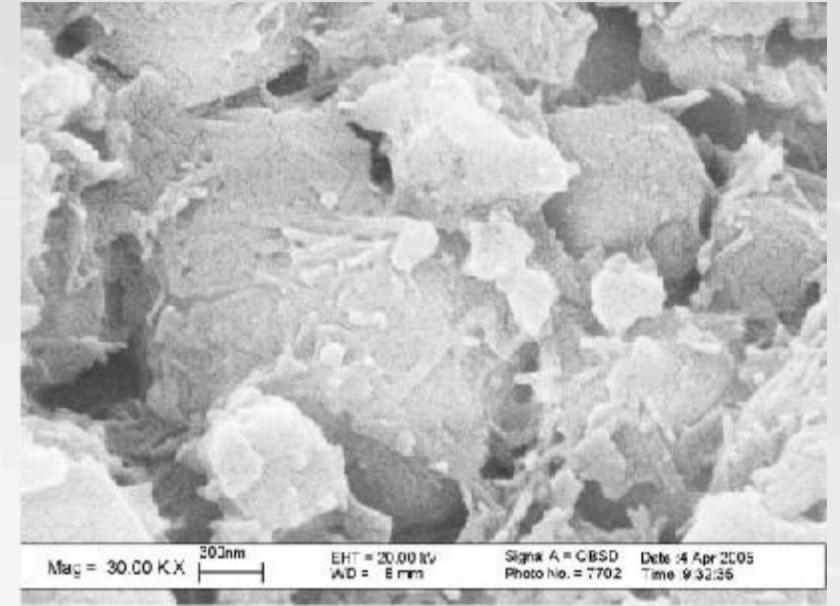


Nano-metal clusters media (NMC) invented by Dr. Xiaorong Huang is a novel water purification media which made from millions of nano-metal clusters on porous inorganic material, and its specific surface and porosity is more than 100 times of KDF media's. NMC formed in innumerable micro primary cells has a very strong redox (reduction-oxidation) ability to reduce the heavy metal ions of  $Pb^{2+}$ ,  $Cd^{2+}$ ,  $Cr^{6+}$ ,  $As^{3+}$ , residual chlorine into



SEM photo of NMC ×30,000

### Characteristics:

1. Highly efficiently removes residual chlorine and disinfection by-products.
2. Highly efficiently removes soluble heavy metal ions in water such as  $Pb^{2+}$ ,  $Cd^{2+}$ ,  $Cr^{6+}$ ,  $As^{3+}$ , etc.
3. Efficiently decreases organic pollutants in water.
4. Micro-organisms growth and reproduction can be inhibited and eliminated.
5. Efficiently removes iron ions and reduces unpleasant tastes and odors.



Bacteria restraint function report



Report of  $Pb^{2+}$ ,  $Cd^{2+}$ ,  $Cr^{6+}$  removal



Disinfection efficiency report



Patent No. ZL200610034167.5





# NMC 5-20 times of KDF's effect

## Model of nano-metal clusters media

Model	NMC-I	NMC-II	NMC-III	NMC-IV
Actual photo				
Outlook	Reddish brown grain	Reddish brown grain	Reddish brown grain	Black & white grain
Diameter	0.5-1.0mm	0.5-1.0mm	1.0-1.5mm	40-60mesh
Bulk density	0.9-1.0g/ml	0.8-0.9g/ml	0.8-0.9g/ml	0.6-0.9g/ml
Effect <small>(Removal of residual chlorine at the same flow rate)</small>	10 times of KDF55	5 times of KDF55	5 times of KDF55	20 times of KDF55
Capacity	100-500 Liters/g (depending on the water quality)			
Resistance	NMC-I > NMC-IV > NMC-II > NMC-III			
Suggest usage	Replacement of the Activated carbon or KDF			
	Gravity Filter	Gravity Filter, Pretreatment for RO membrane	Filter for kitchen or shower	Filter with high removal efficiency
Suggest amount	Candle and Cartridge of Gravity Filters (Flow rate: <6L/h)	> 20g	> 30g	> 40g
	Candle and Cartridge of In-Line Pressure Filters (Flow rate: <1L/min)	> 50g	> 80g	> 100g
Remark	Prefilter is suggested against covering by suspended contaminants in water.			

Pureeasy's NMC media has passed the test of "Safety evaluation of Protective Materials in Drinking Water System" by CDC\* of GD province. The test shows all items such as colority, turbidity, taste and odour, visible substance, PH, TDS, COD, volatile phenol, Fe, Mn, Cu, Zn, As, Cd, Cr(6+), Al, Pb, Hg, Ag, CHCl<sub>3</sub>, CHCl<sub>4</sub>, F<sup>-</sup>, NO<sub>3</sub><sup>-</sup>-N, radioactivity( total α, total β) meet the Chinese safety requirements of materials in drinking water system.

\*Centers for Disease Control and Prevention



Test report of NMC safety

Model	Barrel packing size(cm)	N.W (kg)	G.W (kg)	Qty in 20'Gp	Qty in 40'Gp
NMC	Φ31×46.5cm	25	27.5	684	1538