



EXTRACTION OF NANOCELLULOSE FROM BIOMASS

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INTRODUCTION

NANOCELLULOSE IS A TERM REFERRING TO NANO-STRUCTURED CELLULOSE.

IT IS A LIGHTWEIGHT MATERIAL. IT HAS **HIGH STRENGTH & DURABILITY**.

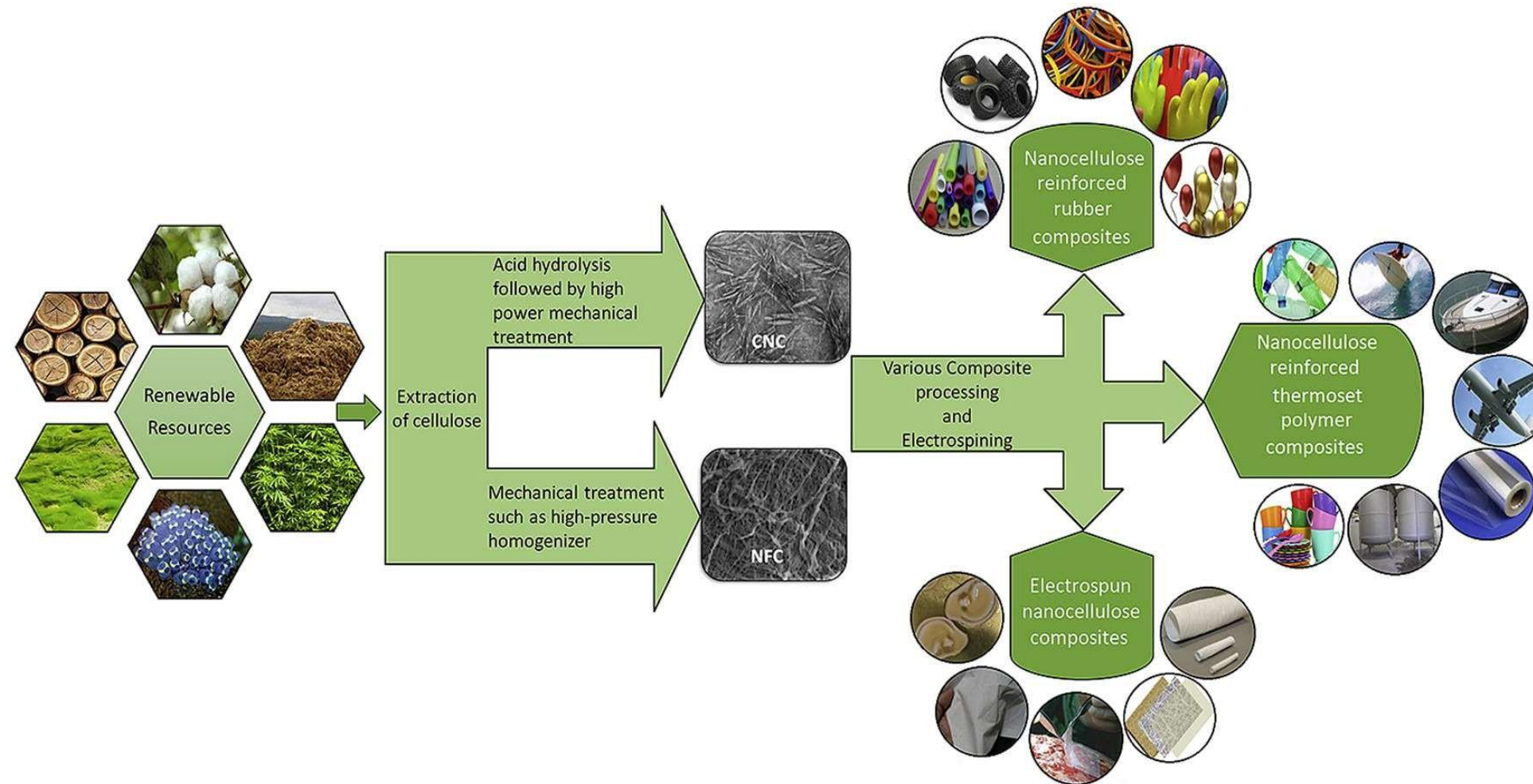
NANOCELLULOSE/CNF OR NCC CAN BE PREPARED FROM ANY CELLULOSE MATERIAL, BUT WOOD PULP IS NORMALLY USED.

NANOCELLULOSE IS COMPLETELY **RENEWABLE**.

