

Materials List for:

# Transport of Surface-modified Carbon Nanotubes through a Soil Column

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URL: <https://www.jove.com/video/52634>

DOI: [doi:10.3791/52634](https://doi.org/10.3791/52634)

## Materials

Name	Company	Catalog Number	Comments
MWCNT	Cheap Tubes Inc., USA	sku-03040304	Purchased as semi-functionlized powder
Quartz sand	Sibelco Nordic, Baskarp, Sweden	B44	Purchased with more than 91% silica sand
H <sub>2</sub> SO <sub>4</sub>	VWR	1.01833.2500	95%-97% purity
HNO <sub>3</sub>	VWR	1.00441.1000	70% purity
HCl	VWR	1.00317.2500	37%-38% purity
H <sub>2</sub> O <sub>2</sub>	VWR	23615.248	30% purity
NaCl	VWR	1.06404.0500	99.5% purity
NaOH	Sigma-Aldrich	S8045-500G	99.99% pur pellets
Ultrasonic Homogenizer	Biologics Inc. Manassas, Virginia	Model 3000, 0-127-0002	Operated for fix time interval
Sonicator (bath)	Kerry Ultrasonic Ltd	1808	Common bath sonicator
Peristaltic pump	Ismantec, Glattbrugg, Switzerland	ISM931	Work with tygon tubing in the pump
Spectrophotometer	Hach Lange	DR500, LPV408.99.0001	Operate with manual cuvette as well as automated sampling
pH meter	Metrohm	781	pH analysis
Glass column	Chromaflex	420830-1510	Column with adjustable cap
Fraction collector	Spectrum Labs Europe	CF-2, 124846	Fixed at regular interval of time
Fraction collector tubes	VWR	212-9599	6 ml volume glass tube
Hot plate stir	Thermo Scientific	SP131320-33	Adjustable temperature
Oven	Elektro Helios	259	For oven dry of sand
Balance	Mettler Toledo	AE 160	For accurate weight