

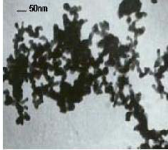
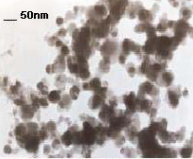
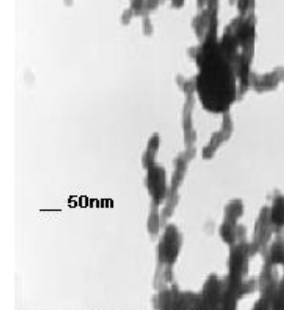

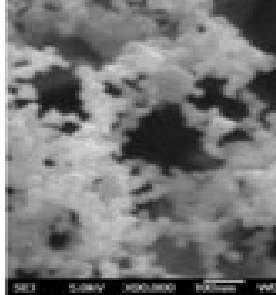
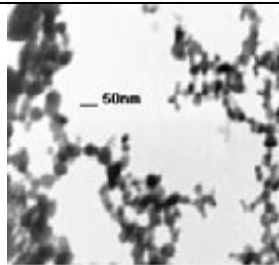
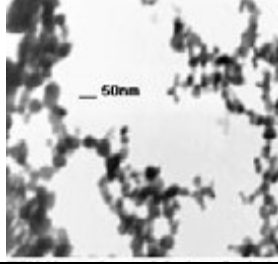

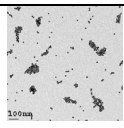
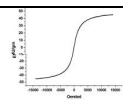
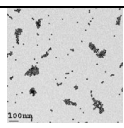


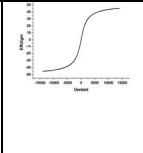
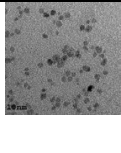
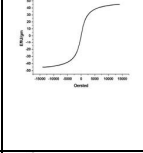
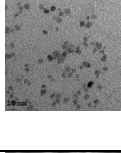
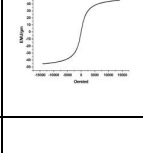

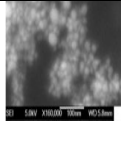
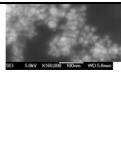
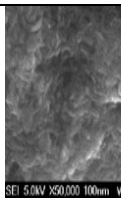
METAL NANOPOWDERS

DESCRIPTION	AV SIZE	SIZE RANGE	SPECIFIC SURFACE AREA	OTHER INFO	TEM/SEM	PARTICLE SIZE DISTRIBUTION	MAGNET I CCURVE	PRICE(in Rs.)
Aluminum	18 nm	2-50 nm	40 - 60 m2/g	n/a				
Cobalt	28 nm	2-60 nm	40 - 60 m2/g	Spherical				
Copper	25 nm	2-60 nm	30 - 50 m2/g	Spherical				
Copper (Carbon Coated)	25 nm	2-60 nm	30 - 50 m2/g	Spherical				
Iron (Carbon Coated)	25 nm	2-60 nm	40 - 60 m2/g	Spherical	 TEM Macrophage of Carbon Nanoparticles			
Iron	25 nm	2-58 nm	40 - 60 m2/g	Spherical				
Nickel	20 nm	2-50 nm	40 - 60 m2/g	Spherical				

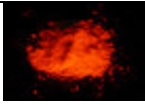



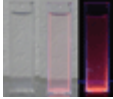


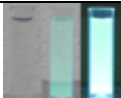


Nickel (Carbon Coated)	20 nm	2-50 nm	40 - 60 m2/g	Spherical				
Silver	35 nm	2-100 nm	30 - 50 m2/g	Spherical				

DISPERSIONS: PLEASE CONTACT US FOR A QUOTE IF YOU NEED A DISPERSION OTHER THAN THOSE LISTED BELOW. ALL OUR NANOTUBES ARE AVAILABLE AS 1.6 WEIGHT DISPERSIONS . ALL DISPERSIONS HAVE A \$150 MINIMUM ORDER.

