



Dr. Shaul Lapidot
Co Founder, CEO Melodea Ltd.



The Global Waste Problem

Ban on single-use plastic items approved by European Parliament [Link](#)

Canada to ban single use plastics as early as 2021 [Link](#)

Nestle is aiming at 100% recyclable or reusable packaging by 2025 [Link](#)

Tesco vows to remove one billion pieces of plastic packaging by end of 2020 [Link](#)



The Packaging Market

Size



Over Trillion US\$
Packaging industry is
on track to keep
growing (CAGR of 5%)

Need



Many packaging products require
barrier properties against oxygen,
oils, water vapor and aromas to
protect the packed products

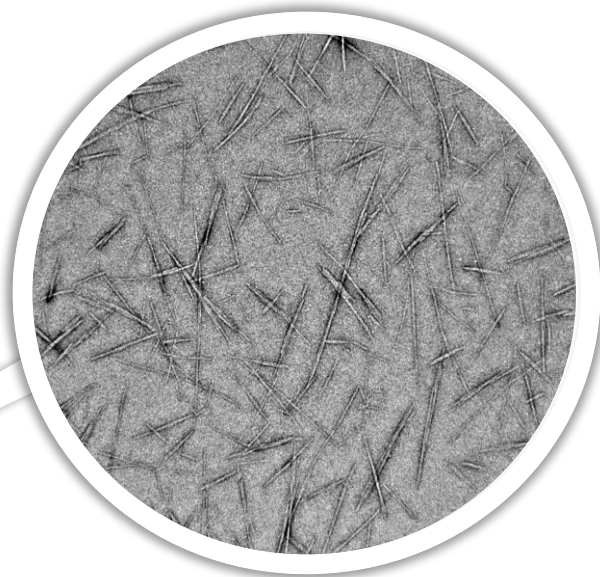
Problem



Barrier properties are achieved
by materials that are harmful to
the environment such as plastics
and aluminum foil

The Solution - Bio-Based Materials

Cellulose Nano Crystals (CNC) is emerging as one the most promising green solutions



Natural building block of all plants on earth



Strong, light weight and transparent material



Excellent for various bio-based applications

For more information please watch our Co-founder, Professor Oded Shoseyov TED talk [link](#)



Melodea
Bio Based Solutions



We operate in two main activities:

Production of CNC



Melodea's CNC plant in Arad, Israel

CNC



Barrier coatings for packaging



Next generation applications

- ✓ 3D Printing
- ✓ Paint Additives
- ✓ Fiber & textile
- ✓ Printed electronics
- ✓ Led lights
- ✓ Films and composites



Target Markets

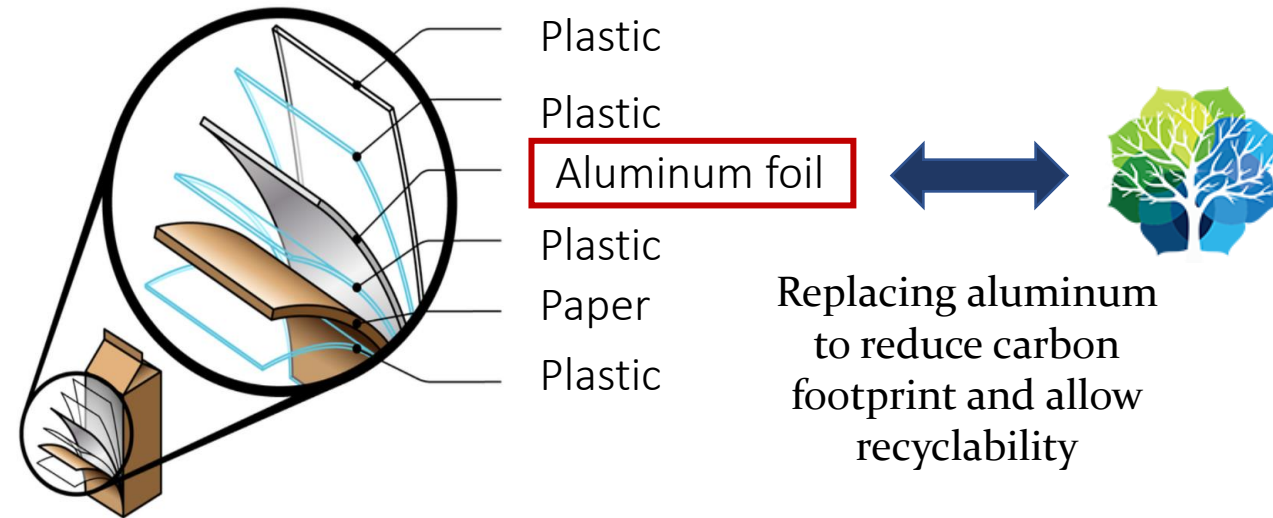
We have developed a CNC based barrier coating for:

