

Accepted Manuscript

Title: Enhanced mechanical and thermal properties of poly (vinyl alcohol)/corn starch blends by nanoclay intercalation

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PII: S0141-8130(16)32785-4
DOI: <http://dx.doi.org/doi:10.1016/j.ijbiomac.2017.03.111>
Reference: BIOMAC 7277

To appear in: *International Journal of Biological Macromolecules*

Received date: 6-12-2016
Revised date: 8-3-2017
Accepted date: 21-3-2017

Please cite this article as: Huafeng Tian, Kai Wang, Di Liu, Jiaan Yan, Aimin Xiang, A.Varada Rajulu, Enhanced mechanical and thermal properties of poly (vinyl alcohol)/corn starch blends by nanoclay intercalation, International Journal of Biological Macromolecules <http://dx.doi.org/10.1016/j.ijbiomac.2017.03.111>

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Enhanced mechanical and thermal properties of poly (vinyl alcohol)/ corn starch blends by nanoclay intercalation

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Highlights

- PVA/starch/MMT nanocomposites were prepared by melt processing.
- Highly exfoliated MMT layers were obtained containing MMT lower than 10wt%.
- Intercalated structure was predominant with more than 10 wt% MMT.
- Water resistant properties were improved with the incorporation of MMT.
- Significant improvement in strength and flexibility were observed.
- The thermal stability was improved by MMT addition.

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