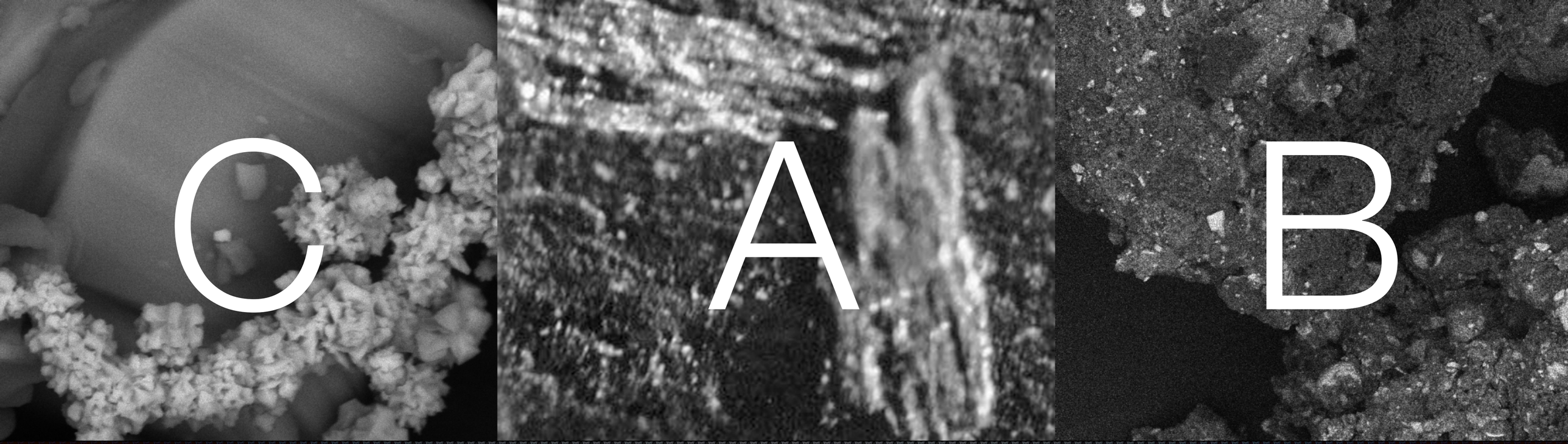


‘CAB Story’ > SUM(A + B + C)

Testable Low Energy Nuclear Reactions

Bob W. Greenyer B. Eng. (Hons.)

2 August 2017

Party A

- Due to other world events on that day, was moved to tell us about specific reactions that were highly predictable based on their most successful excess heat experiment
- Shared full plans of experiment and previously undisclosed details surrounding the event that produced those results, discussed risk
- Shown data other than already in the public domain
- Due to other group investing at same time, MFMP were prevented from replicating which was a huge disappointment

Goldwater *Glowstick* series evidence

- GS 5.2 “Signal” possibly due to break down of charge cluster, lead to purchasing of Neutron bubble detectors
- GS 5.3 Observations of thermal Neutrons in temperature range similar to Party A
- Following announcement, other researchers (re-)reported neutrons
- Development of Bob Higgins open Neutron detector

Party B

- Very specific claims of high heat
- Known fuel feedstock, known processing, known reactor design
- All procedures published
- Subsequently, evidence found in two scenarios supporting claims of Parties A & C

Party C

- Claims of success in triggering LENR with excess heat
- Due to timing and choice of reactor / technology,
  a hugely disappointing live test with no excess heat result obtained
- Due to the lack of excess heat, a request was made to test samples from previous reactors; under the circumstances, access was given
- Request was made which samples should be focussed on
- Only samples highlighted for examination were interesting, key sample with same key fuel elements as Party B, support claims of Parties A and B

CAB Story

- We had no proof of what Party A was saying until recently
- Given the sequence of events and the nature of our project we must inform

PROOF is evidence that is so strong,
it would be statistically unreasonable to deny it

