FOCUS GRAPHITE

ELECTROCHEMICAL PERFORMANCE OF SILICON ENHANCED LAC KNIFE NATURAL FLAKE GRAPHITE FROM QUEBEC, CANADA IN LITHIUM ION BATTERIES

Military Power Sources Consortium - Silicon Anode Seminar
Aberdeen Proving Ground, MD - March 7 and 8, 2023

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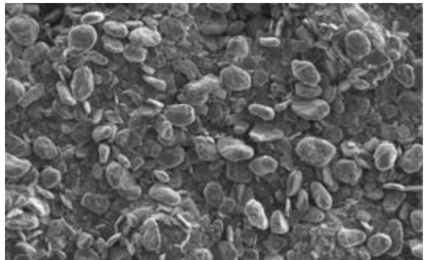
Lac Knife Graphite Project

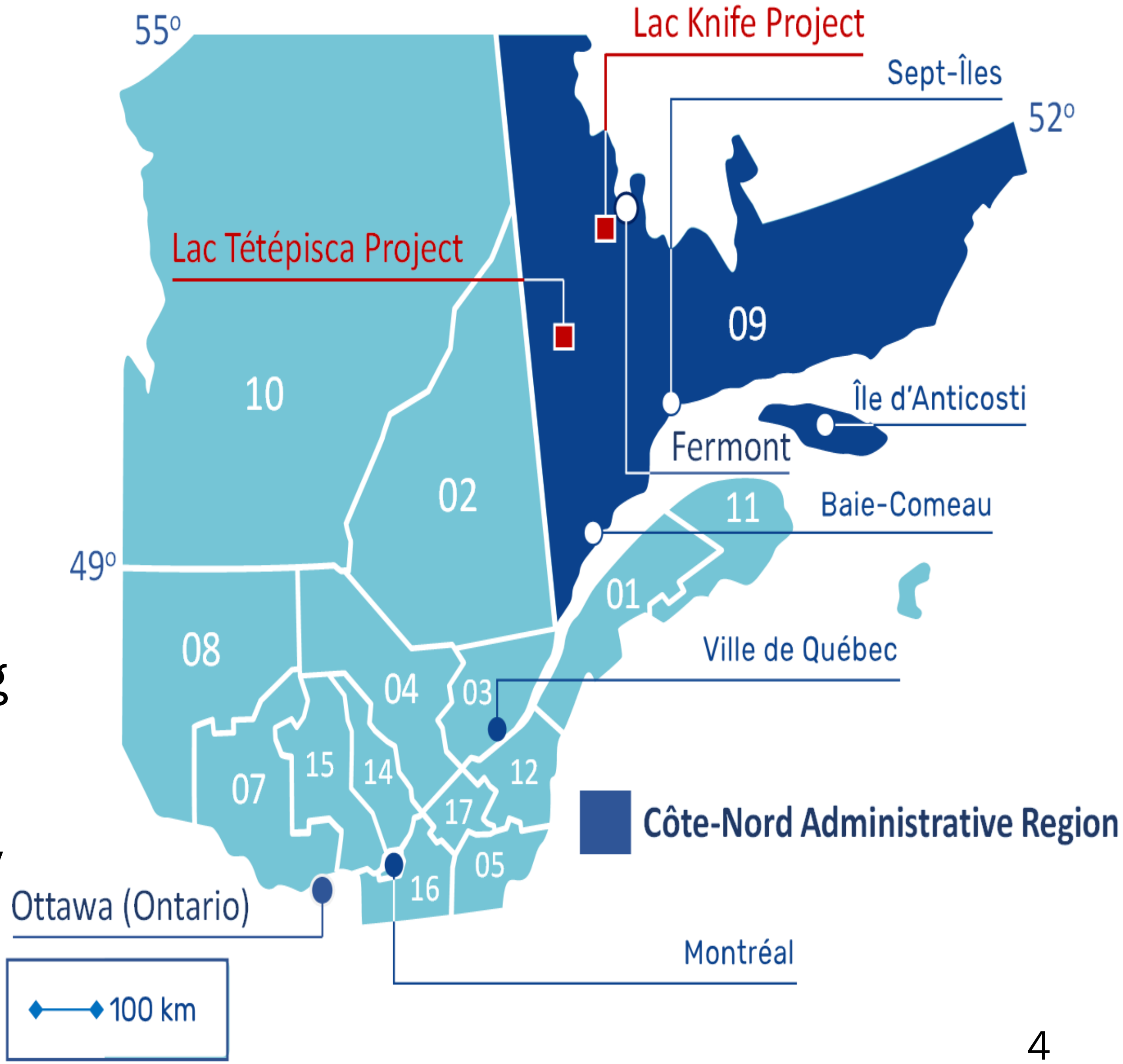
OUTLINE

- ❑ Lac Knife Graphite Project Overview
- ❑ Production of Expanded Lac Knife Graphite
- ❑ Lac Knife Graphite as a Conductivity Additive in Cathodes
- ❑ Performance of Lac Knife Graphite and Synthetic Graphite in Li Ion Cells
- ❑ Long Term Cycling Performance of Lac Knife Graphite
- ❑ Performance of Silicon Enhanced Lac Knife Graphite
- ❑ Advantages of Using Lac Knife Graphite in Batteries

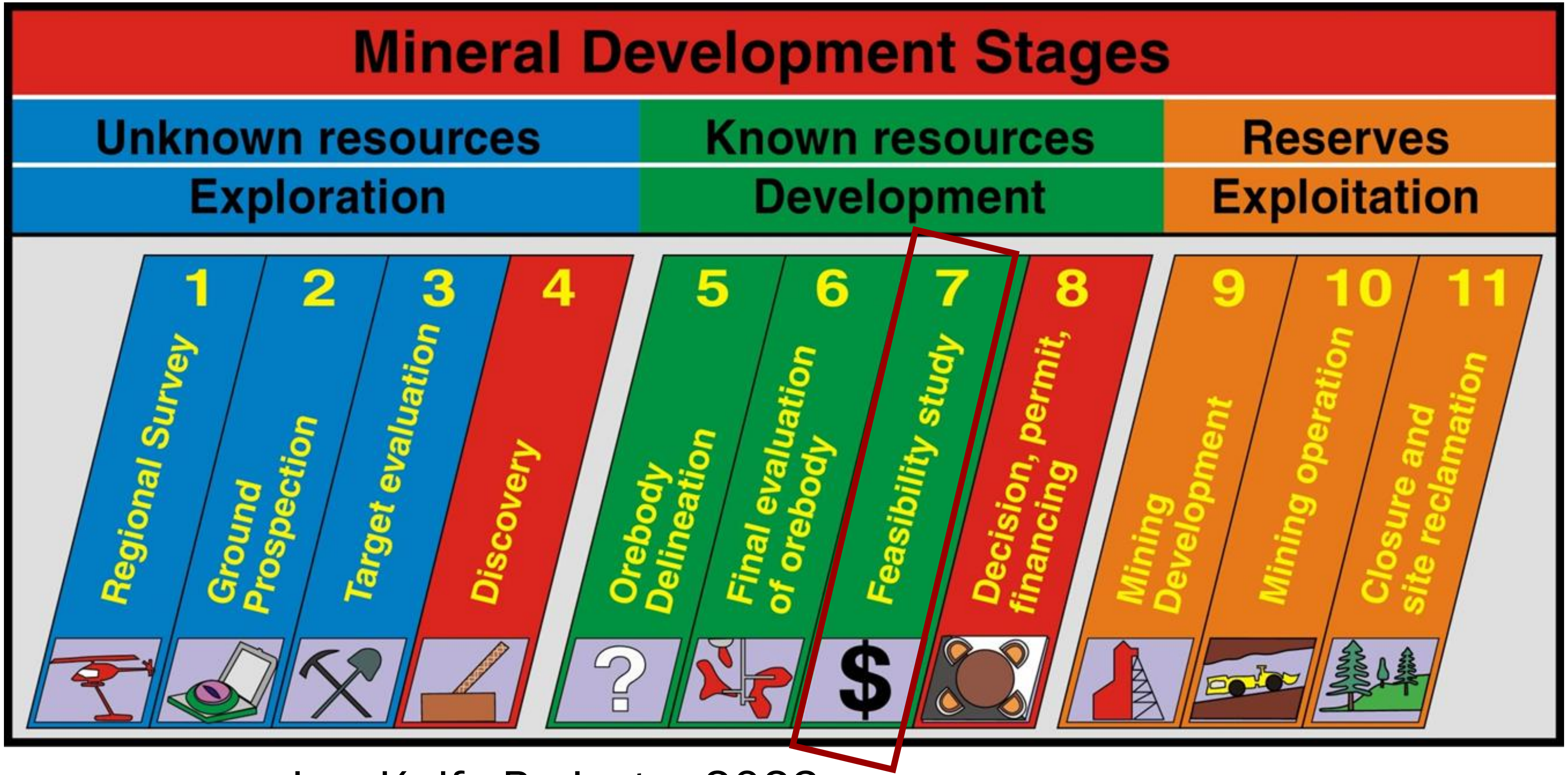


About Focus Graphite and Quebec

- Focus Graphite Inc. is a Canadian Junior mining and technology-oriented company established in 2010 and listed on the TSX-V (“FMS”).
- Focus is developing two of the most promising flake graphite mining projects in North America, Lac Knife and Lac Tétépisca, both located in the Province of Québec.
- Québec is a top-rated jurisdiction for mineral exploration, mining and mining investment.
- Québec’s infrastructure such as roads, rail and low-cost, green hydroelectricity facilitate the development of mining project in remote locations.