DESCRIPTION	AV SIZE	SIZE RANGE	DISPERSION	MORPHOLOGY	COLOR	OTHER	TEM/SEM	Price(in Rs.)
Aligned MWNT Aqueous Dispersion (1.6 Wt %, 10-20 nm OD)		10-20 nm OD	Aqueous Solution with Non-Ionic Surfactant		Black	Storage Temperature: 2~8 degrees C		
Gold Colloid Aqueous Suspension, 0.02% wt	15 nm	11~18 nm Monodisperse	Aqueous Suspension Au amount: 0.02%, <0.1% Sodium citrate as stabilizer	Roughly Spherical	Red, non-fading			
Cobalt Aqueous Dispersion	28 nm	2-60 nm	Aqueous Solution with Non-Ionic Surfactant	Spherical	Black and grey			
Copper Aqueous Dispersion (1.85 wt %)	25 nm		Aqueous Solution with Non-Ionic Surfactant					
Copper Aqueous Dispersion (Carbon Coated, 1.8 wt %)	25 nm		Aqueous Solution with Non-Ionic Surfactant					
FerroFluid Fe3O4 Aqueous Colloid, 5 mg/ml	6 nm		Aqueous Suspension Fe3O4 amount: 0.5%	Roughly Spherical	Black			

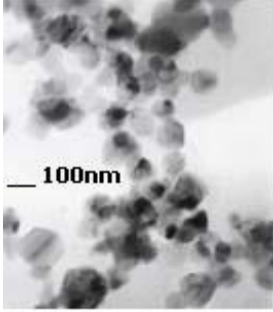



FerroFluid Fe3O4 Aqueous Colloid, 25 mg/ml	6 nm		Aqueous Suspension Fe3O4 amount: 2.5%	Roughly Spherical	Black			
FerroFluid Fe3O4 Aqueous Colloid, 50 mg/ml	6 nm		Aqueous Suspension Fe3O4 amount: 5%	Roughly Spherical	Black			
FerroFluid Fe3O4 Aqueous Colloid, 100 mg/ml	6 nm		Suspension Fe3O4 amount: 10%	Roughly Spherical	Black			
Iron Aqueous Dispersion (Carbon Coated, 2.9 wt%)	25 nm	5-60 nm	Aqueous Solution with Non-Ionic Surfactant	Spherical				
Nickel Aqueous Dispersion (1.85 wt %)	20 nm	2-50 nm	Aqueous Solution with Non-Ionic Surfactant					
Nickel Aqueous Dispersion (Carbon Coated 1.85 wt %)	20 nm	2-50 nm	Aqueous Solution with Non-Ionic Surfactant					
Silicon Carbide(SiC) Aqueous Dispersion(1.6 wt %)			Aqueous Solution with Non-Ionic Surfactant					
Silver Aqueous Dispersion (1.6% wt., Av. Size 35 nm)	35nm	2-100 nm	Aqueous Solution with Non-Ionic Surfactant	Spherical	Black and Grey			
Short-MWNT Aqueous Dispersion (1.6 Wt %, 10-20 nm OD)		10-20 nm OD			Black			
SWNT Aqueous Dispersion (1.6 Wt %, < 2 nm OD)	< 2 nm OD		Aqueous dispersion with non-ionic surfactant		Black			


PHOSPHORDOTS: CADMIUM-FREE QUANTUM DOTS

DESCRIPTION	EXCITE	EMISS	AV SIZE	DISPERSION	PICTURE	CONCENTRATION	STORAGE	PRICE(in Rs.)
Europium Doped Yttrium Oxide Powder			10 nm	n/a		n/a	Refrigerate but do not freeze	
Europium Doped Yttrium Vanadate Colloid	350 nm	620 nm	10 nm	Solvent: H2O		50mg/mL	Refrigerate but do not freeze	
Cerium Doped Yttrium Aluminum Garnet Colloid	350-400 nm	550 nm	10 nm	Solvent: 1,4-butanediol		0.15 - 0.35 g/cm ³	Refrigerate but do not freeze	
Thulium Doped Yttrium Vanadate Colloid	300 nm	477 nm	20-50 nm	<0.7mg/mL PVP		0.2mg/mL	Refrigerate but do not freeze	
Samarium Doped Yttrium Vanadate Colloid	300 nm	568, 607, & 650 nm	10 nm	Aqueous Colloid with Trace of Citrate		50mg/mL	Refrigerate but do not freeze	
Samarium Doped Yttrium Vanadate Colloid	300 nm	568, 607, & 650 nm	20-50 nm	<0.7mg/mL PVP		0.2mg/mL	Refrigerate but do not freeze	
Dysprosium Doped m Vanad	300 nm	486& 576 nm	10 nm	Aqueous Colloid with Trace of Citrate		50mg/mL	Refrigerate but do not freeze	
Dysprosium Doped m Vanad	300 nm	486& 576 nm	20-50 nm	<0.7mg/mL PVP		0.2mg/mL	Refrigerate but do not freeze	
Europium Doped m Vanad	300 nm	620nm	20-50 nm	<0.7mg/mL PVP		0.2mg/mL	Refrigerate but do not freeze	
Erbium Doped m Vanad	300 nm	527 & 556 nm	20-50 nm	Aqueous Colloid with Trace of Citrate		10mg/mL	Refrigerate but do not freeze	