IT CAN ALSO BE OBTAINED FROM NATIVE FIBRES BY AN ACID HYDROLYSIS, GIVING RISE TO HIGHLY CRYSTALLINE AND RIGID.

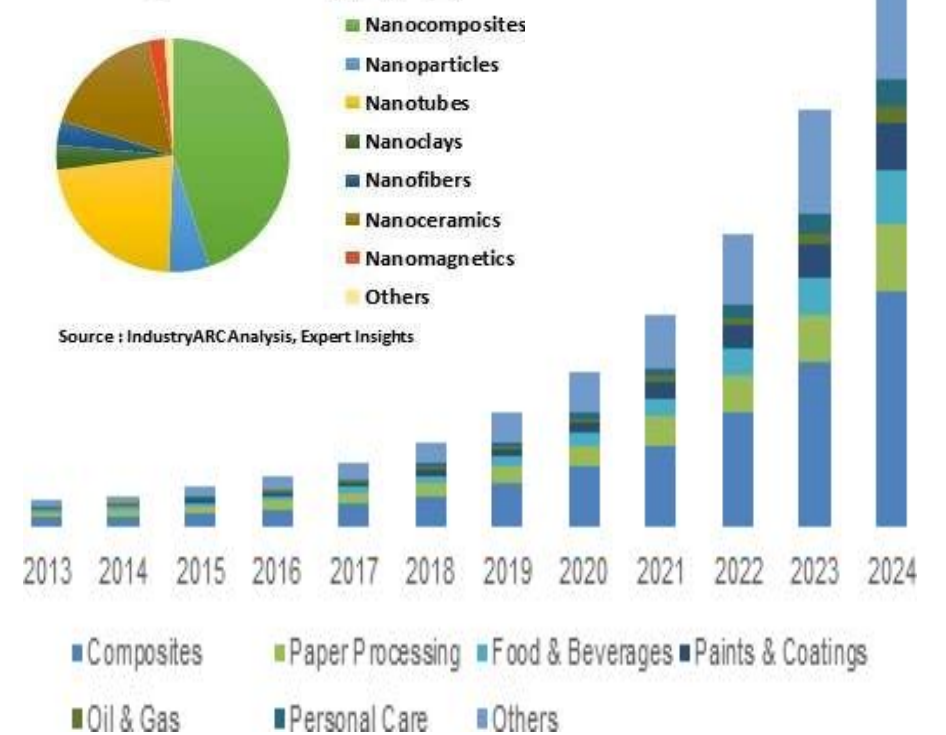
THE RESULTING MATERIAL IS KNOWN AS **NANOCRYSTALLINE CELLULOSE(NCC)**.

METHODS & APPLICATION



NANOCELLULOSE MARKET

Nanotechnology Market Revenue, By Type (%)