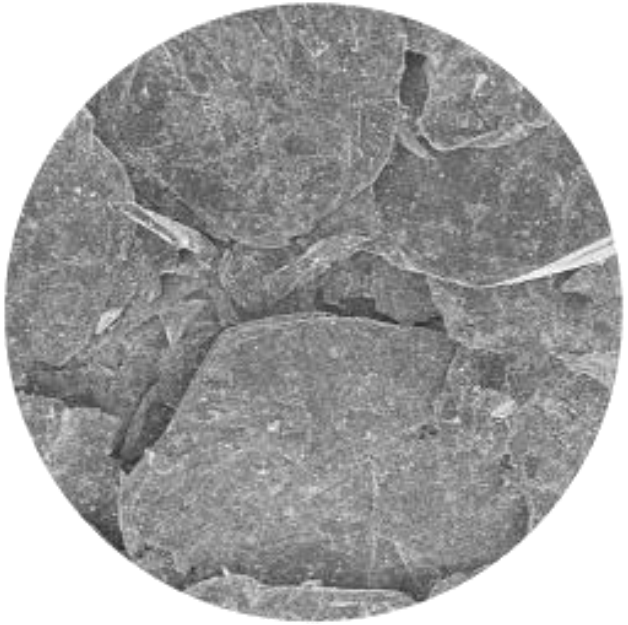
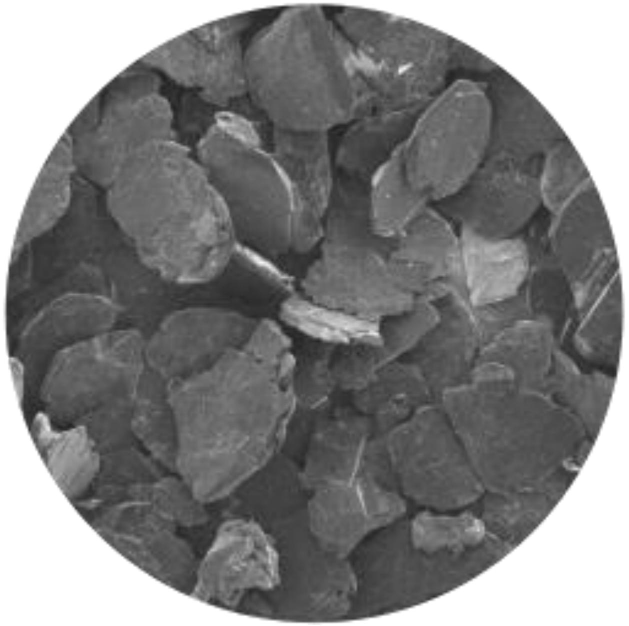
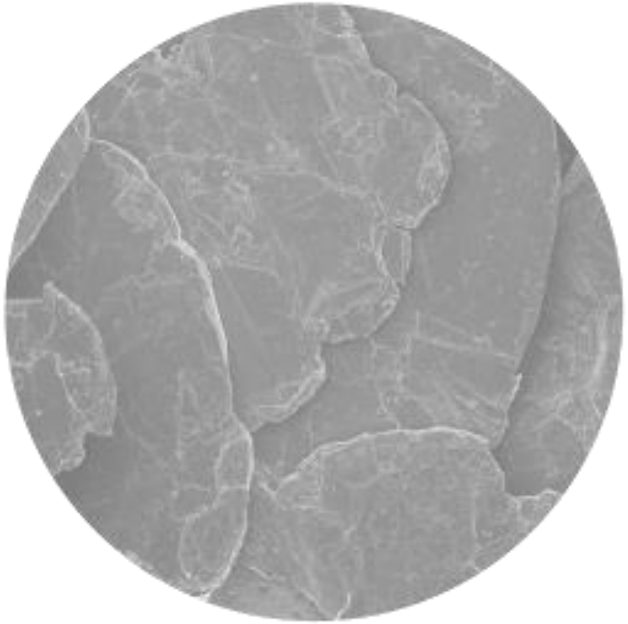


The Three Phases and Eleven Stages of the Mineral Development Process

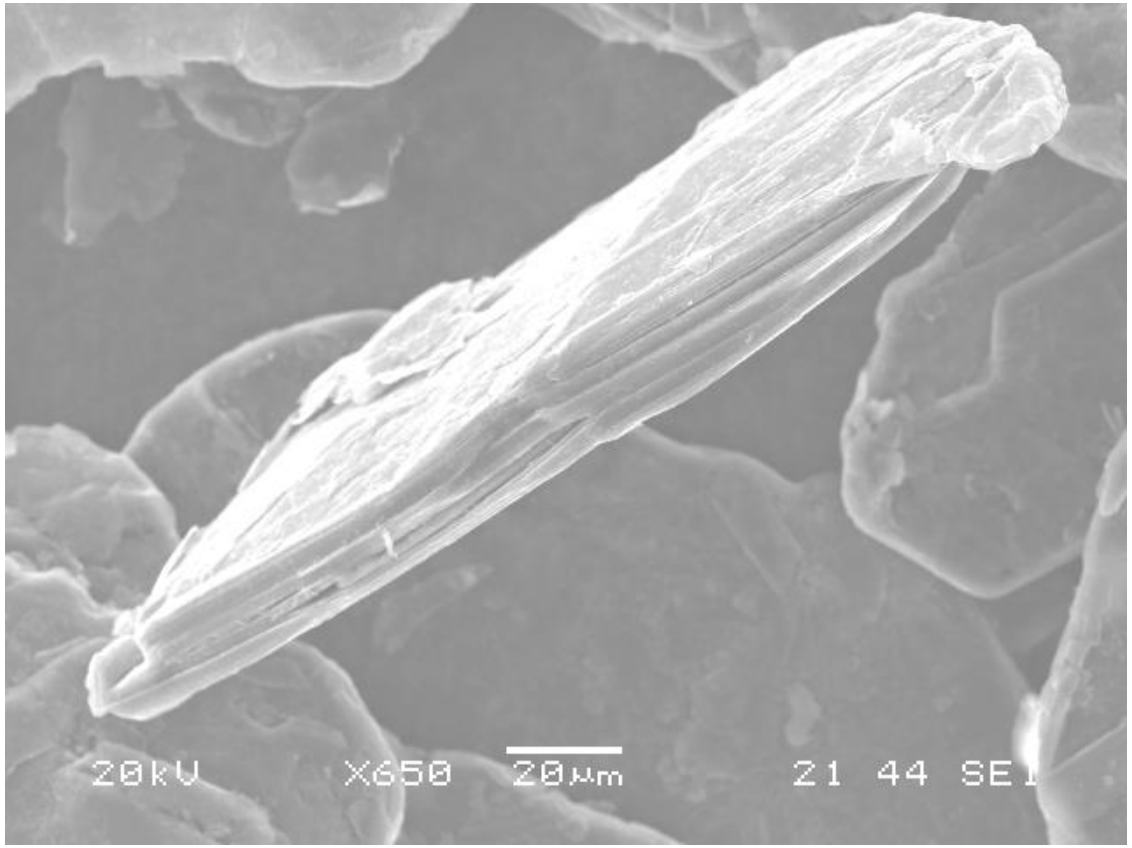


Lac Knife Project – 2023

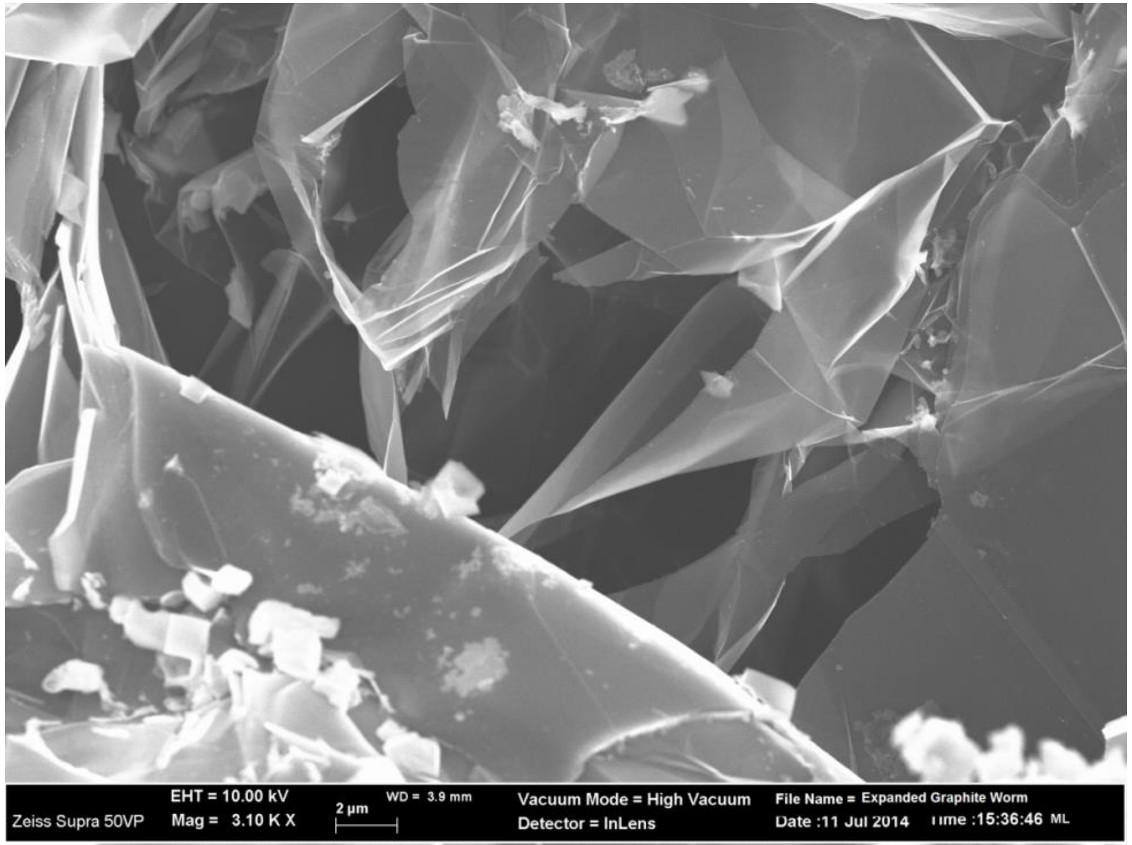
FLAKE PURIFICATION PROCESS

Flotation Concentrate	Concentrate after Polishing	Lac Knife Graphite after Purification
		