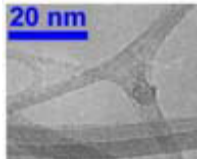
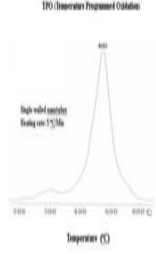
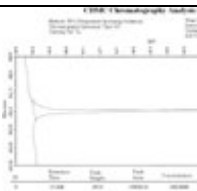

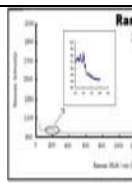
CERAMIC NANOPOWDERS


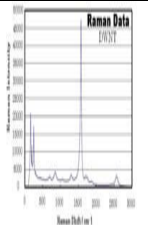
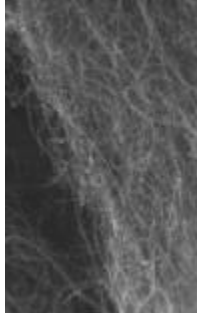
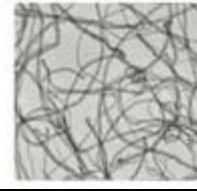
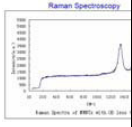

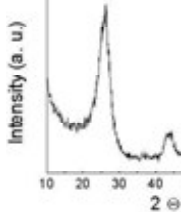
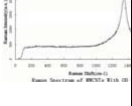
DESCRIPTION	AV SIZE	SIZE RANGE	SPECIFIC SURFACE AREA	OTHER INFO	TEM/SEM	PRICE(in Rs.)

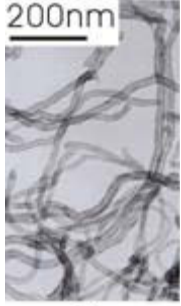
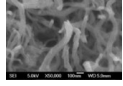
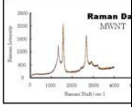
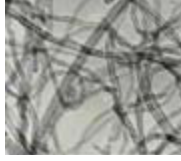
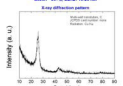
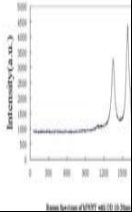
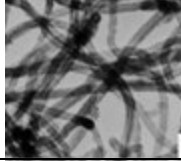
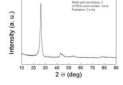
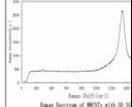
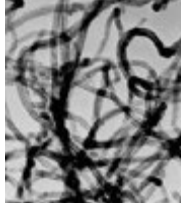
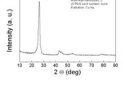
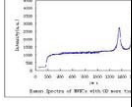
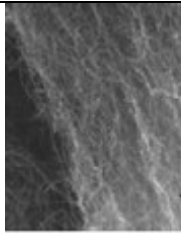
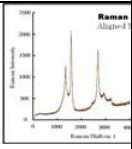
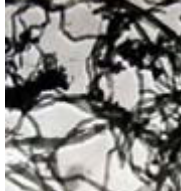
Silicon Carbide-beta Powder	<50 nm	40-50 nm	60-80 m2/g	Nearly Spherical Crystallographic Form: Cubic	 TEM Macrophage	
Titanium Carbide	< 30 nm		90 m2/g	Nearly Spherical; Crystallographic Form: Cubic Dissociative Si: <0.4%, Oxygen Content: < 1.0%		
Aluminum Nitride	<50 nm	40-50 nm	> 75m2/g	Crystal Phase: Hexagonal, Effective duration: 24 months		
Silicon Nitride	≤20 nm	10-20 nm	> 115 m2/g	Amorphous Si3N4, Effective duration: 24 months		
Alpha Silicon Nitride - Whisker	Diameter <100 nm x Length 800 nm	n/a	>45 m2/g	Crystal: hexagonal, effective duration 24 months		
Titanium Nitride	<15 nm	10-20 nm	> 80 m2/g	Spherical, Crystallographic Form: FCC		
Aluminum Oxide	60 nm	60-100 nm	180 m2/g	Gamma phase		
Aluminum Oxide	155 nm	>300 nm	10 m2/g	Alpha phase		
Ball Particle Silicon Oxide	30 nm	20-50 nm	160 m2/g	UV Diffraction: > 75%		

