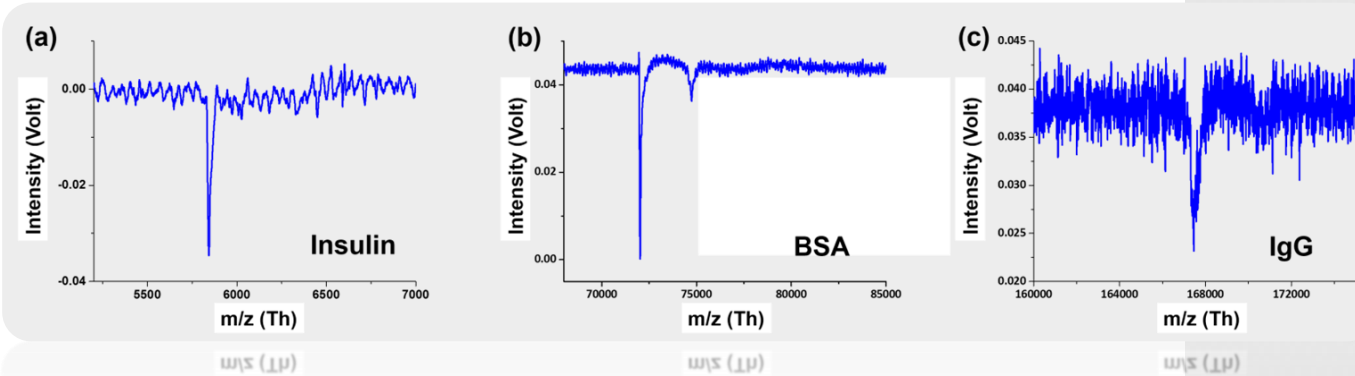
Event Script Editor

```

Start:: parameters...;
LaserTrigger:: parameters...;
Idle:: parameters...;
AuxScan:: parameters...;
MainAmpScan:: parameters...;
MainPhaseScan:: parameters...;
Stop:: ;
    
```

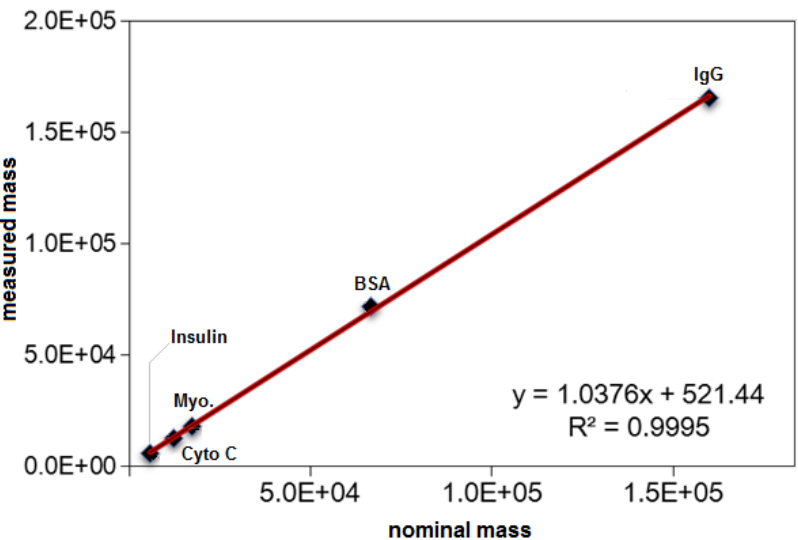


頻率抖動 ~ $1e-4$!!



	Nominal Mass	Uncalibrated Mass
Insulin	5733	5856
Cyto C	12327	12674
Myoglobin	17200	17996
BSA	66463	72077
IgG	160000	165580