96% Cg	98.3% Cg	99.98%+ Cg

PRODUCTION OF EXPANDED LAC KNIFE GRAPHITE

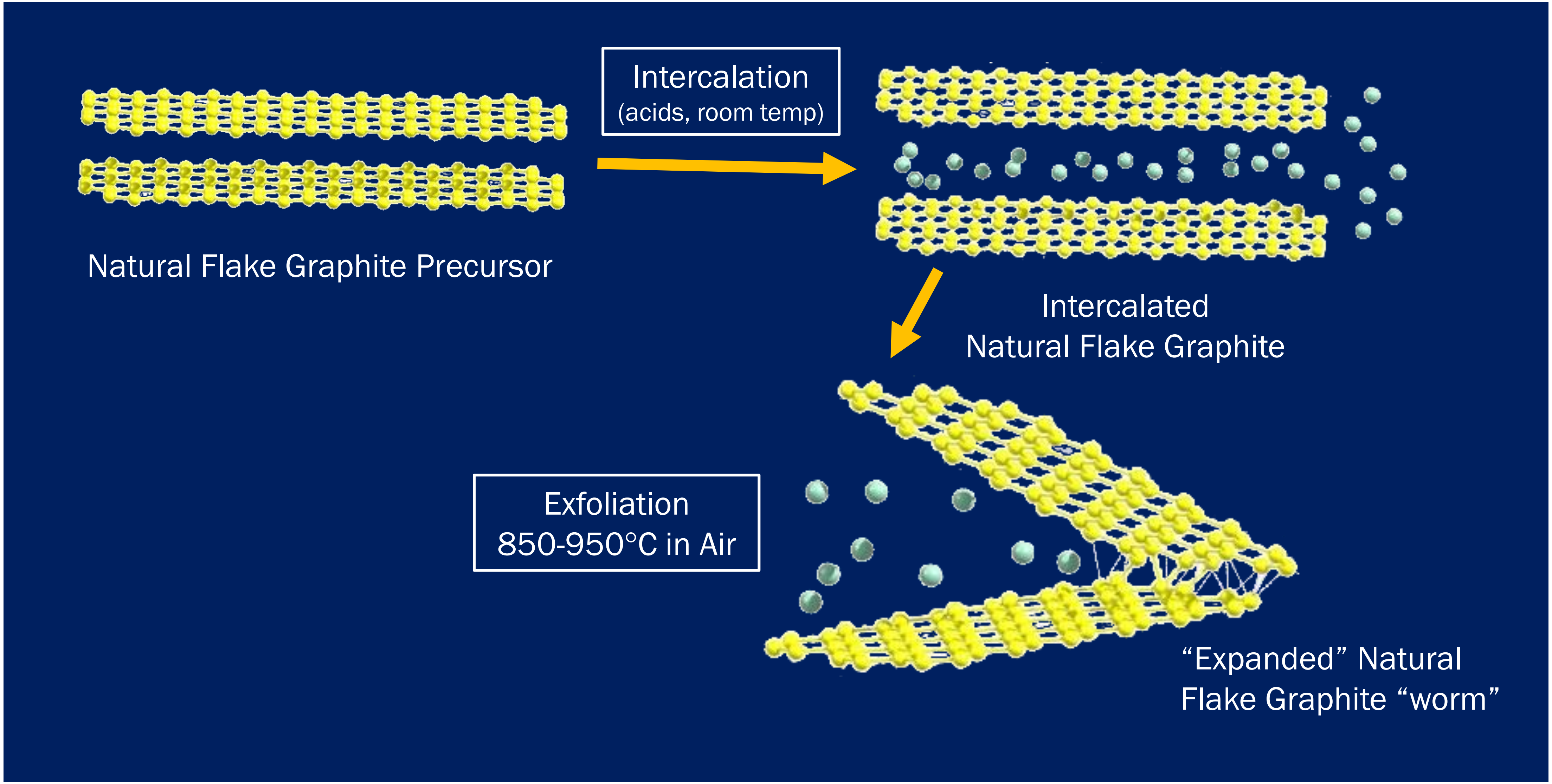


Purified Graphite



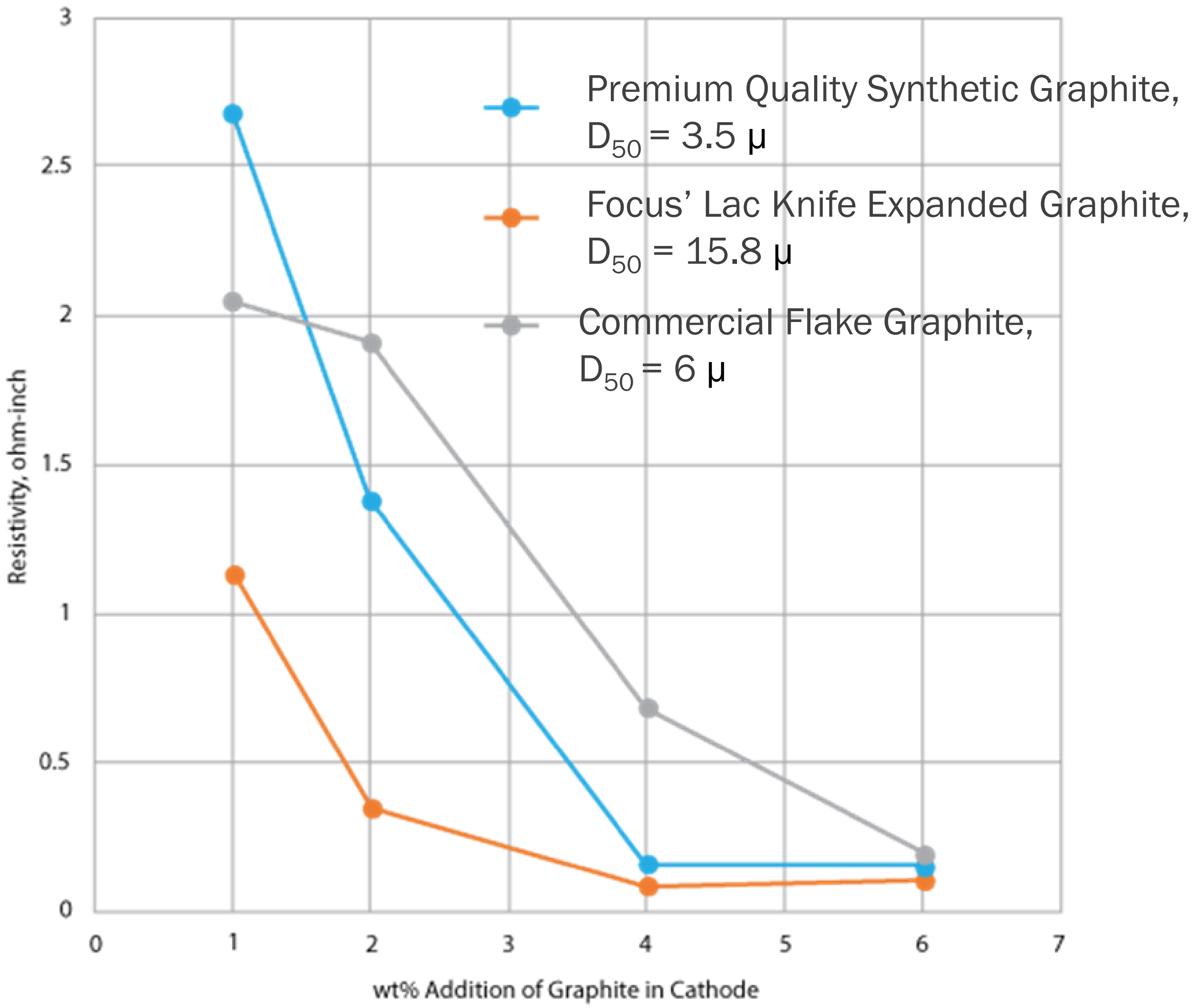
Expanded Graphite

PRODUCTION OF EXPANDED LAC KNIFE GRAPHITE

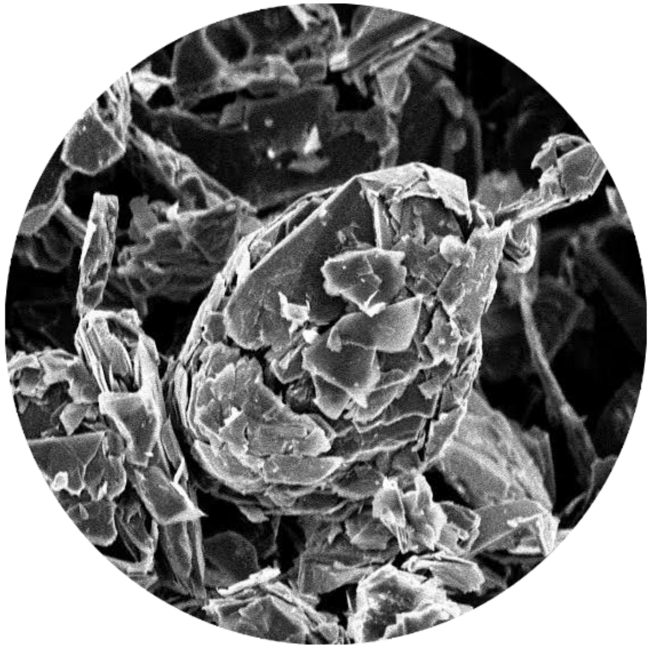


RESISTIVITIES IN Li ION CATHODE MATRIX:

