

Bridging Single-Wall CNT Performance with Multi-Wall CNT Cost & Scalability

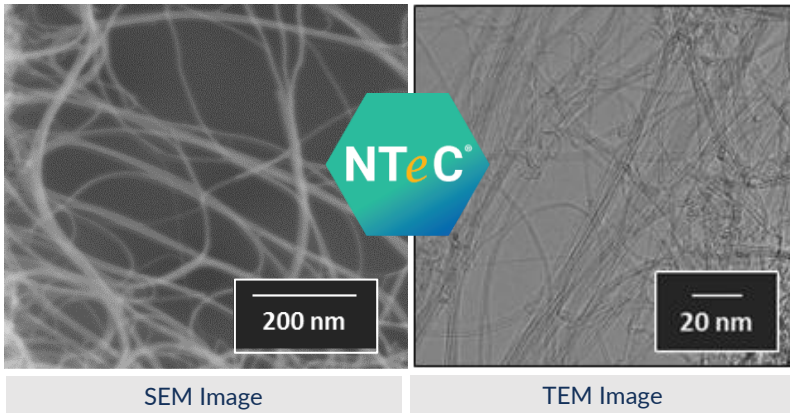
Now Open for Strategic Joint Development



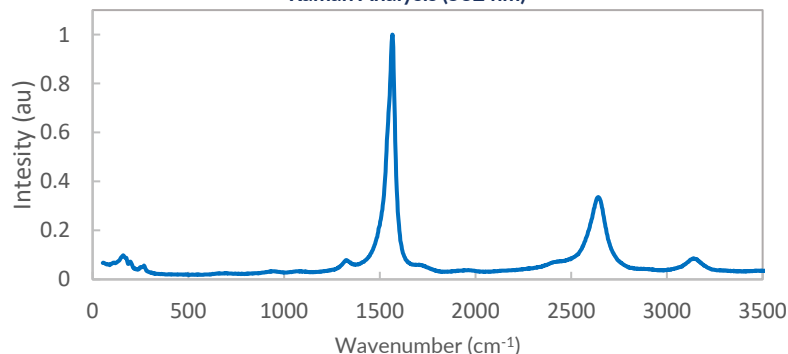
Exceptional Performance

NTeC® DWCNT quality ≥ World leading SWCNT supplier's

Property	Typical Value	Test Method
Carbon Purity	≥ 99 wt%	TGA
Median Number of Walls	2	TEM
Median Outer Diameter	2.18 nm	TEM
Aspect Ratio (L/D)	>1000	SEM
G/D Ratio	≥ 17	Raman



Raman Analysis (532 nm)



Why NTeC® Double-Wall?

NTeC Double-wall CNT bridges the performance of SWCNTs with the cost efficiency and scalability of MWCNTs. It delivers equivalent or superior performance at significantly lower cost with much greater supply availability



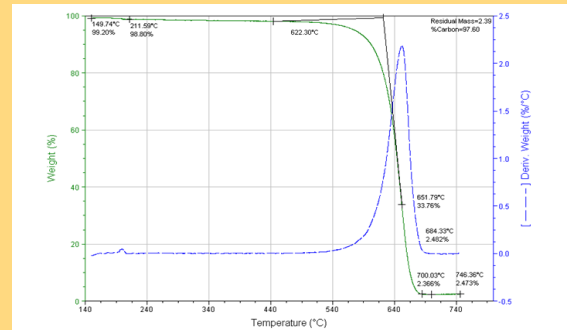
Why CHASM?