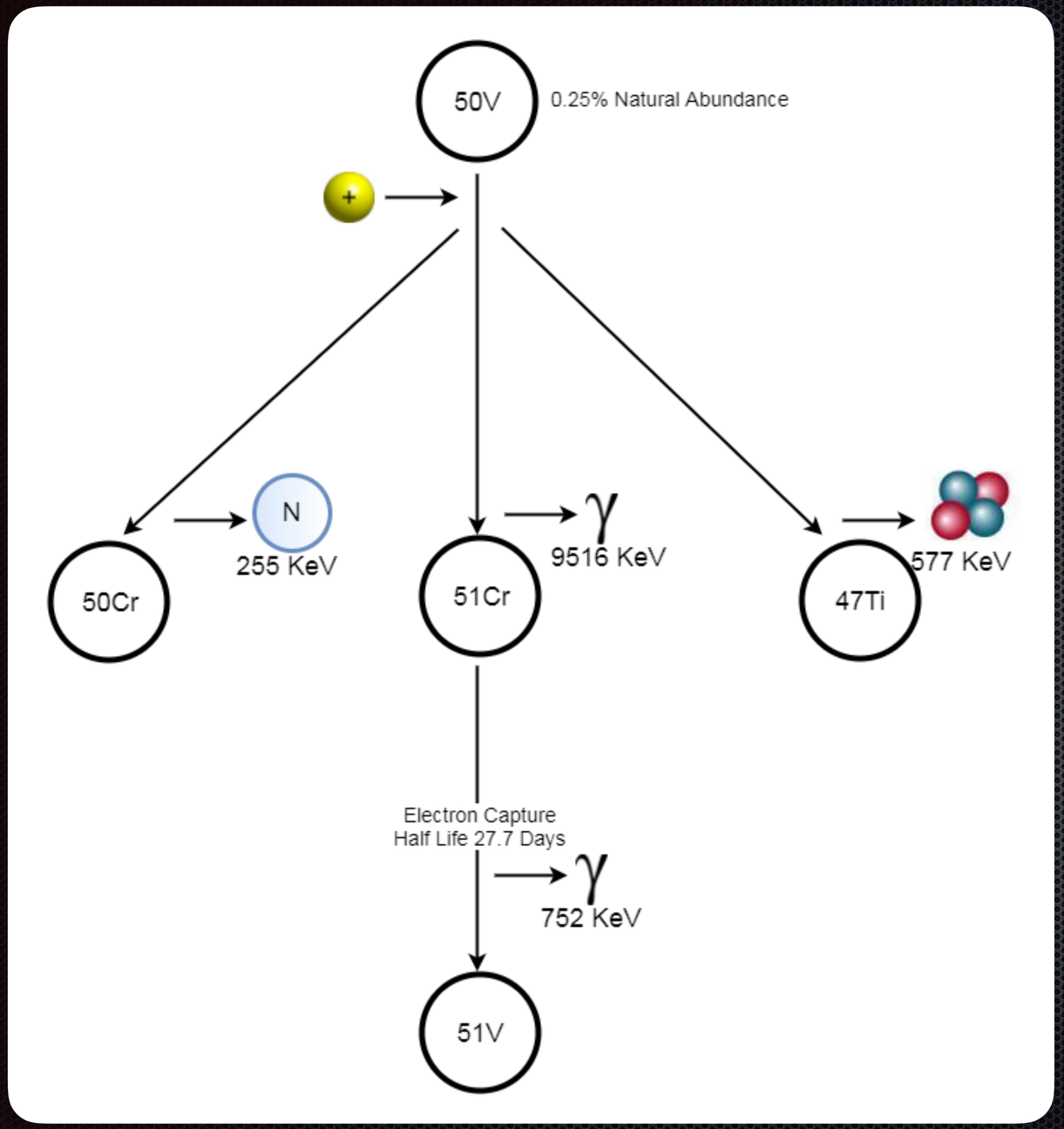
Party A - Piantelli, January 2015

- Following first Paris attacks, Piantelli was adamant the world could not be responsible with LENR and worried about an amateur researcher chancing upon a reaction that might cause injury, leading to a shut down of the field
- Explained that the highest excess was due to reaction products released from contamination in his reactors stainless steel (never disclosed) which took a long time to establish
- Explained that a common metal hydride could lead to same active component and that was a real safety concern
- We mused for years over if we should conduct experiment as fast track to LENR proof - not willing to take risk since others may follow as we acted

Neutrons - but why?

AUTHORS	LAB	START	SAMPLE	H LOADING	Δt_{max} [d]	ΔP_{max} [W]	TOTAL HEAT EXCESS [MJ]	NUCLEAR ASHES
F. Piantelli	Siena	January 92	Ni cylindrical	high	36	12	not valued	no γ-ray or neutrons measures altered metal surface
S. Focardi, R. Habel, F. Piantelli	Siena	October 93	nickel-plated Ni alloy cylindrical	high	55	44	> 90	no γ-ray or neutrons measures altered metal surface
S. Focardi, V. Gabbani, V. Montalbano F. Piantelli , S. Veronesi	Siena	September 94	nickel-plated Ni alloy cylindrical	very high	278	72	~ 900	γ-ray neutrons altered metal surface

Source



why?

Vanadium 50 + p

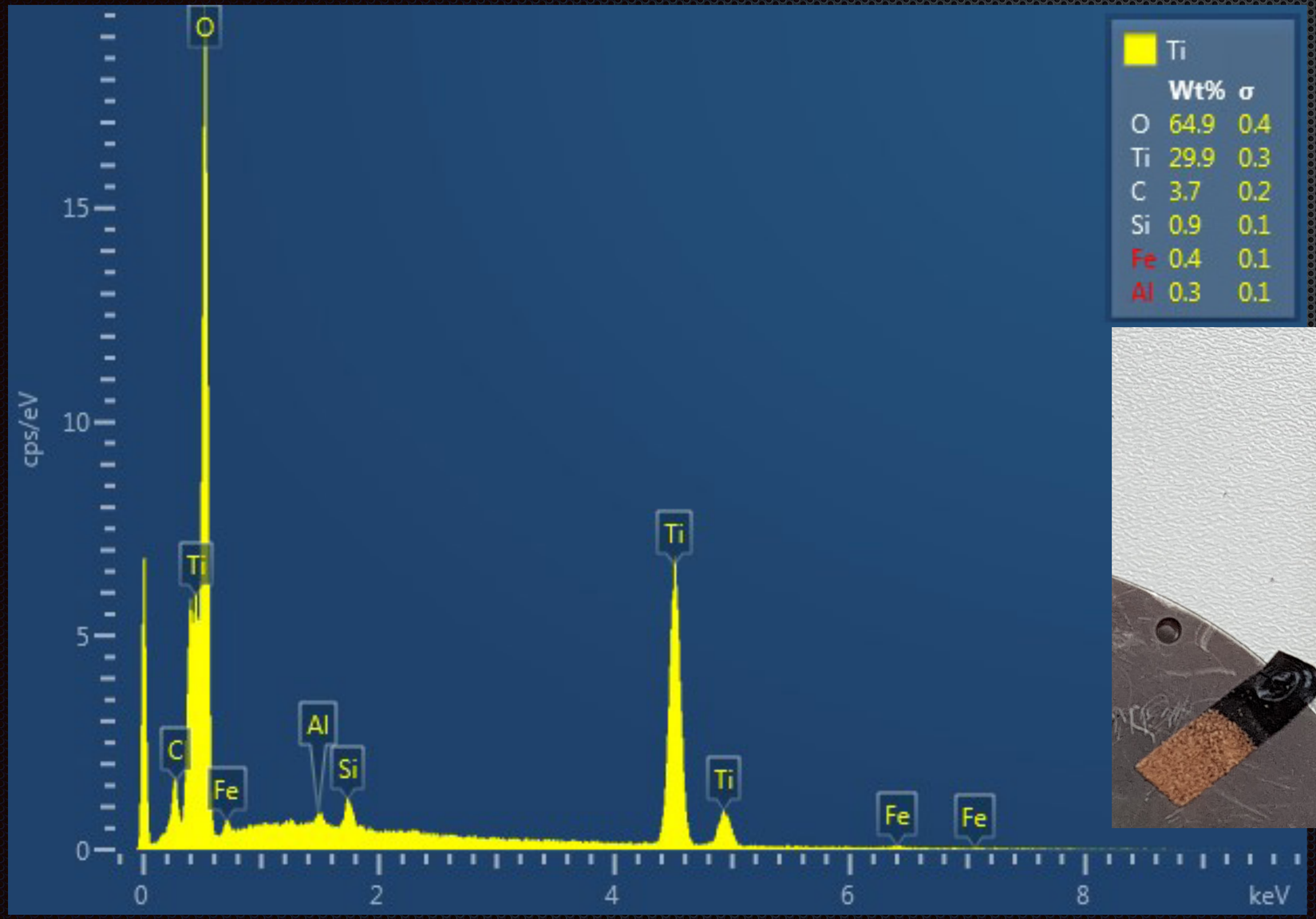
Only 0.25% Natural as part component in steel