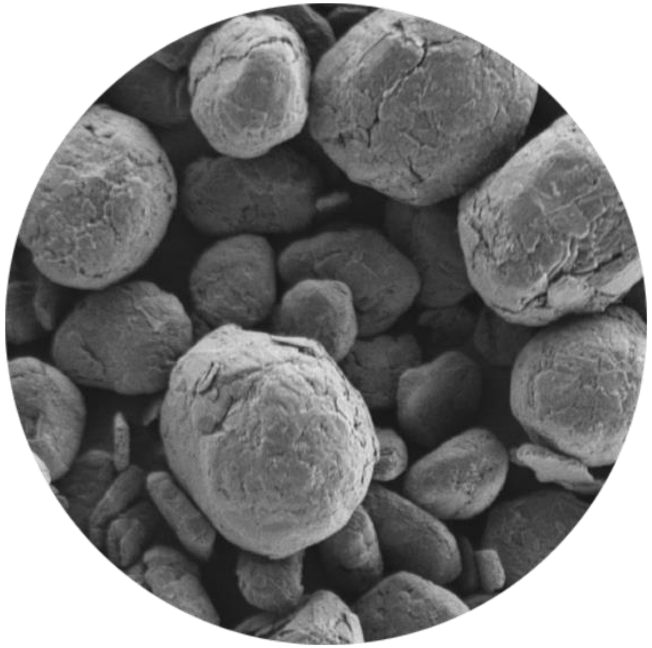
$LiNiMnCoO_2$



FORMATION OF SPHERICAL GRAPHITE



Formation of a Graphite Sphere



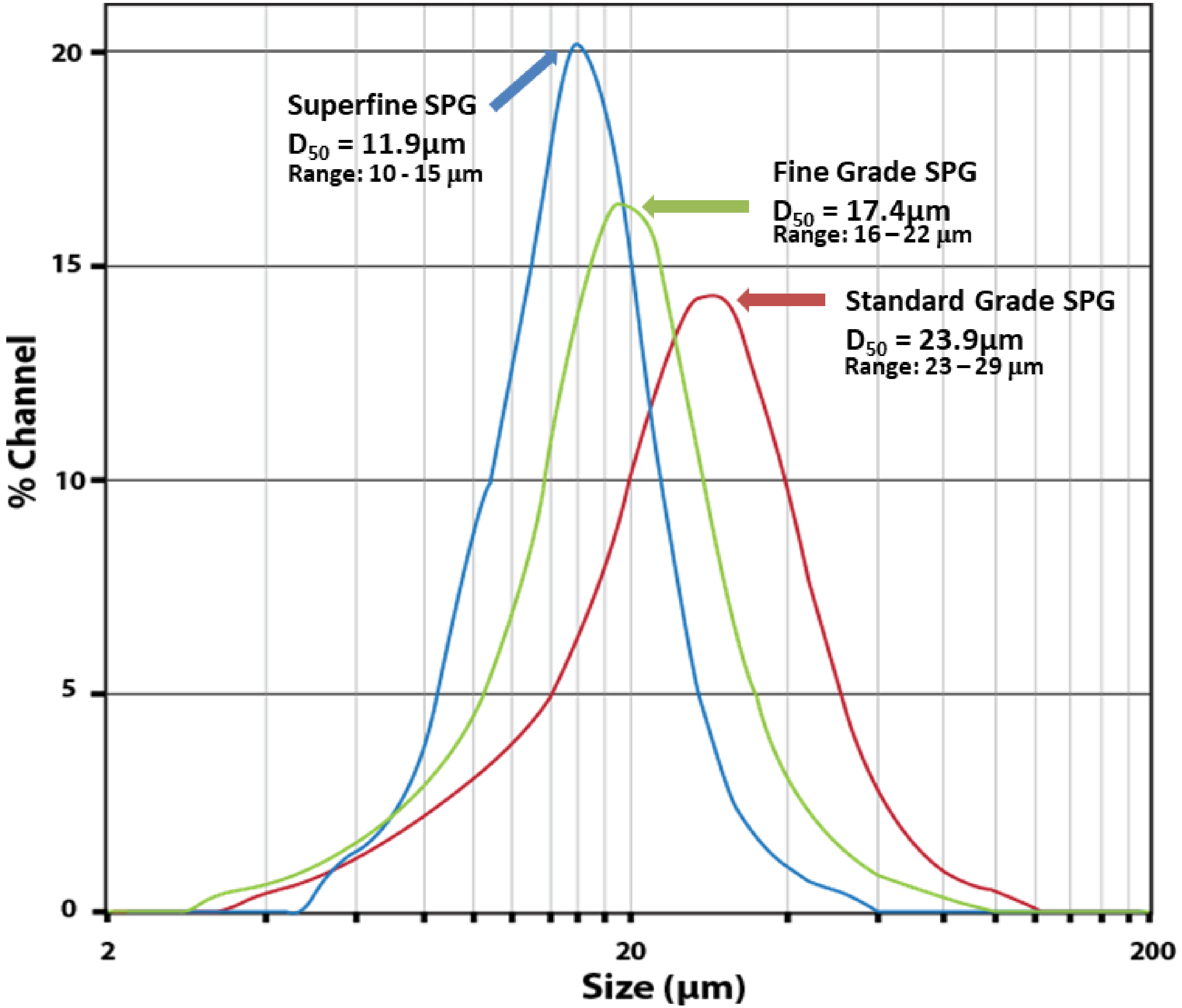
Spherical Graphite

COMPARISON OF THE ELECTROCHEMICAL PERFORMANCE OF THREE GRADES OF LAC KNIFE SPHERICAL GRAPHITE (SPG)

Focus Graphite Cell Test Samples	Reversible Capacity (mAh/g)	Irreversible Capacity Loss %	Surface Area (m2/g)
Standard Carbon Coated SPG Grade (D50=23.9μm)	363.7	1.44%	0.48
Fine Carbon Coated SPG Grade (D50=17.4μm)	365.1	1.01%	1.14
Superfine Carbon Coated SPG Grade (D50=11.9μm)	360.2	1.19%	0.89

- Note that the high Reversible Capacity of 360 mAh/g , low Irreversible Capacity Loss of 1.19% and low surface area of 0.89 m^2/g for the new Superfine Grade of spherical graphite compare very favorably with the standard and fine grades

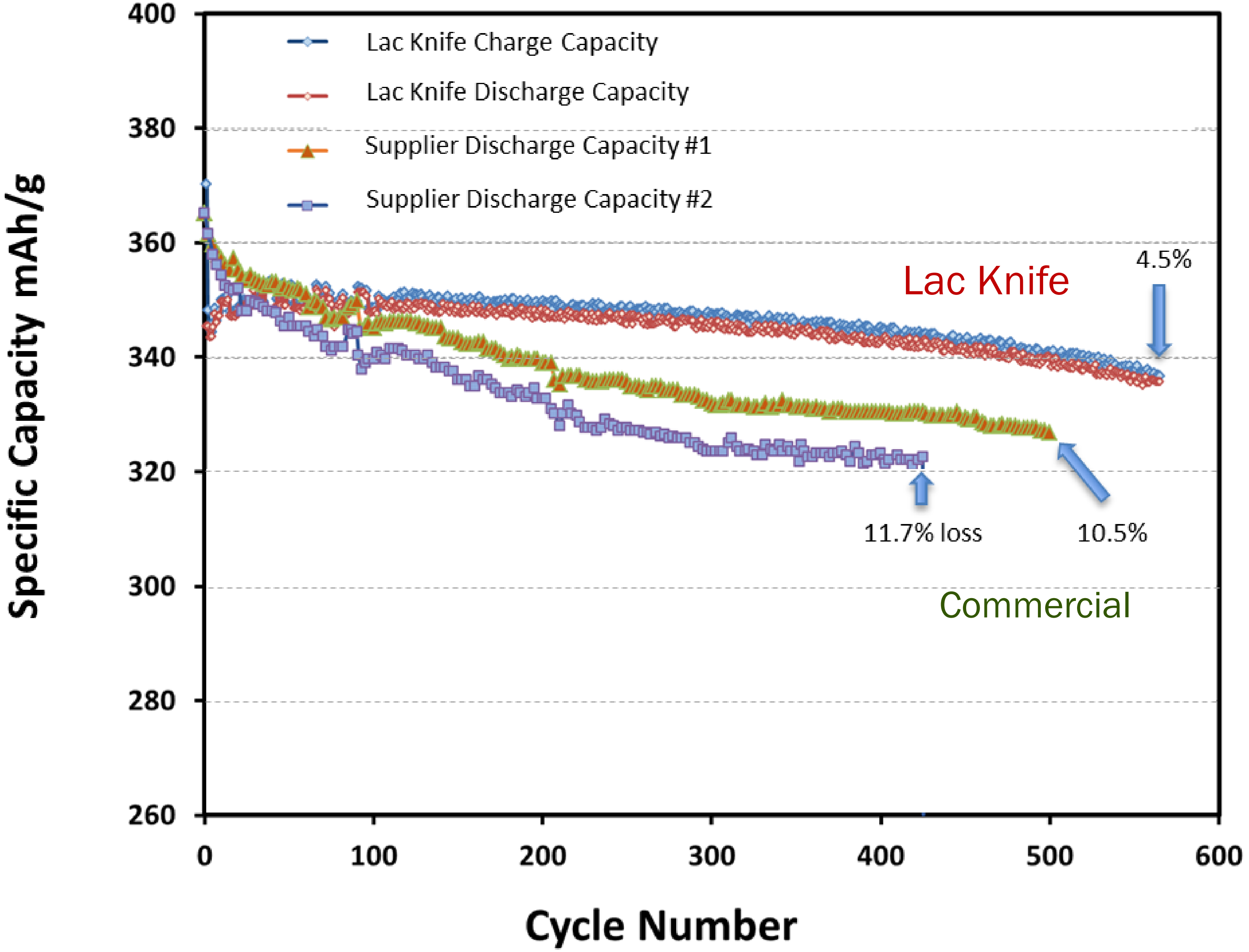
PARTICLE SIZE DISTRIBUTIONS OF SUPERFINE, FINE AND STANDARD GRADES OF LAC KNIFE SPG



PERFORMANCE OF LAC KNIFE FLAKE GRAPHITE COMPARED WITH SYNTHETIC GRAPHITE IN Li ION CELLS

Focus Graphite Coin Cell Test Samples	1st Cycle Capacity, (Ah/Kg)	Irreversible 1st Cycle Loss (%)	Reversible Capacity (Ah/Kg)
Focus Li ion Fine Grade of Coated SPG D_{50} = 21.44 µ. Tap Density = 0.93 g/cc Surface Area = 0.44 m^2/g	366.0	0.65% (99.35% Efficient)	363.6
Commercial Li ion Synthetic Grade # 1 D_{50} = 15.8 µ. Tap Density = 0.88 g/cc Surface Area = 0.97 m^2/g	347.2	6.45% (93.55% Efficient)	324.8 (10.7% lower)
Commercial Li ion Synthetic Grade # 2 D_{50} = 20.6 µ. Tap Density = 0.87 g/cc Surface Area = 1.15 m^2/g	345.4	3.46% (96.54% Efficient)	333.4 (8.3% lower)

EXTENDED LONG TERM CYCLING PERFORMANCE OF LAC KNIFE GRAPHITE COMPARED WITH TWO COMMERCIAL GRADES OF COATED SPHERICAL GRAPHITE