- 1 Leading CNT technology innovator with over 20 years of SWCNT and MWCNT development and commercialization
- 2 Global leader in low-cost, scalable, and sustainable CNT production



High Purity High Performance Product

Thermogravimetric Analysis (TGA)



Low cost and high scalability drive adoption

Antistatic/
ESD

Batteries

Carbon
Fiber



CHASM Approach to Meet Demand



Future
Vision



MADE IN
JAPAN

Jointly develop and manufacture DWCNTs with strategic partners for affordable, innovative materials at scale

単層CNT並みの性能と
多層CNT並みのコスト・量産性を実現

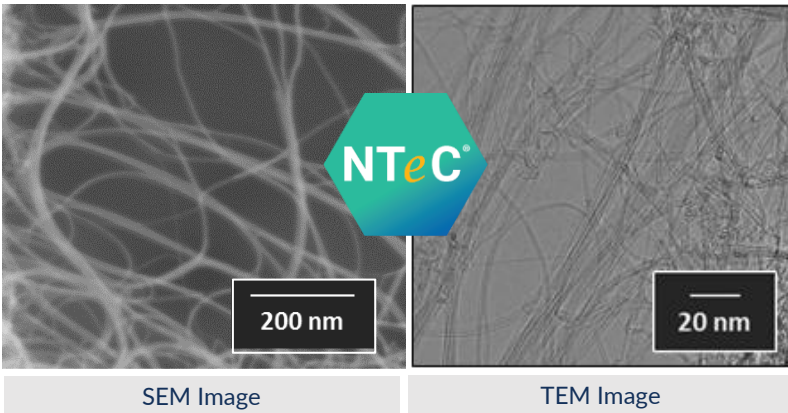
戦略的共同開発パートナー募集中



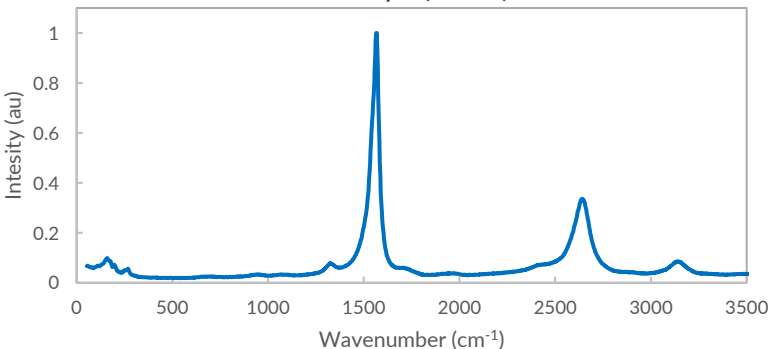
卓越した性能

NTeC® DWCNT 世界トップクラスSWCNTと同等以上の品質

特性	代表値	試験方法
炭素純度	≥ 99 wt%	TGA
壁数 (中央値)	2	TEM
外径 (中央値)	2.18 nm	TEM
アスペクト比 (L/D)	> 1000	SEM
G/D比	≥ 17	ラマン分光



Raman Analysis (532 nm)



NTeC® Double-Wallを選ぶ理由

NTeC二層CNTは、単層CNT (SWCNT) の性能と多層CNT (MWCNT) のコスト効率・量産性を両立。大幅に低いコストと高い供給能力で、同等またはそれ以上の性能を実現します



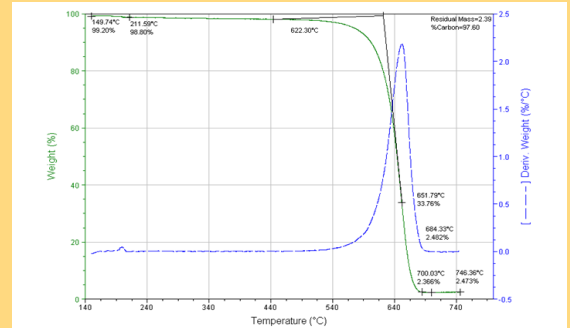
Why CHASM?

- 1 SWCNT・MWCNTの開発と商業化で20年以上の実績を持つCNT技術のリーダー
- 2 低コスト・スケーラブル・持続可能なCNT生産を実現する世界的リーダー



高純度・高性能製品

Thermogravimetric Analysis (TGA)



低コストと高い量産性が普及を加速

帯電防止 / ESD対策

電池

炭素繊維



需要に応えるCHASMの戦略



Future Vision



MADE IN JAPAN

戦略的パートナーと共同でDWCNTを開発・製造し、手頃な価格で革新的材料の量産を実現