High barrier films for flexible packaging



High Barrier
Paper Based
Packaging

Liquid packaging carton packs



Our Product - Barrier Coatings for Packaging

Sustainable
alternative



Compostable



Biodegradable



Recyclable

High performance barrier
properties in high
humidity conditions



Oxygen

<1 cc/(m²·day) @70% RH



Oil & grease

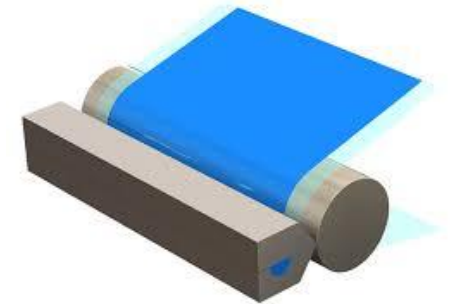
3M Kit value of 12



Water Vapor

Substrate dependent

Can be integrated into
existing coating lines and
applied on different substrates



Melodea
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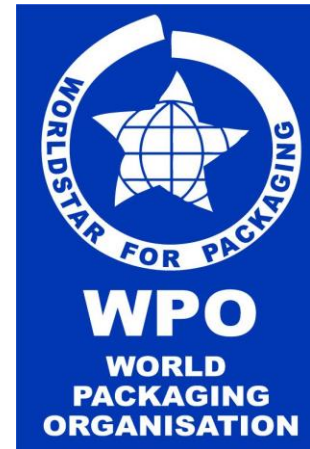
Award Winning Technology

Packaging Europe, #FachPack2019



Dr. Clarite Azerraf our CTO

#Interpack2020



**WORLDSTAR
WINNER 2020**

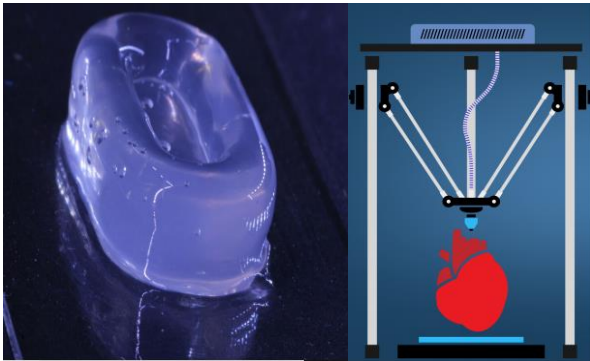




Next Generation Applications

3D Printing

Printing & Bio-printing
of CNC and CNC
containing formulations



Paint additives

Scratch & Abrasion
resistance and rheology
modifier



Fiber & textile

Enhancement of mechanical
properties and fixation of dyes,
pigments and active materials



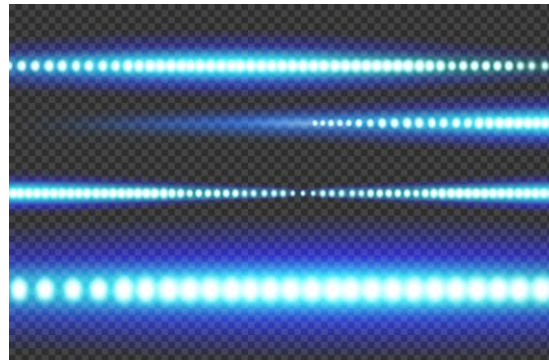
Printed electronics

CNC based conductive
components



Led lights

Protection and lifetime
expansion of led lights



Films & Composites

Bio-based flexible films and
foams



Business Plan

Revenues from



- Selling our barrier coatings to packaging and paper manufacturers
- Licensing CNC production technology to build plants globally

Partnerships



- Commercial agreements with companies across the packaging industry value chain
- Strategic partnerships for next generation applications (3D printing, printed electronics, led lights, textile, composites, etc.)

Capital Investment



- Use of proceeds: marketing & sales, human resources, R&D and increasing our production capacity



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