Titanium and Vanadium

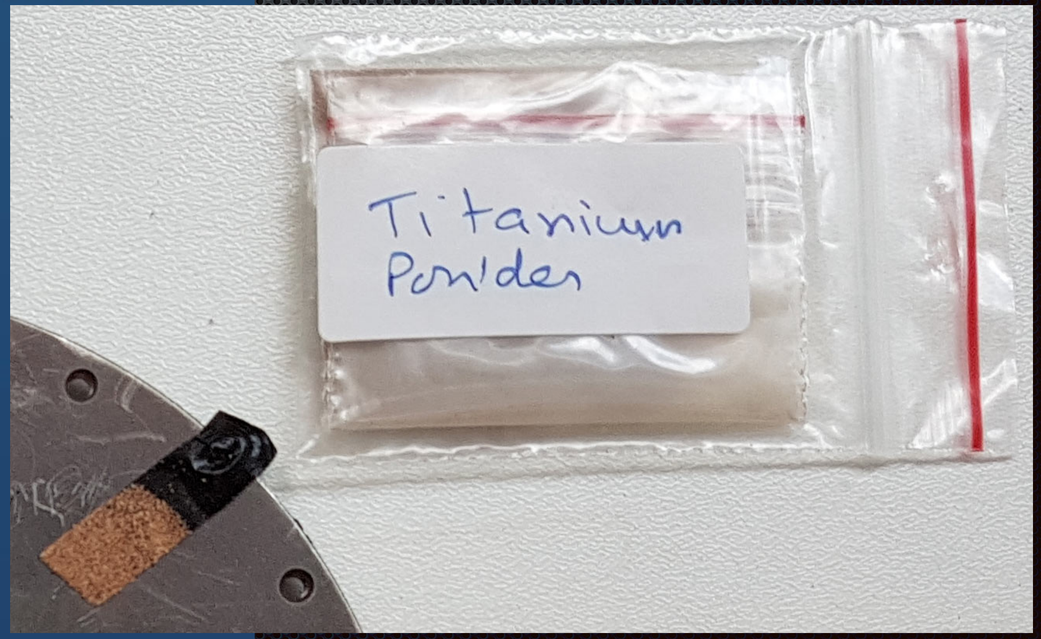
X-ray adsorption edges and characteristic X-ray line energies (keV)

Atomic number and element	K-*series*							
	K *edge*	KN_{III}	KM_{III}	KM_{II}	KL_{III}	KL_{II}	L_I *edge*	L_I
		$K\beta_2$	$K\beta_1$	$K\beta_3$	$K\alpha_1$	$K\alpha_2$		L
Intensity	—	2–5	~20	~10	100	50–53	—	
22 Ti	4.965		4.932		4.511	4.505	0.529	
23 V	5.463		5.427		4.952	4.944	0.626	

