PREPARATION AND APPLICATION OF NEW N-COORDINATED ORGANOGALLIUM COMPOUNDS

Milasheuskaya Y.[1], Jambor R.[1], Němec P.[2], **Bouška M.[2]**

[1]*Department of General and Inorganic Chemistry, Faculty of Chemical Technology, University of Pardubice, Czech Republic*
[2]*Department of Graphic Arts and Photophysics, Faculty of Chemical Technology, University of Pardubice, Czech Republic*

Amorphous thin films based on gallium chalcogenides form are an important field for today's research and development. These materials show wide potential in the area of photonics, infrared optics, sensors, medicine, computer memories, or military applications. Amorphous chalcogenide thin films are typically fabricated by the physical vapor deposition methods. Another interesting group of materials are gallaborates which are prepared by solvo or hydrothermal procedures. Applications of gallaborates are in catalysis or ion exchange, laser technology and nonlinear optical materials.

The aim of this work is preparation and application of new N-coordinated organogallium compounds as suitable precursors for deposition of gallium chalcogenides and gallium boroxines thin films by spin coating method.

This work was funded with support from the Czech Science Foundation (Project No. 22-07635S) and Ministry of Education, Youth and Sports of the Czech Republic (LM2018103 project).