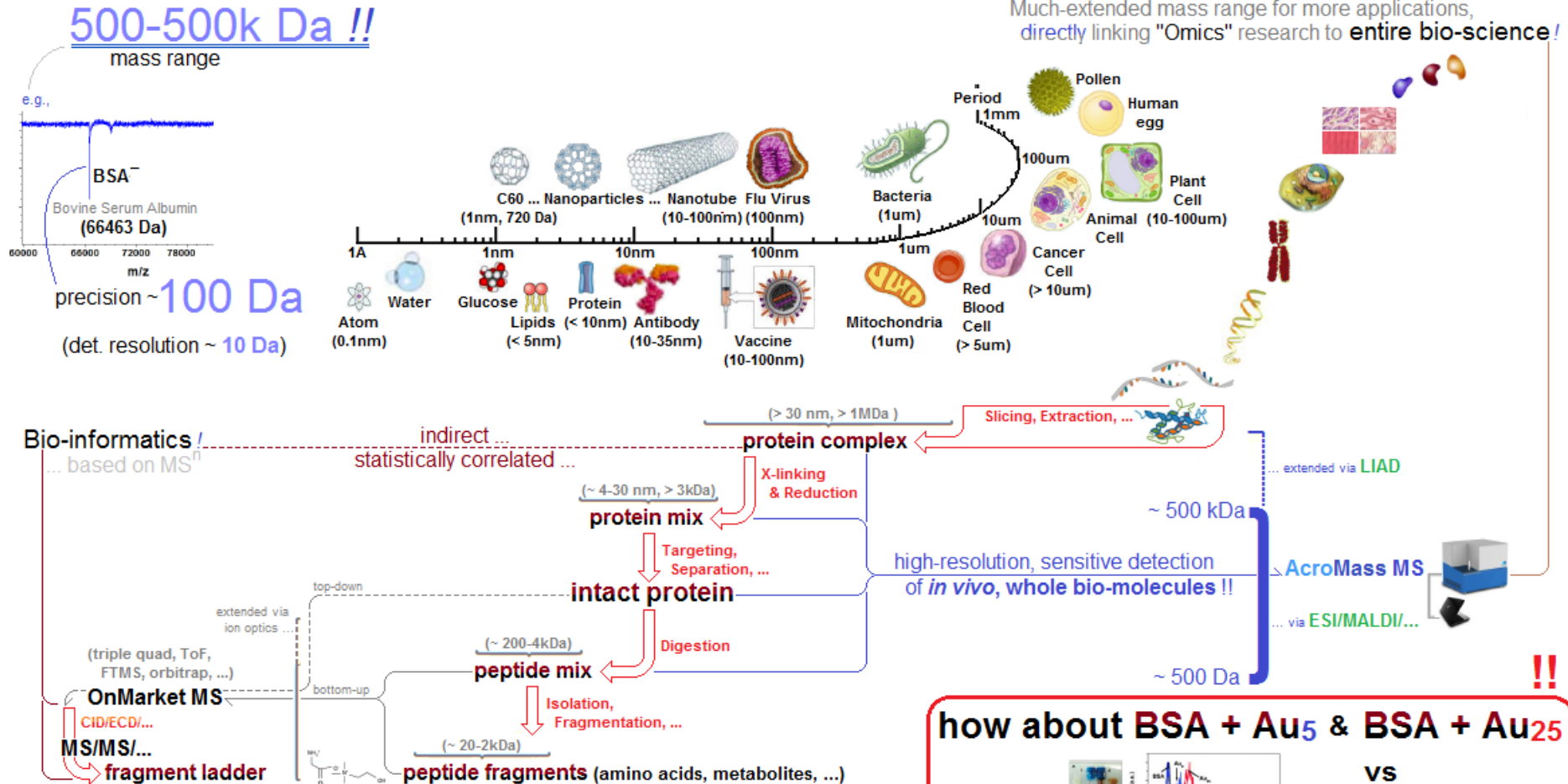
Uncalibrated MALDI ion trap mass spectra of (a) insulin (5808 Da), (b) bovine serum albumin (BSA, 66.5k Da), and (c) immunoglobulin G (IgG from bovine serum, ~160k Da, Sigma-Aldrich). The mass spectra use unstable ejection with the main RF phase scan.



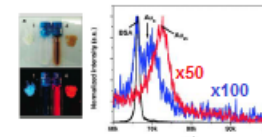
Robust extension
of mass range over 3
orders of magnitude ...

500-500kDa !