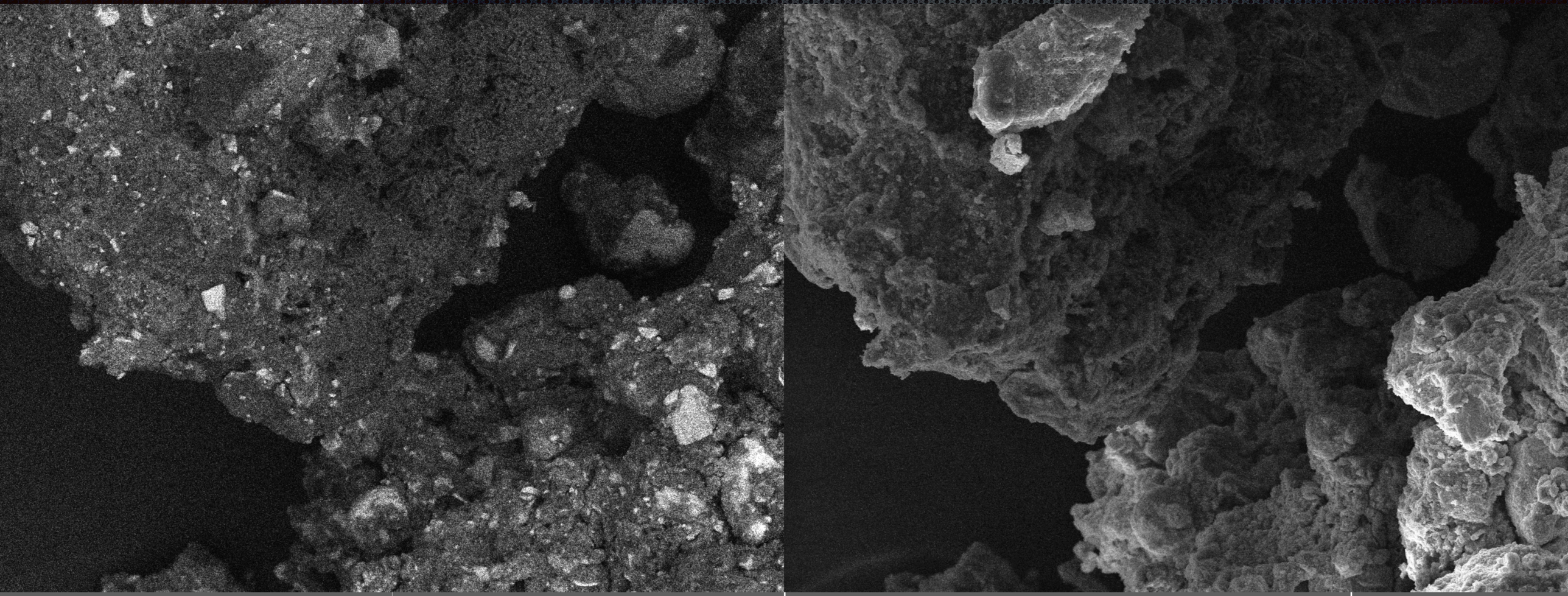
Party B - Suhas Ralkar



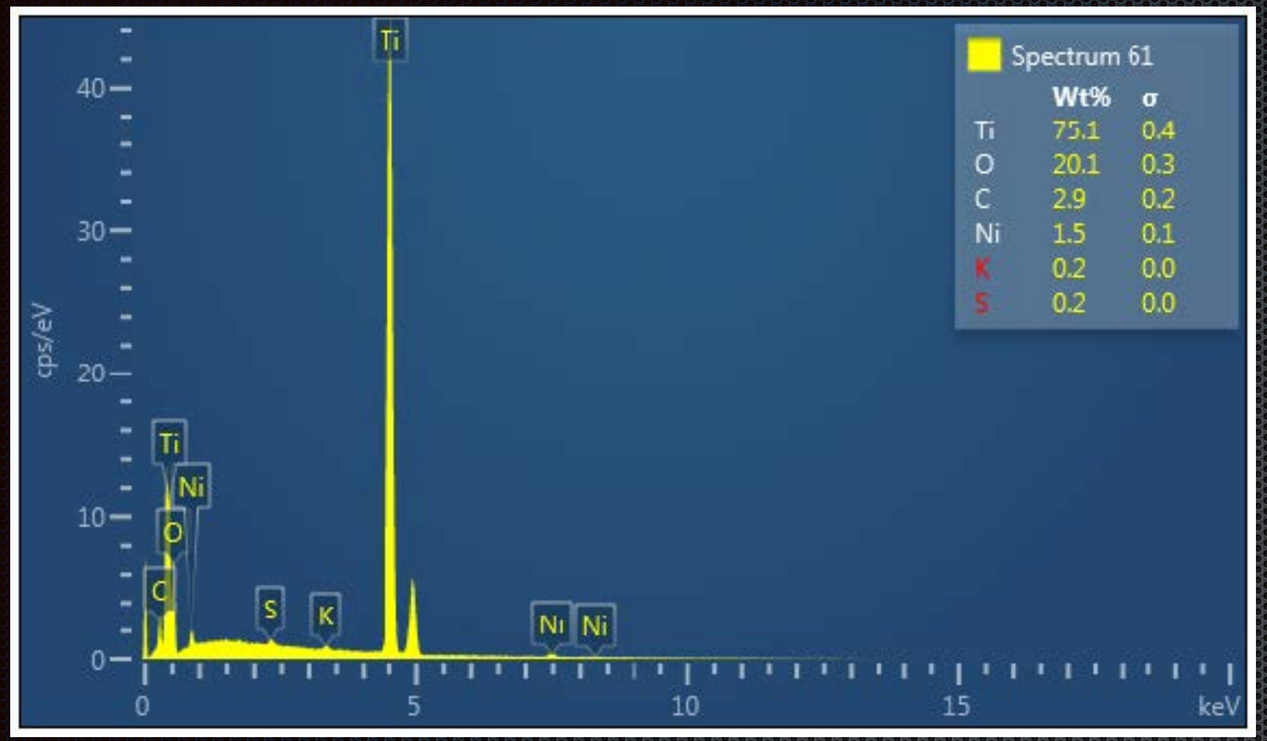
	Ti	
	Wt%	σ
O	64.9	0.4
Ti	29.9	0.3
C	3.7	0.2
Si	0.9	0.1
Fe	0.4	0.1
Al	0.3	0.1

