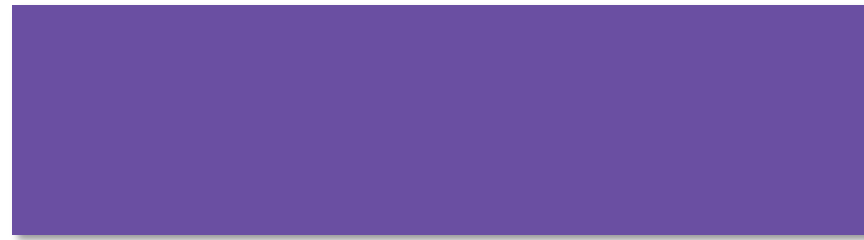


# **P**ACKAGING **T**ECHNOLOGY & **R**ESEARCH

**WHO WE ARE**  
**WHAT WE DO**  
**HOW WE DO IT**



# ABOUT PTR

## Dr. Claire Sand



**Owner**  **PACKAGING  
Technology  
& Research**

**Adjunct Professor**



**Monthly Columnist**



### Current Leadership



CoChair  
Consortium on  
Food Waste



**SUSTAINABLE PACKAGING  
COALITION®** Advisor  
Food Waste  
Repackaged



Executive  
Board



Reviewer  
National Science Foundation

### Recent Awards



Riester-Davis-Brody  
Food Packaging  
Lifetime Achievement Award



IFT Fellow

### Current Editorial Boards



Associate Editor



Editorial Board



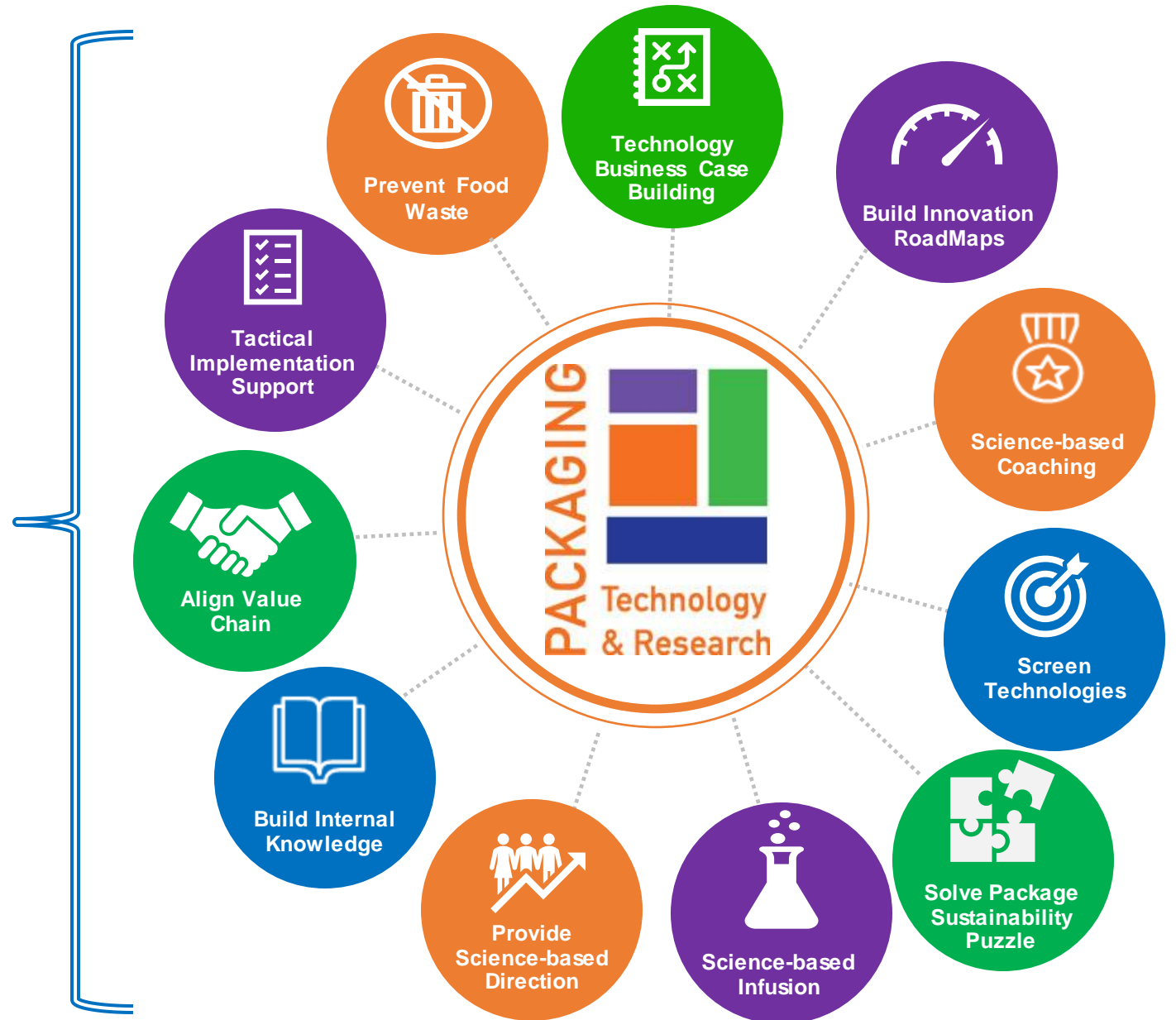
Editorial Board

- Claire Sand is a Global Packaging Leader with 35+ years of broad experience in the food and packaging science spectrum in industry - from basic research to marketing - and in academia - tenured professor and director.
- Sand's mission is to enable a more sustainable food system with science and value chain innovations that more sustainably increases food shelf life and prevents food waste.
- She solves packaging and food industry challenges using a blend of packaging and food science and value-chain expertise.
- Dr. Sand holds a PhD in Food Science and Nutrition from the University of Minnesota and MS and BS in Packaging from Michigan State University.

# ABOUT PTR

## What we do

Provide tailored packaging  
**science & value chain**  
solutions to the  
**food & packaging industry**







# PTR's WORLD

## Realizing the future of food packaging



Our solutions align with  
our future

# PTR's SAVE FOOD BLUEPRINT SOLUTIONS

## How to Gain Consumers with Packaging that Saves Food



### Select Product for Focus

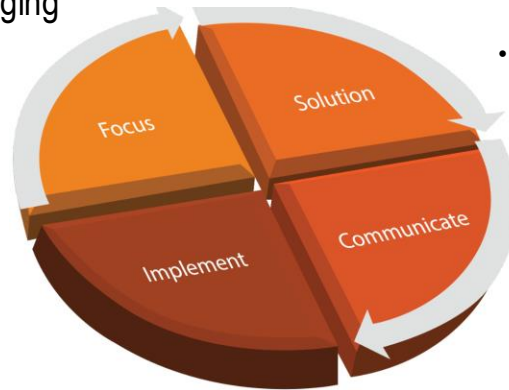
PTR pinpoints products that both offer viable packaging alternatives and where meaningful consumer food waste reduction is possible

- Quantify the **actual food waste consumers** experience when using your products and consumer opinion on this food waste
- **Process** data using AI and 35+ years of experience in food packaging
- **Rank** products in order of the highest food waste reduction opportunities with the most meaning to consumers

### Implement Packaging that Saves Food

PTR implements the solutions that meet brand operational needs and reinforce the value chain

