

Sustainably dyed and functionalized biobased poly (lactic acid) fibers for textile applications

Citation for published version (APA):

Balakrishnan, N. K. (2023). *Sustainably dyed and functionalized biobased poly (lactic acid) fibers for textile applications: an in-depth investigation on the effect of multifunctional colorants on the properties of PLA*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20231106nb>

Document status and date:

Published: 01/01/2023

DOI:

[10.26481/dis.20231106nb](https://doi.org/10.26481/dis.20231106nb)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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- The final published version features the final layout of the paper including the volume, issue and page numbers.

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Propositions

Food can be the best solution to both health and environment related issues, when consumed in right amounts.

Colorants not only color food and textiles but can also be used as an additive to improve polymer shortcomings.

Change in polymer properties such as molecular weight and viscosity during processing is not always bad. As long as one knows what to expect and how to control it, it can be quite useful.

Apart from academic excellence, patience and perseverance are important virtues for a PhD.

There is always support out there. One must only be willing and open enough to ask for it.

One must understand the structure-process parameter-property relation of the polymer with additives to design a stable spinning process.

Preparation and follow-up are just as important as the experiments being carried out.

The scale of experiment matters. One cannot simply plan a scale-up expecting the same behavior and complexity.

Biobased and biodegradable does not always mean sustainable. What is sustainable depends on the specific use-case scenario (circularity, GWP, Carbon Footprint).