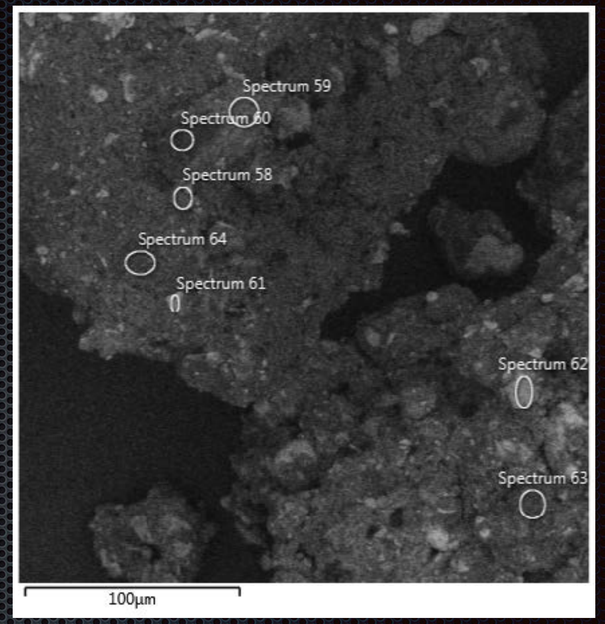


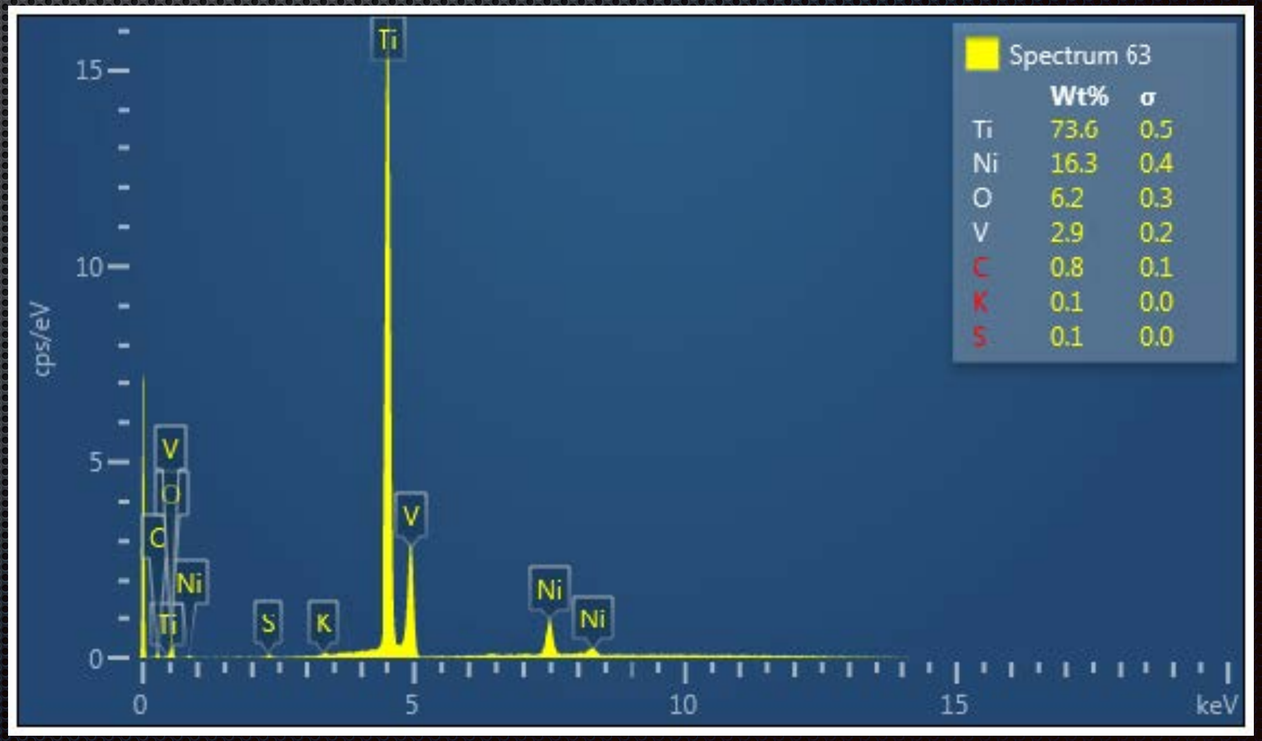
Party B - Suhas Ralkar



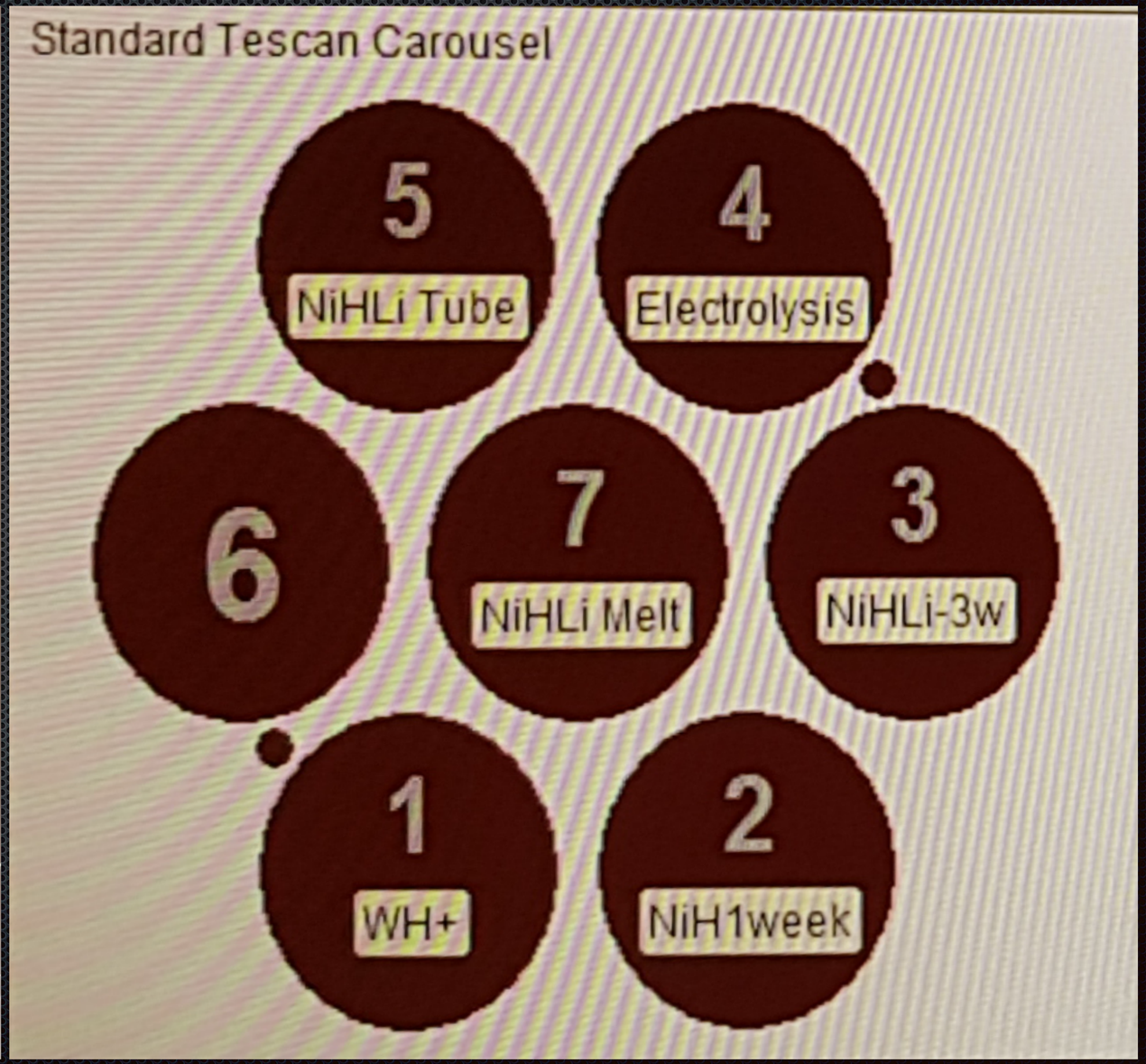
Party B - Suhas Ralkar



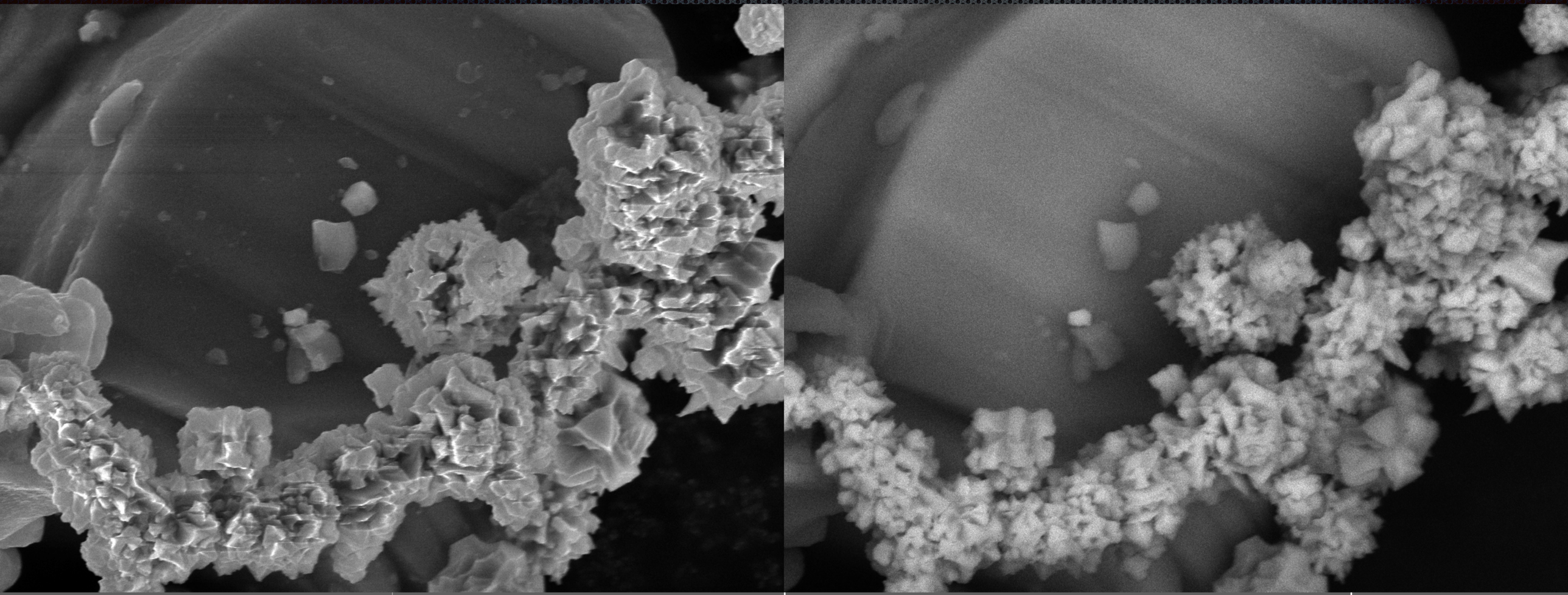




Party C - me356

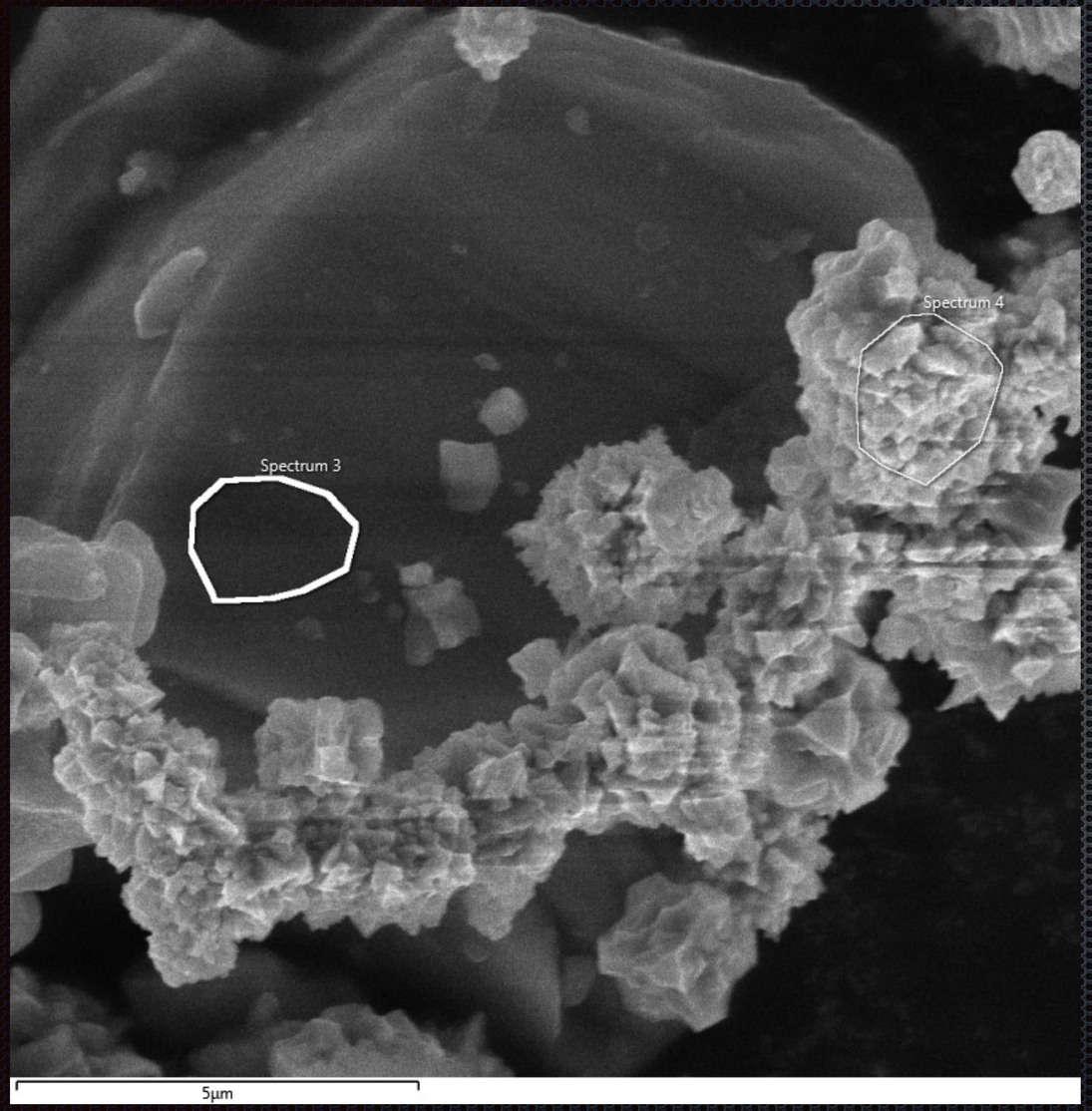