Ball Particle Silicon Oxide Powder (Hydrophobic)	30 nm	20-50 nm	205 m2/g	Particle surface treated with oil, highly dispersed		
Multi-pore Silicon Oxide	20 nm	20-50 nm	645 m2/g	n/a		
Multi-pore Silicon Oxide (Hydrophobic)	20 nm	20-50 nm	680 m2/g	Particle surface treated with oil, highly dispersed		
Titanium Oxide (Anatase)	5-10 nm	n/a	215m2/g	Crystal phase: Anatase		
Titanium Oxide (Rutile)	50 nm	n/a	35 m2/g	Crystal phase: Rutile		
Zinc Oxide	400 nm	300-500 nm	40 - 60 m2/g	n/a		


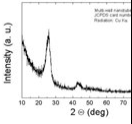
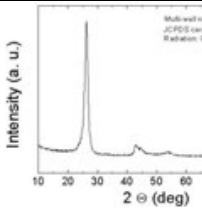
CARBON NANOTUBES: PLEASE NOTE ALL NANOTUBES ARE AVAILABLE AS 1.6 WEIGHT DISPERSIONS WITH \$150 MINIMUM ORDER

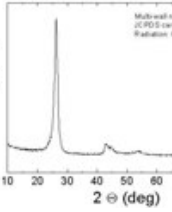
DESCRIPTION	PURITY	ID	OD	LENGTH	SPECIFIC SURFACE AREA	OTHER INFO	TEM/SEM/TPO	XRD	RAMAN	PRICE(in Rs.)
SWNT Powder	95%	0.8-1.6 nm	1-2 nm	5-30 μm	>380 m2/g	Thermal conductivity ~ 4000W/mk				
SWNT Powder	90%	n/a	<2 nm	<20 μm	>450 m2/g	Thermal conductivity ~ 4000W/mk				
-OH Functionalized SWNT, 3.96 wt%)	95%	0.8-1.6 nm	1-2 nm	5-30 μm	>380 m2/g	-OH content: Surface carbon functional-				

						ization ratio: 8-10 mol%				
-COOH Functionalized SWNT, 2.73wt%)	95%	0.8-1.6 nm	1-2 nm	5-20 μ m	>380 m2/g	-COOH content : Surface carbon functionalization ratio: 8-10 mol%				
Short SWNT	95%	0.8-1.6 nm	1-2 nm	1-3 μ m	>380 m2/g	n/a				
-COOH Functionalized Short SWNT	90%	0.8-1.6 nm	1-2 nm	0.5-2 μ m	>380 m2/g	-COOH Content: 2.73% wt				
DWNT Powder	90%	1-2 nm	< 3 nm	< 20 μ m	>450 m2/g	DWNTs: > 60%, Amorphous carbon: < 5%, Ash (catalyst residue): < 3% Thermal conductivity ~ 4000W/mk				
Aligned MWNT Powder	95%	n/a	10-20 nm	5-15 μ m	40-300 m2/g	Amorphous carbon: <3%, Ash (catalyst residue): <0.2% Thermal conductivity ~ 2000W/mk				
MWNT Powder	95%	2-5 nm	< 8 nm	10-30 μ m	>500 m2/g					
MWNT Powder	95%	3-5 nm	8-15 nm	~50 μ m	>233 m2/g	C 99.76%, Al .03%, Cl .09%, S .12%				