LAC KNIFE FLAKE GRAPHITE PRODUCTS

Flotation Concentrates from Pilot Plant Tests

- Coarse (+80 mesh) – 98.3%C
- Medium (-80x150 mesh) – 98.2%C
- Fine (-150x200 mesh) – 98.0%C

Purified Flake - 99.98^{+}%C

Carbon Coated Spherical Graphite (SPG)

- Standard D_{50} = 23.9 µm
- Fine D_{50} = 17.4 µm
- Superfine D_{50} = 11.9 µm

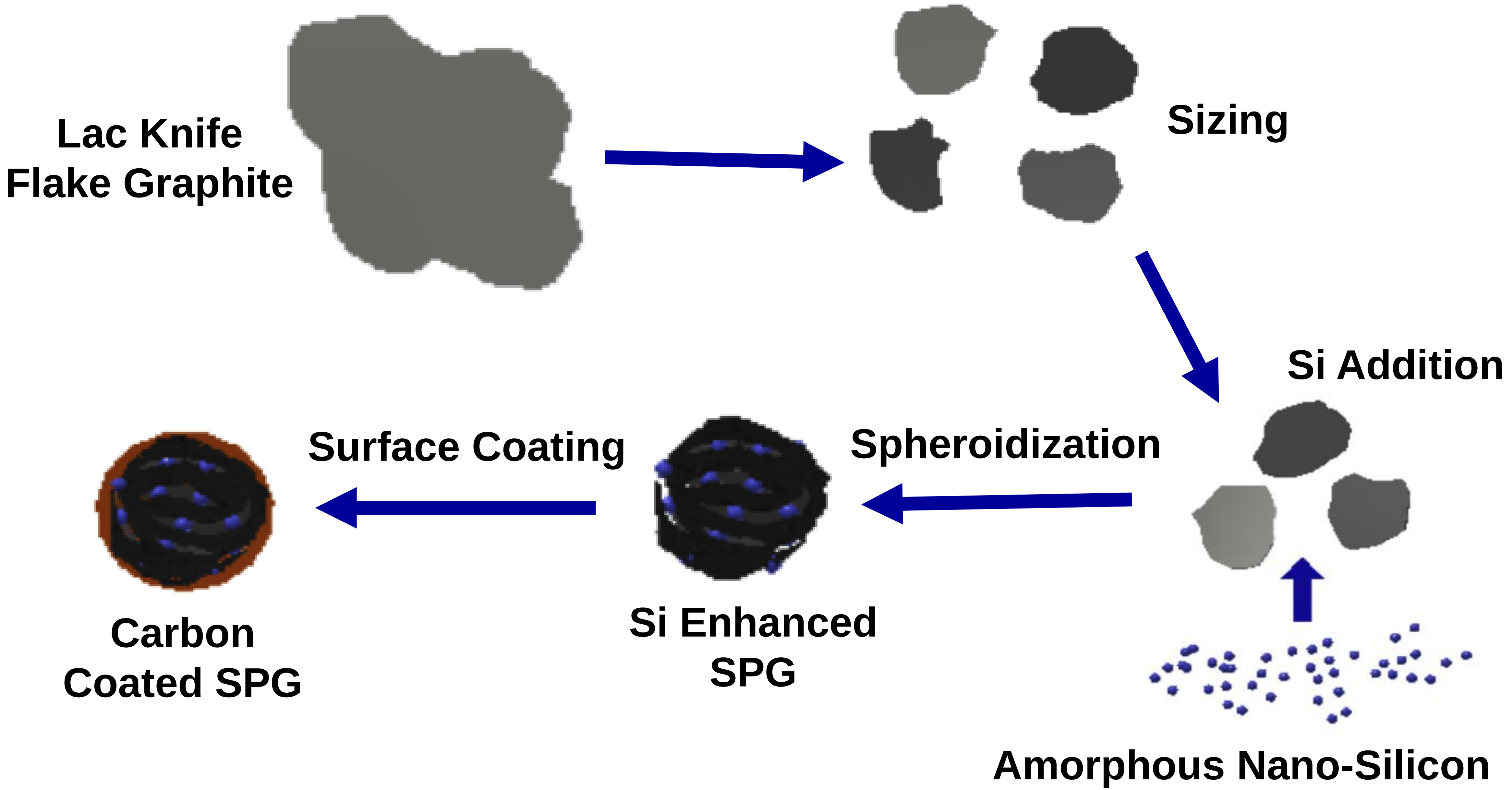
Sized Purified Graphites

- Flake Graphite D_{50} = 21, 16, 10 and 7µm
- Expanded Graphite D_{50} = 21, 15.8 and 3.5 µm

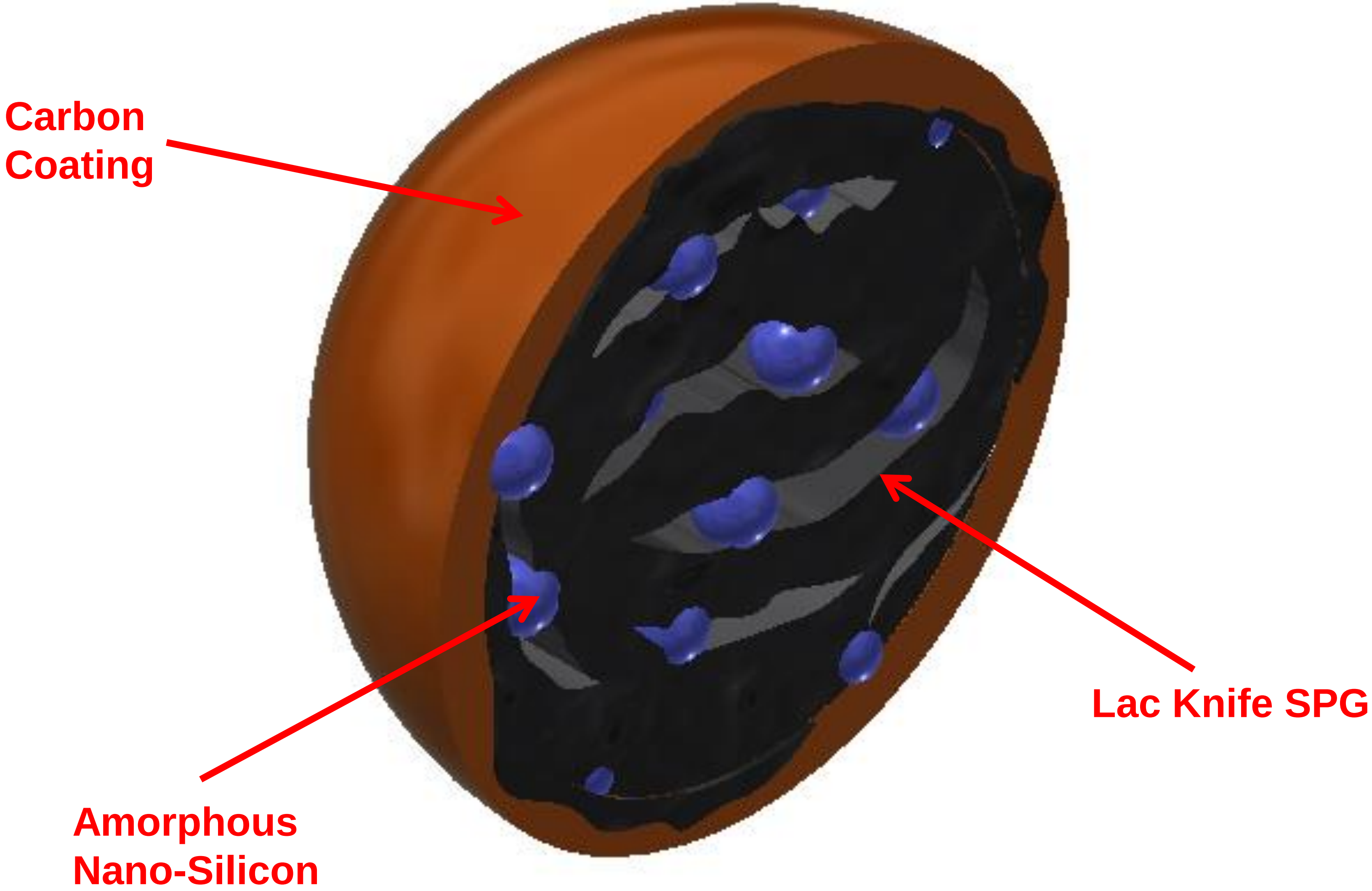
Grades Under Development

- Silicon Enhanced Carbon Coated Spherical Graphite
- High Rate Capability Graphite
- Oxidation Resistant Graphite

