



# Hydroxymethylfurfural (HMF) from organic residues

Paul Körner



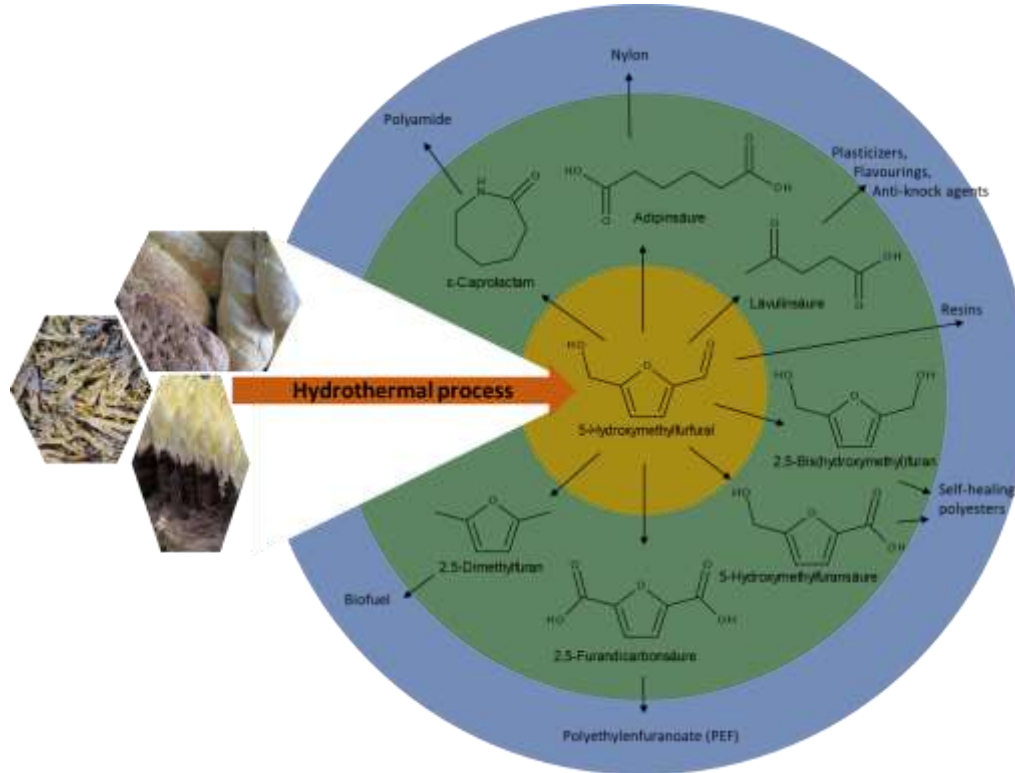
## Fossil Resources



## Organic residues



Department Conversion Technologies of Biobased Resources



**HMF = platform chemical  
= formed by the  
dehydration of  
hexoses (carbohydrates)**



Department Conversion Technologies of Biobased Resources

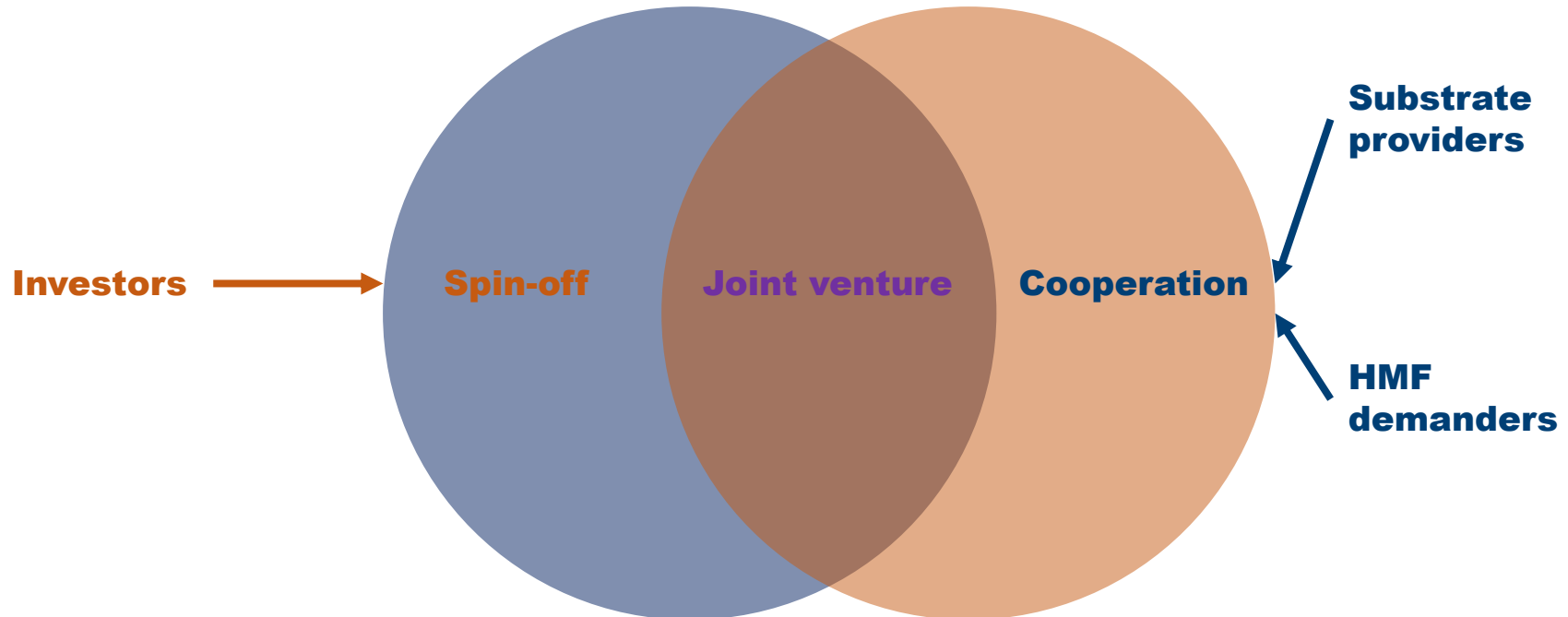


**“Nylon from Chicory”**



**Research station “Unterer Lindenhof”  
location of Biorefinery Technikum**

## Our aims and needs



## The team



### Our competences:

- **Platform chemicals**
  - HMF
  - Phenols
  - Furfural
- **Hydrothermal carbonisation (HTC)**
  - Hydrochar
  - Activated char
  - Electrodes for supercapacitors
  - Direct carbon fuel cells
- **Pyrolysis**
- **Nutrient recycling**
  - Phosphate from sewage sludge or manure
- **Extraction processes**
  - Valuable products from algae