MWNT Powder	95%	5-10 nm	10-20 nm	0.5-2 μ m	40-300 m ² /g	Amorphous carbon: <3%, Ash (catalyst residue): <0.2%				
MWNT Powder	95%	5-10 nm	10-20 nm	10-30 μ m	>200 m ² /g	C 99.8%, Cl 0.2% Electrical conductivity > 100 s/cm				
MWNT Powder	95%	5-10 nm	20-30 nm	10-30 μ m	>110 m ² /g	C 98.39%, Cl 0.45%, Fe 0.23%, Ni 0.93% Electrical conductivity > 100 s/cm				
MWNT Powder	95%	5-12 nm	30-50 nm	10-20 μ m	>60 m ² /g	Electrical conductivity > 100 s/cm				
MWNT Powder	95%	5-15 nm	>50 nm	5-15 μ m	>40 m ² /g	Amorphous carbon: <3%, Ash (catalyst residue): <0.2% Electrical conductivity > 100 s/cm				
Aligned MWNT Powder	95%	n/a	10-20 nm	5-15 μ m	40-300 m ² /g	Amorphous carbon: <3%, Ash (catalyst residue): <0.2% Electrical conductivity > 100 s/cm				
Industrial Grade MWNT	85%	5-10 nm	10-30 nm	10-30 μ m	>200 m ² /g	n/a				
Industrial Grade	85%	5-10 nm	20-40 nm	10-30 μ m	>110 m ² /g	n/a				

MWNT		nm	nm	μm						
Short MWNT	95%	2-5 nm	< 10 nm	1-2 μm	40-300 m ² /g	n/a				
Short MWNT	95%	5-10 nm	10-20 nm	1-2 μm	40-300 m ² /g	n/a				
Short MWNT	95%	5-10 nm	20-30 nm	1-2 μm	>110 m ² /g	n/a				
Short MWNT	95%	5-12 nm	30-50 nm	0.5-2 μm	>60 m ² /g	n/a				
Short MWNT	95%	5-15 nm	>50 nm	1-2 μm	>40 m ² /g	n/a				
-COOH Functionalized MWNT	95%	2-5 nm	< 8 nm	10-30 μm	>500 m ² /g	Surface carbon functionalization ratio: 8-10 mol%, weight percentage 3.86 wt%				
-COOH Functionalized MWNT	95%	5-10 nm	10-20 nm	10-30 μm	>200 m ² /g	Surface carbon functionalization ratio: 8-10 mol%, weight percentage 2.0 wt%				
-COOH Functionalized MWNT	95%	5-10 nm	20-30 nm	10-30 μm	>110 m ² /g	Surface carbon functionalization ratio: 8-10 mol%, weight percentage 1.23 wt%				
-COOH Functionalized MWNT	90%	5-15 nm	30-50 nm	10-20 μm	>60 m ² /g	Surface carbon functionalization ratio: 8-10 mol%, weight percentage				

						0.73 wt%				
-COOH Functionalized MWNT	95%	5-15 nm	>50 nm	10-20 μm	>40 m ² /g	Surface carbon functionalization ratio: 8-10 mol%, weight percentage 0.49 wt%				
-COOH Functionalized Short SWNT	95%	0.8-1.6 nm	1-2 nm	0.5-2 μm	>380 m ² /g	-COOH Content: 2.73% wt				
-OH Functionalized MWNT, C 97.46%, Al 0.19%, Cl 1.02%, Co 1.09%, S 0.24%		2-5 nm	< 8 nm	10-30 μm	>500 m ² /g	carbon functionalization ratio: 20-26 mol%, weight percentage 1-7wt%				
-OH Functionalized MWNT, C 99.8%, CL .2%		5-10 nm	10-20 nm	10-30 μm	>200 m ² /g	Surface carbon functionalization ratio: 20-26 mol%, weight percentage 1-7wt%				
-OH Functionalized MWNT, C 98.39%, Cl .45%, Fe .23%, Ni .93%	95%	5-10 nm	20-30 nm	10-30 μm	110 m ² /g	n/a				
-OH Functionalized MWNT, C 97.37%, Cl 0.2%, Fe .55%, Ni 1.86%, S .02%	95%	5-15 nm	30-50 nm	10-20 μm	60 m ² /g	Surface carbon functionalization ratio: 20-26 mol%, weight percentage 1-7wt%				

-OH Functionalized MWNT, C 97.37%, Cl 0.2%, Fe .55%, Ni 1.86%, S .02%	95%	5-15 nm	>50 nm	10-20 μm	40 m ² /g	Surface carbon functionalization ratio: 20-26 mol%, weight percentage 1-7wt%				
--	-----	---------	--------	---------------------	----------------------	--	--	--	--	--