PREPARATION OF CARBON COATED Si ENHANCED SPG

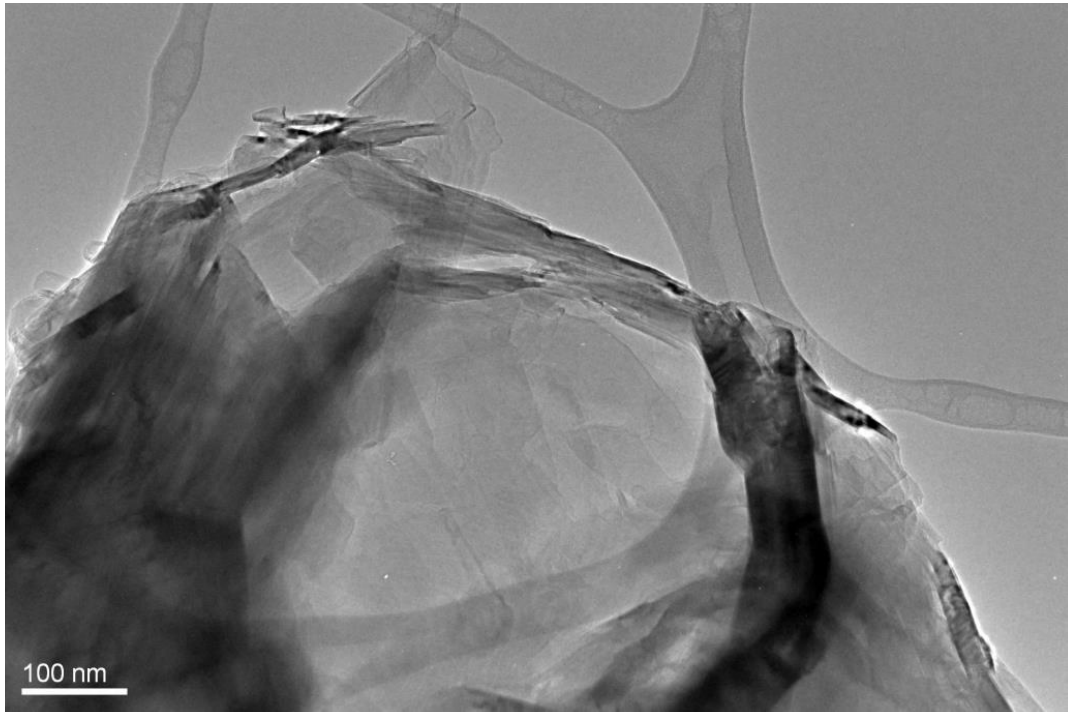


CROSS SECTION OF CARBON COATED Si ENHANCED SPG

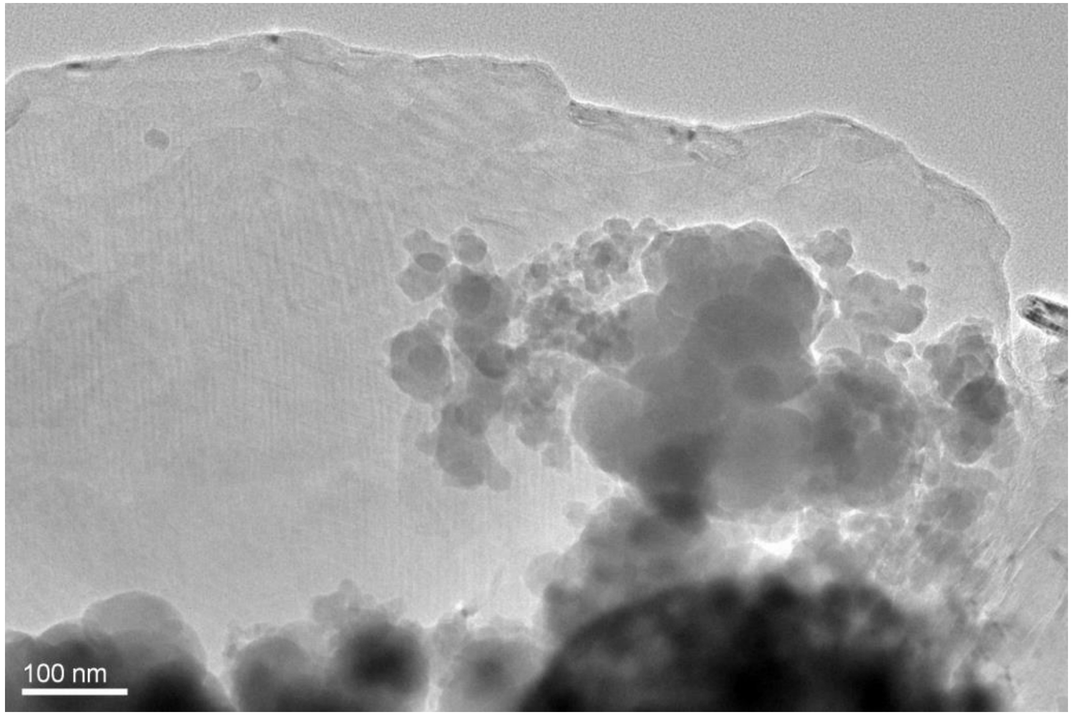


TEMs OF STANDARD AND Si ENHANCED SPG

Standard SPG



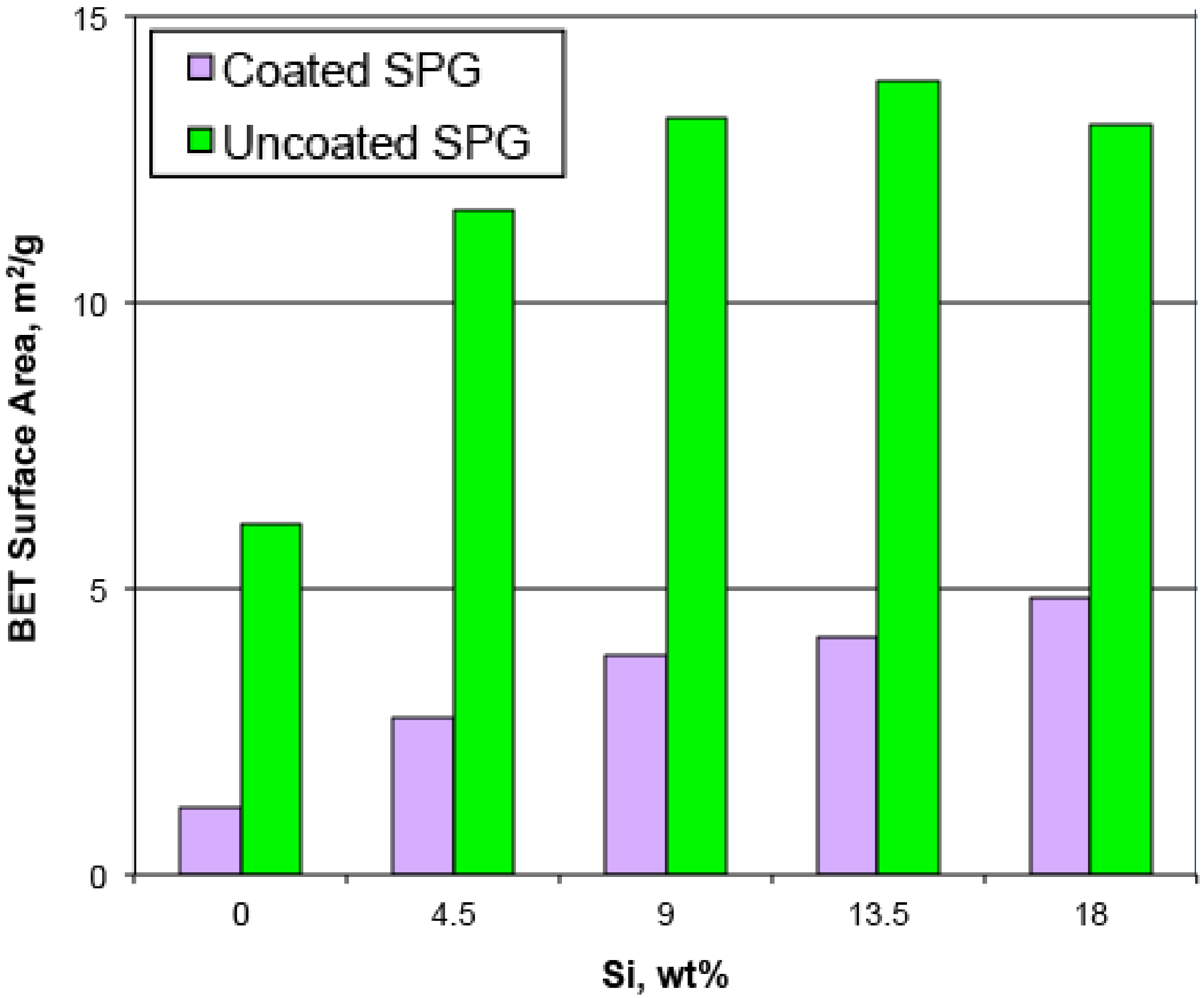
9 wt% Si Enhanced SPG



- Spheroidized edges of basal plane on graphite are clearly evident.
- No foreign inclusions are visible in SPG, attesting to its ultra-high purity level
- Nano-scale particles of Silicon are clearly visible in the Si-enhanced SPG structure;
- Most of the Si is trapped inside the spheroidal shell of SPG

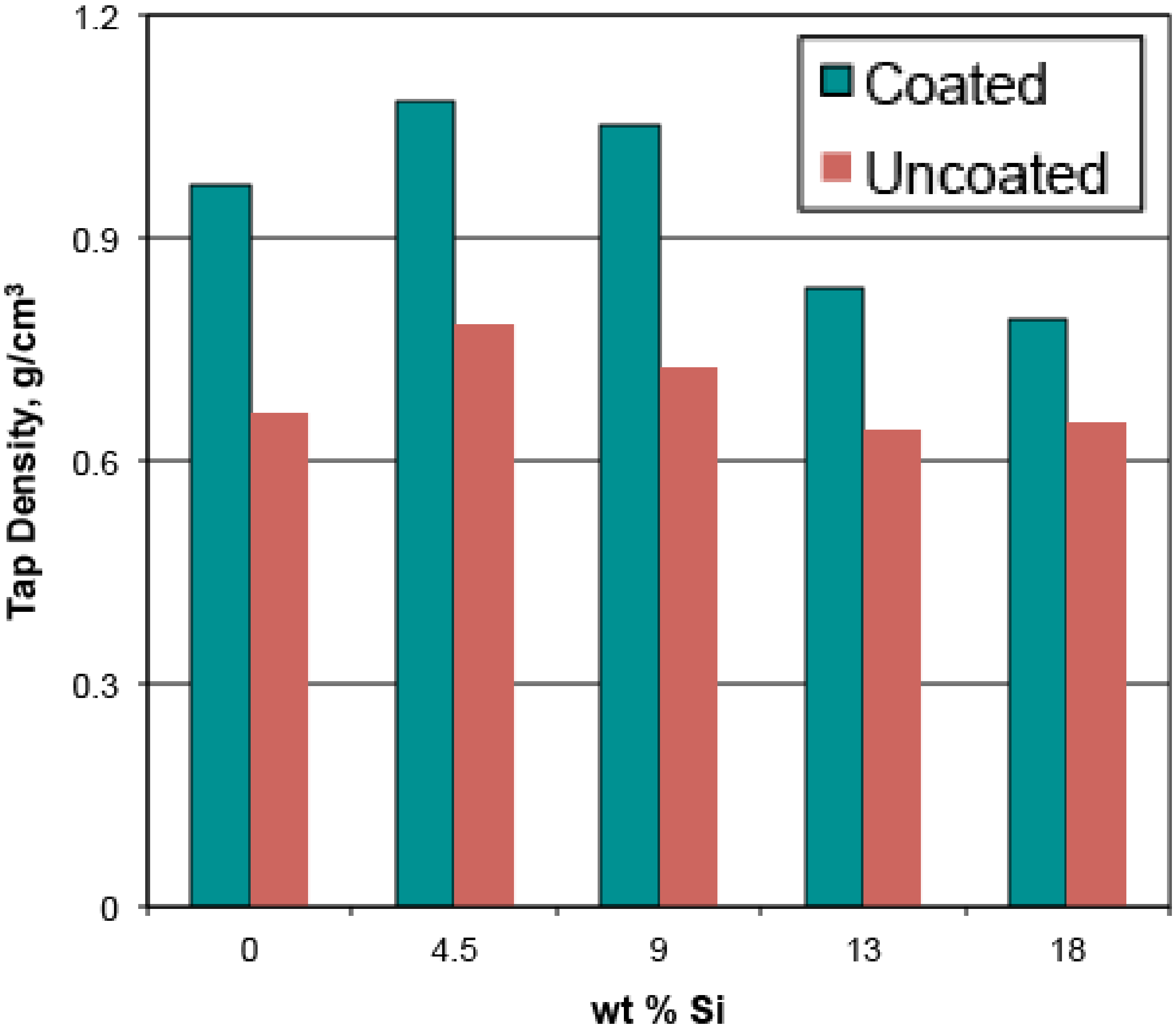
TEM data by ISI, 200 kV EM-002B Ultra-high resolution Transmission Electron Microscope