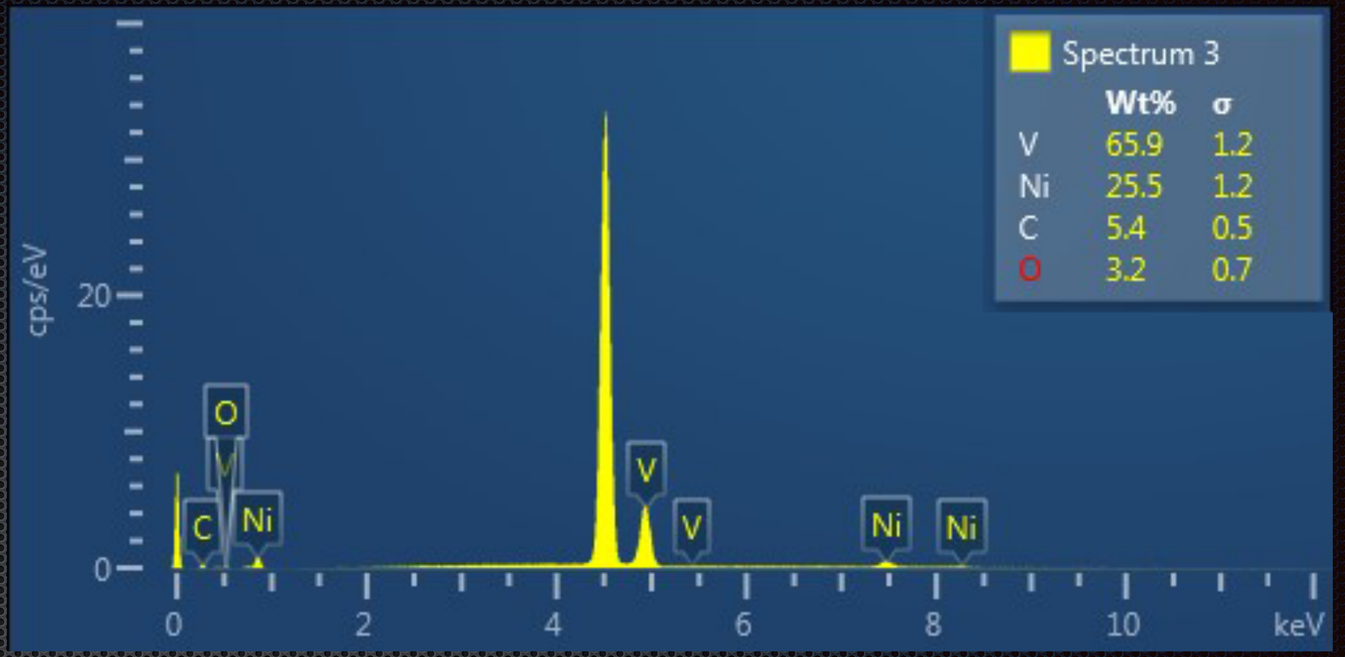
Party C - me356

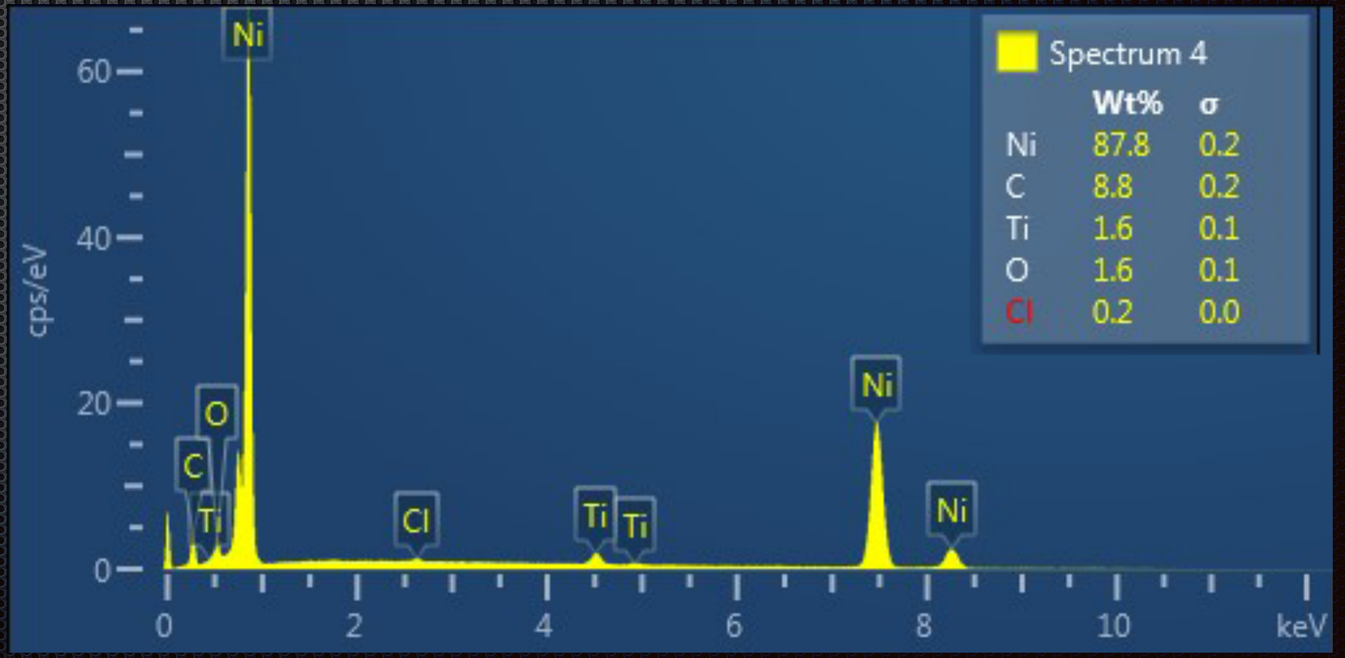


SEM MAG: 20.0 kx	WD: 15.00 mm		MIRA3 TESCAN
View field: 13.8 µm	Det: SE, BSE	10 µm	
SEM HV: 15.0 kV	Date(m/d/y): 06/29/17	Department of Physical Electronics, CEPLANT	

Party C - me356

