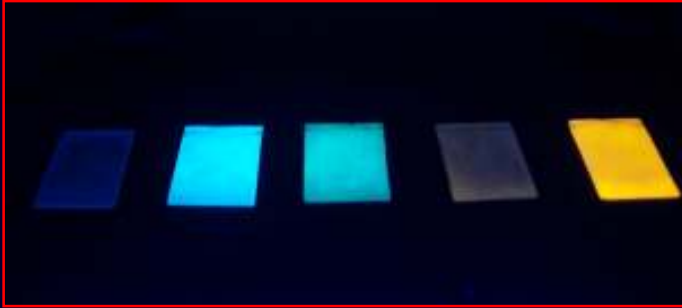


METALIC CHALCOGENIDE THIN LAYERS WITH LUMINESCENT PROPERTIES

CERES Project 28/2002-2004

Project director: dr. Elisabeth-Jeanne Popovici



Luminescent structures

$ZnS(Cu/Mn)/glass/ZnS(Cu/Mn)$ or
 $ZnS(Cu/Mn)/ITO/glass$



Results

- Tehnology for the preparation of some metallic chalcogenide thin films by chemical bath deposition
- Electrodeposition procedure for metallic chalcogenide thin films
- Papers
- **Romanian Patent Application -CBI 0497/ 2004;**

General characteristics of luminescent zinc sulfide thin films

- Optical or ITO- coated glass platelets kwith variable luminescent emission, in blue-green-yellow-orange domain;
- Film thickness 50 -400 nm
- Structures in the succession of :
 $ZnS(Cu/Mn)/ glass/ ZnS(Cu/Mn)$ or $ZnS(Cu/Mn)/ ITO/ glass/$

Application domain :

- **Solar cells;**
- **Photovoltaic devices;**
- **Electroluminescent lamps and panels;**
- **Cathode ray tubes;**
- **Display screens;**

