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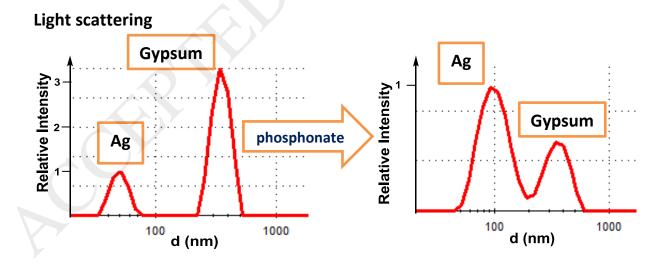
## ACCEPTED MANUSCRIPT

# A new insight into the mechanism of the scale inhibition: DLS study of gypsum nucleation in presence of phosphonates using nanosilver dispersion as an internal light scattering intensity reference

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#### Graphical abstract



#### **Abstract**

Scaling in reverse osmosis facilities, boilers, heat exchangers, evaporation plants, and oilfield applications is a serious problem worldwide. A widely used solution for controlling scale deposition is an application of chemical inhibitors. However, irrespective of the broad and a

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