

## Chemical bath synthesis of Ag<sub>2</sub>S, CuS, and CdS nanoparticle-polymer nanocomposites: structural, linear, and nonlinear optical characteristics: supplement

ALI FATEMI,<sup>1,6</sup> MILAD RASOULI,<sup>2,3,6,\*</sup>  MAHMOOD GHORANNEVISS,<sup>3</sup> DAVOUD DORRANIAN,<sup>4</sup> AND KOSTYA (KEN) OSTRIKOV<sup>5</sup>

<sup>1</sup>Department of Physics, Faculty of Sciences, Azarbaijan Shahid Madani University, Tabriz, Iran

<sup>2</sup>Department of Physics, Kharazmi University, Tehran, Iran

<sup>3</sup>Department of Physics, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>4</sup>Laser Lab, Department of Physics, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>5</sup>School of Chemistry and Physics and QUT Centre for Materials Science, Queensland University of Technology (QUT), Brisbane, Australia

<sup>6</sup>Equal contributors.

\*[miladrasouli@outlook.com](mailto:miladrasouli@outlook.com)

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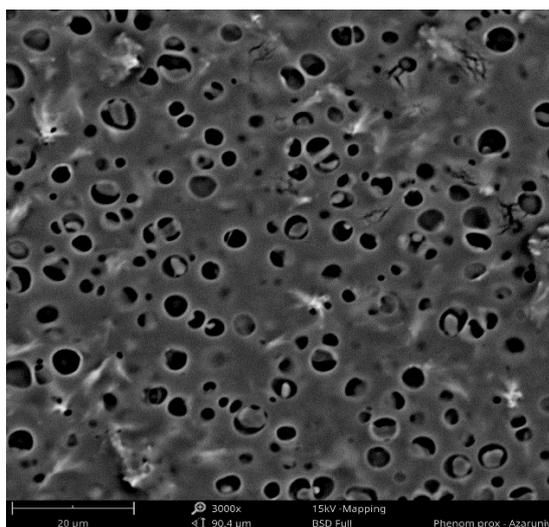
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## **Chemical bath synthesis of Ag<sub>2</sub>S, CuS, and CdS nanoparticle-polymer nanocomposites: structural, linear, and nonlinear optical characteristics**

### SEM analyses

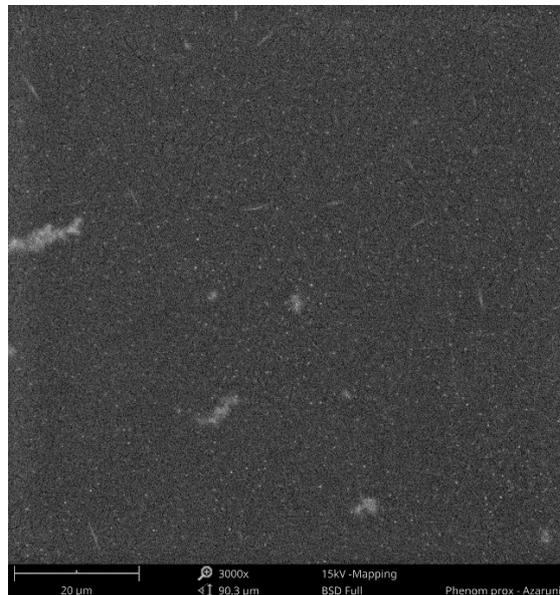
The scanning electron microscopy (SEM) images prepared using proX of Phenom Company in range of 20  $\mu\text{m}$  for PVA/Ag<sub>2</sub>S, PVA/CdS and PVA/CuS and revealed the morphology of synthesis NPs. From figure S1 the particles of Ag<sub>2</sub>S NPs in polymer bed show a spherical shape, from figure S2 the CdS NPs and figure S3 reveals the distribution of CuS small particles in PVA polymer matrix.



**Figure S1.** PVA/Ag<sub>2</sub>S SEM image



**Figure S2.** PVA/CdS SEM image



**Figure S3.** PVA/CuS SEM image