

Materials List for:

The Effect of Ultraviolet Radiation on the Chemical Bath Deposition of Bis(thiourea) Cadmium Chloride Crystals and the Subsequent CdS Obtention

Luis Eduardo Trujillo Villanueva¹, Felipe Legorreta García¹, Iker Rodrigo Chávez-Urbiola², Francisco Javier Willars-Rodríguez², Rafael Ramírez-Bon², Marius Ramírez-Cardona¹, Leticia Esperanza Hernández-Cruz¹, Edgar Arturo Chávez-Urbiola³

¹Área Académica de Ciencias de la Tierra y Materiales, Universidad Autónoma del Estado de Hidalgo

²Área de Materiales Optoelectrónicos, CINVESTAV-IPN

³CONACyT-Área Académica de Ciencias de la Tierra y Materiales, Universidad Autónoma del Estado de Hidalgo

Correspondence to: Edgar Arturo Chávez-Urbiola at chavez.urbiola@gmail.com

URL: <https://www.jove.com/video/57682>

DOI: [doi:10.3791/57682](https://doi.org/10.3791/57682)

Materials

Name	Company	Catalog Number	Comments
Reagents			
Cadmium chloride Anh. ACS, 99.4 %	Fermont	PQ24291	Highly toxic
Thiourea technical grade, 99.9 %	Reasol	R5913	Toxic
Hydrochloric acid, 36.5 – 38.0 %	J.T.Baker	MFCD00011324	Highly corrosive liquid
Material			
Filter paper	Whatman	1440 125	40, Ashless, Circles, 125 mm
Beaker	Kimax	1400	100 mL
Volumetric Flask	Kimax	28012-100	Class A 100 mL
Glass Funnel	Kimax	28980-150	Addition Funnel, Long Stem, 60° Angle, Wide Top. Type I, Class B.
Watch glasses	Pyrex	9985-150	Corning, 150 mm
Crucibles	Fisherbrand	FB-965-D	High-Form Porcelain
Equipment			
Furnace	Briteg Instrumentos Cientificos S.A. de C.V.	1010	
Fume Hood	Fisher Alders, S.A. de C.V.	F1124	
Light surge	Philips	PL-S 9W UV-A/2P 1CT/6X 10 CC	
pH meter	OAKTON	WD-35419-10	
Hotplate whit magnetic stirrer	Cole-Parmer	JZ-04660-75	