EFFECT OF CARBON COATING ON SURFACE AREA OF Si ENHANCED SPG



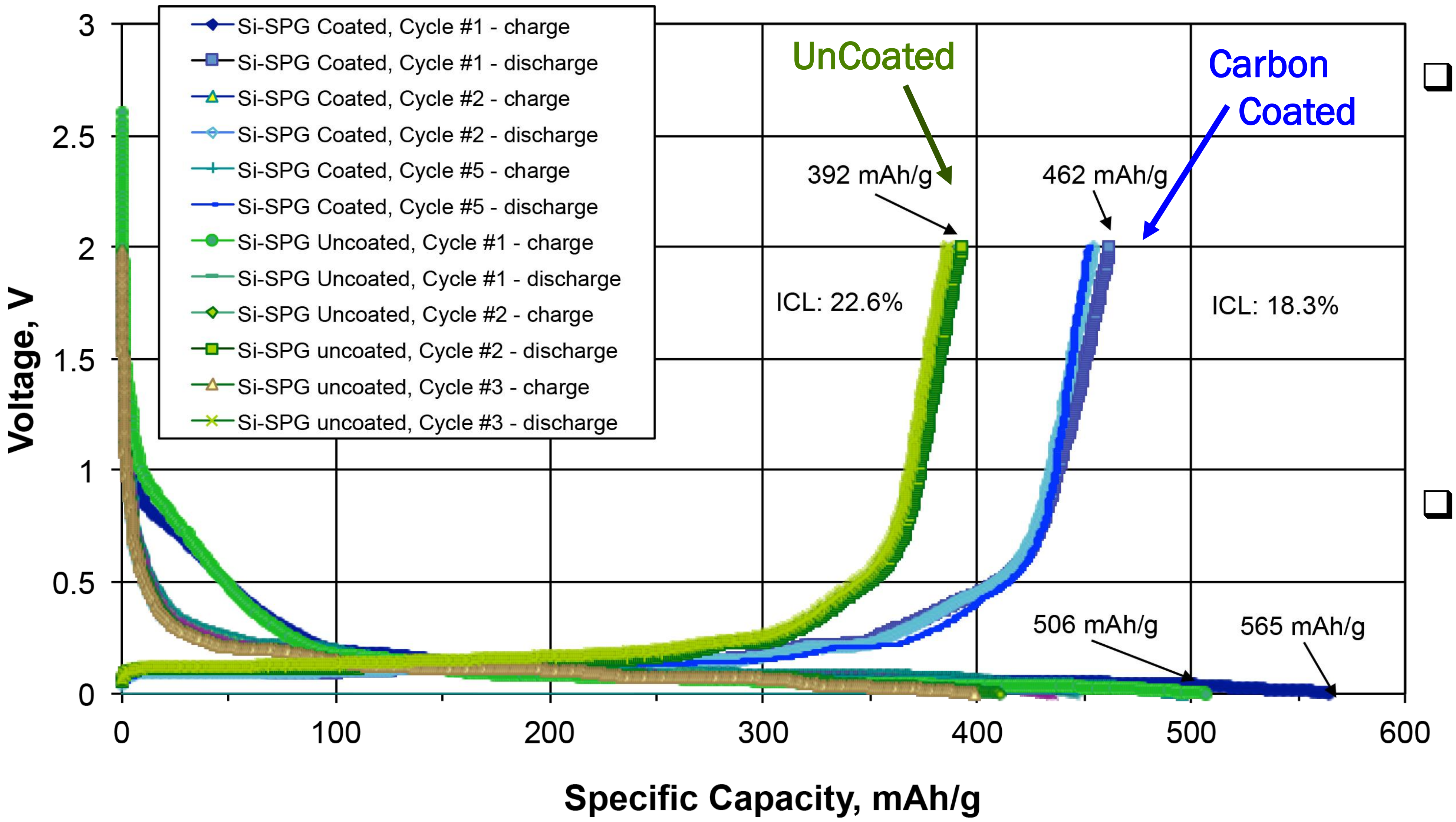
- Applying a carbon coating reduces the surface area of the SPG
- Target SA for graphite used in Li ion batteries is generally less than 4 m^2/g

EFFECT OF Si ADDITION ON TAP DENSITY OF SPG



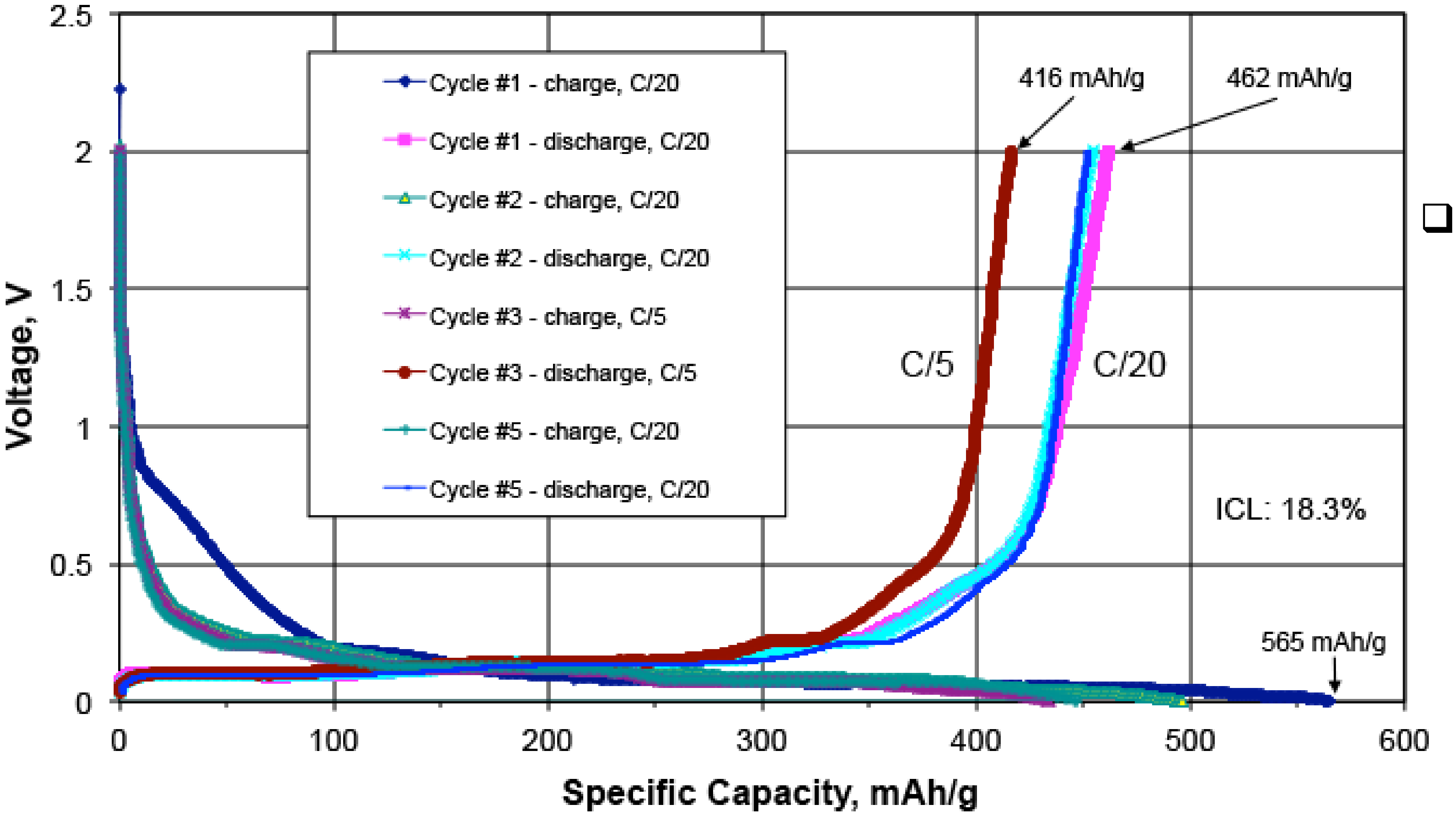
- Carbon Coating increases the tap density of both the Standard and Si-enhanced SPG
- Targeted tap density of 0.9 to 1.0 g/cc for coated SPG was achieved at Si levels up to 9 wt% Si