High-resolution *intact protein analysis*



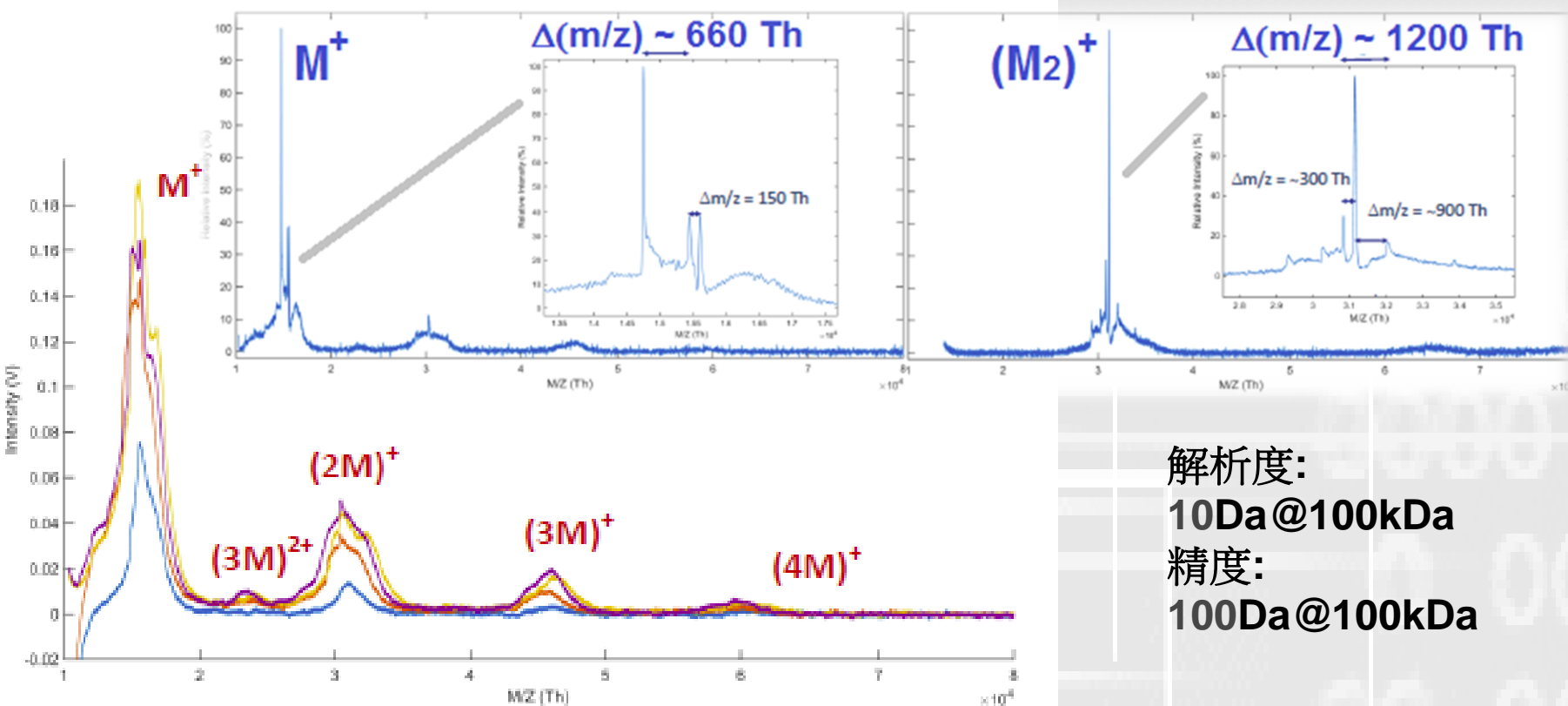
how about BSA + Au₅ & BSA + Au₂₅



VS
 Applied BioSystems 4800
 Proteomics Analyzer
 MALDI ToF/ToF ~ 5-10 kDa

High-resolution *intact protein analysis*

溶菌酶包覆金原子簇 (Lys-AuNCs) 以做為功能性奈米材料



解析度:
10Da@100kDa
精度:
100Da@100kDa

Mass spectrum (uncalibrated) of lysozyme + Au cluster — fast screening of charge state (1st stage CSPD signal)

簡報結束
謝謝！

Q&A