- **Build** relationship with solution provider and Brand
- Support internal marketing and packaging to **refine messaging** to consumers
- **Connect value chain efforts** to support food waste prevention and balance costs and benefits



### Identify Packaging Solutions

PTR selects and refines packaging solutions to prevent food waste

- Identify the **mode of food deterioration** and viable food waste reduction packaging solutions
- Rank **packaging solutions** based on IP, internal Brand drivers (agility, increased shelf life), external value chain elements
- **Pinpoint 2-3 specific options** that align and internal drivers and key value chain elements for support

### Define Communication and Value for Consumer

PTR determines consumer communication for solutions

- **Quantify** consumer food waste using 2-3 packaging solution options
- **Determine** consumer views on semiotic and symbols, shapes, text, package size, shape, texture and Willingness to Pay (W2P) for 2-3 packaging solutions to prevent food waste
- Refine **communication with consumers** for the top solutions
- Assess how to **sway consumer to packaging with less** food waste vs other Brands

# ABOUT PTR

## Selected Clients



### Food Industry



### Packaging Industry



### Associations



Agricultural Utilization Research Institute



# ABOUT PTR

## Our Services – 4 areas



### Strategy Consulting

- Value Chain & Technology Roadmaps
- Directed Market & Science Alignment
- Increase Packaging Platform Sustainability
- Reduced Food Waste

**CLIENTS:** PACKAGING AND FOOD COMPANIES AND ASSOCIATIONS

### Technical Consulting

- Technology Development
- Cost Reductions
- More Sustainable Packaging solutions
- Food Waste reduction

**CLIENTS:** PACKAGING AND FOOD COMPANIES

### Technology Evaluations

- Ecommerce
- Migration
- Consumer Research on Sustainability
- Intelligent Packaging
- More Sustainable Packaging
- Global Research Institutes

**CLIENTS:** PACKAGING AND FOOD COMPANIES

### Expert Witness

- Food packaging expert report, deposition, and trial support

**CLIENTS:** LEGAL FIRMS



# Questions?

# ask Claire



## Dr. Claire Sand

Owner



Adjunct Professor



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Monthly Columnist



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