GALVANOSTATIC CHARGE/DISCHARGE CURVES FOR CARBON COATED AND UNCOATED SPG AT 4.5 wt% Si ADDITION



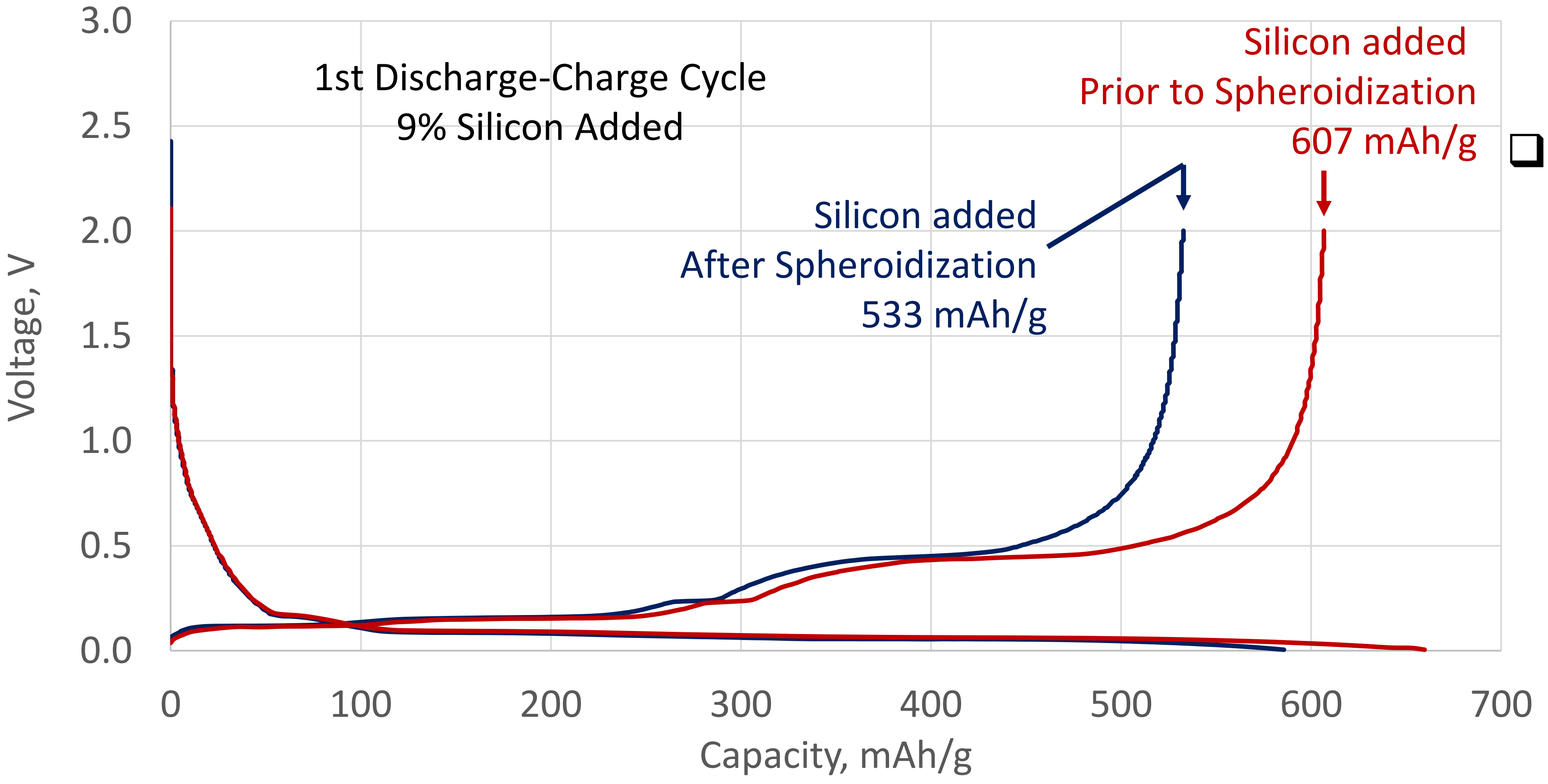
- ❑ Coating the SPG with carbon increases the reversible capacity from 392 to 462 mAh/g which is 24% higher than the theoretical capacity of graphite alone.
- ❑ Carbon Coating also reduces the Irreversible Capacity Loss (ICL) from 22.6% to 18.3%

GALVANOSTATIC CURVES FOR CARBON COATED SPG AT C/20 & C/5 RATES AT 4.5 wt% Si ADDITION



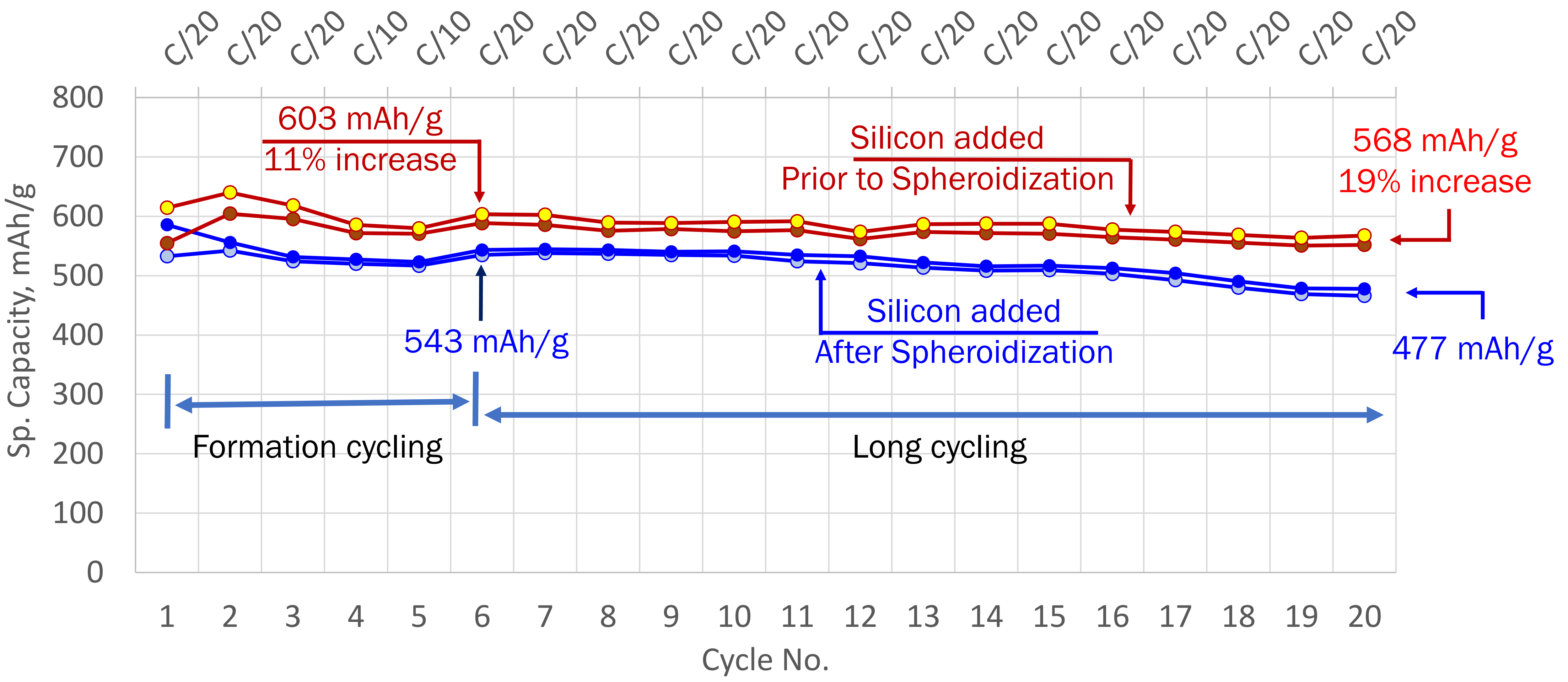
- ❑ Data shows highly stable cycling performance while changing cycling rates between C/20 and C/5.

Comparison of the Capacity of Carbon Coated SPG with 9 wt% Silicon added prior to and after Spheroidization



- Silicon addition prior to spheroidization increased the capacity 14% from 533 to 607 mAh/g and reduced the Irreversible Capacity Loss (ICL) from 9.04 to 8.03%

Comparison of the Capacity of Carbon Coated SPG with 9 wt% Silicon added prior to and after Spheroidization



ADVANTAGES OF USING LAC KNIFE GRAPHITE IN BATTERIES

Key Properties:

- Near Theoretical Reversible Capacity
- Low Irreversible Capacity Loss
- Reduced Capacity Fade during Long-term Cycling
- High Electrical Conductivity
- High Purity

End User Advantages:

- Higher Capacity
- Increased Power
- Longer Battery Life
- Increased Utilization of Cathode Active Material
- Reduced Processing Costs
- Ideal for Use with Silicon and Other Additives

DISCLAIMER

This presentation contains "forward-looking information" within the meaning of Canadian securities legislation. All information contained herein that is not clearly historical in nature may constitute forward-looking information. Generally, such forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: (i) volatile stock price; (ii) the general global markets and economic conditions; (iii) the possibility of write-downs and impairments; (iv) the risk associated with exploration, development and operations of mineral deposits; (v) the risk associated with establishing title to mineral properties and assets; (vi)the risks associated with entering into joint ventures; (vii) fluctuations in commodity prices; (viii) the risks associated with uninsurable risks arising during the course of exploration, development and production; (ix) competition faced by the resulting issuer in securing experienced personnel and financing; (x) access to adequate infrastructure to support mining, processing, development and exploration activities; (xi) the risks associated with changes in the mining regulatory regime governing the resulting issuer; (xii) the risks associated with the various environmental regulations the resulting issuer is subject to; (xiii) risks related to regulatory and permitting delays; (xiv) risks related to potential conflicts of interest; (xv) the reliance on key personnel; (xvi) liquidity risks; (xvii) the risk of potential dilution through the issue of common shares; (xviii) the Company does not anticipate declaring dividends in the near term;(xix) the risk of litigation; and (xx) risk management.

Forward-looking information is based on assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, no material adverse change in metal prices, exploration and development plans proceeding in accordance with plans and such plans achieving their stated expected outcomes, receipt of required regulatory approvals, and such other assumptions and factors as set out herein. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Such forward-looking information has been provided for the purpose of assisting investors in understanding the Company's business, operations and exploration plans and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this press release, and the Company does not undertake to update such forward-looking information except in accordance with applicable securities laws.

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THANK YOU

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