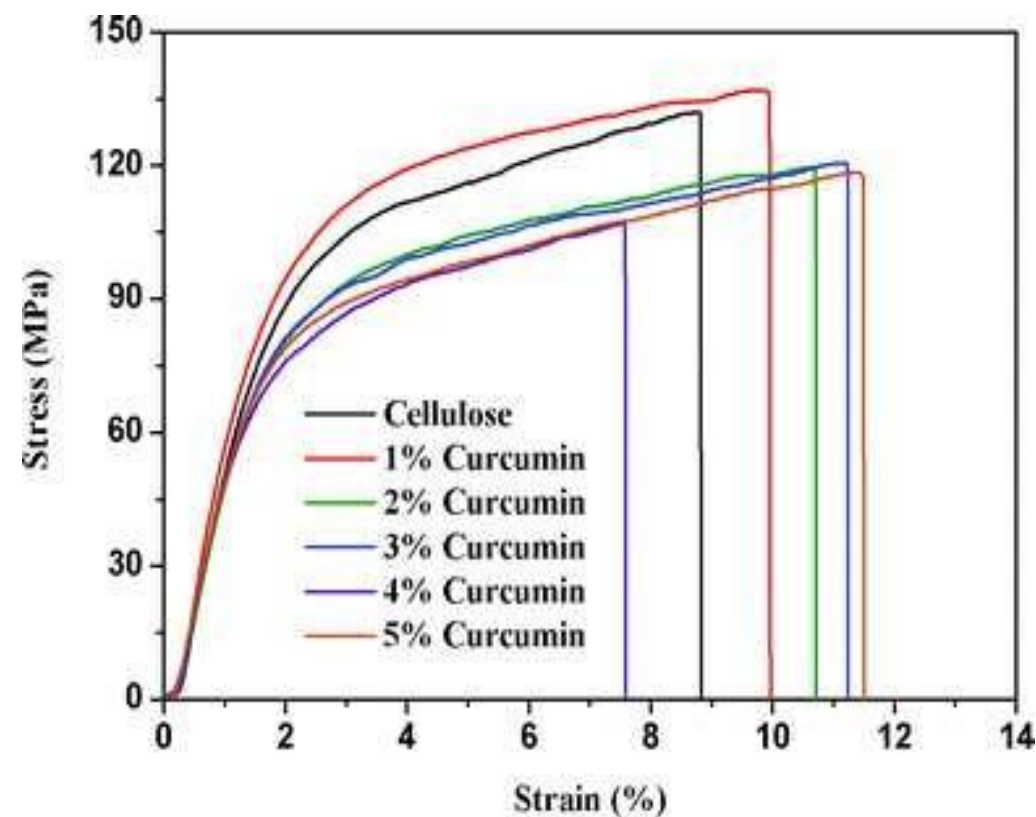
OBJECTIVES

EXTRACTION OF NANOCELLULOSE FROM WASTE BIOMASS

&

ANALYSIS OF PROPERTIES OF COMPOSITE MADE

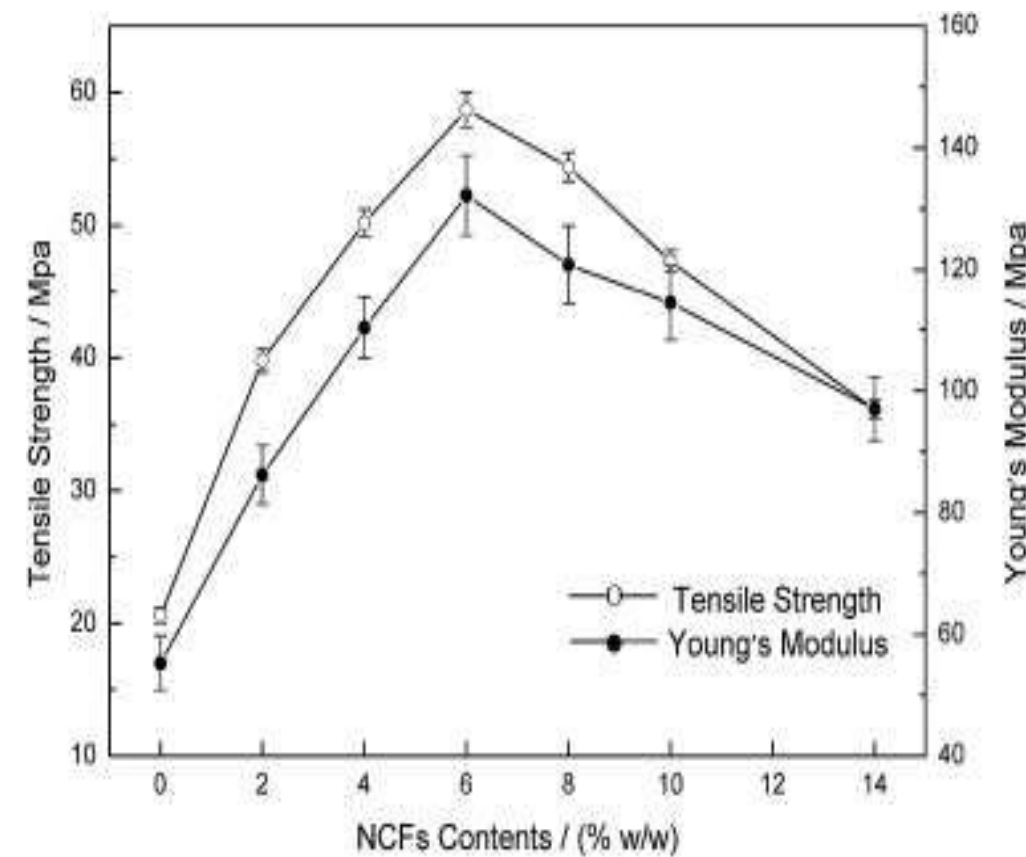
WHY NANOCELLULOSE ?



METHODOLOGY

- Literature Review
- Gaps & Finding
- Selection of Process Parameter
- Sample Collection
- Sample Preparation
- Experimental setup
- Experiment
- Result Analysis
- Conclusion

MECHANICAL PROPERTIES



EXPECTED OUTCOME

NANOCELLULOSE



ACKNOWLEDGEMENT

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