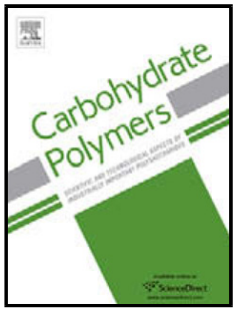


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# Cellulose-glycerol-polyvinyl alcohol composite films for food packaging: Evaluation of water adsorption, mechanical properties, light-barrier properties and transparency

Patricia Cazón[1,2], Manuel Vázquez[2], Gonzalo Velazquez[1*]

[1]Instituto Politécnico Nacional. CICATA unidad Querétaro. Cerro Blanco No. 141. Colinas del Cimatario, Querétaro, 76090, México.

[2]Department of Analytical Chemistry, Faculty of Veterinary, University of Santiago de Compostela, 27002-Lugo, Spain

*Corresponding author: gvelazquezd@ipn.mx; phone +52 (442)-229-0804 Ext 81058

## Highlights

- Natural sources to produce biodegradable films for food packaging are demanded.
- Composite films of cellulose, glycerol and polyvinyl alcohol are presented
- Polyvinyl alcohol enhances the toughness of cellulose films
- Water adsorption up to 222.09% was obtained.
- Films showed higher burst strength (up to 12014 g) than other biodegradable films.

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