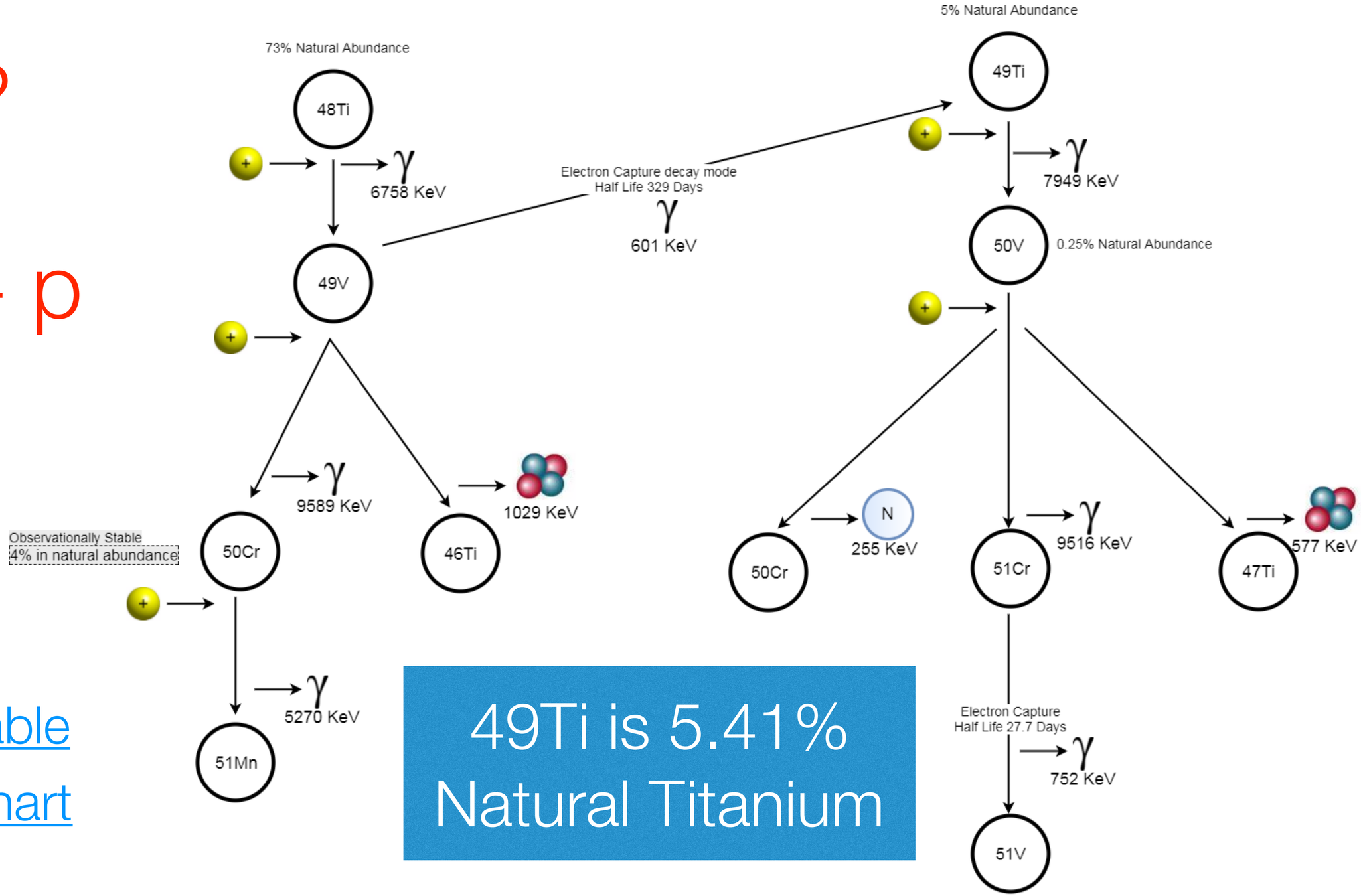






why?

49Ti + p



[Reaction table]

[Reaction chart]

49Ti is 5.41% Natural Titanium

49V - Isotopic tracer

- Since 73% of natural Titanium is 48Ti, most likely output is 49V
- Has 329 day half life producing 601KeV gamma
- Opportunity for verification by long term integration spectrometry

Summary

- Nickel + Titanium + Hydrogen + Electrons leads to
  - excess heat
  - transmutations
  - potential emissions of gamma and neutrons
- Seemingly resilient to reactor design
- May be verifiable with bubble detectors and gamma spectrometry

Thanks

Q & A