## Process Scale Up Workshop

**November 6-7th, 2023**

Coffman Memorial Union  
300 Washington Ave SE, Minneapolis, MN 55455  
Great Hall

### Monday, November 6th, 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 – 9:00 am</td>
<td>Breakfast &amp; Registration</td>
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</table>
| 9:00 – 9:35   | **Opening Remarks**  
Pam Ismail, Professor and PPIC Director and Founder, University of Minnesota |
| 9:40 – 10:15  | **Keynote Speaker:**  
*Scaling: How Different Organizations See the Challenge*  
Kip Underwood, CEO, Burcon NutraScience Co. |
| 10:15 – 10:50 | **BREAK & NETWORKING SESSION**                                      |
| 10:55 – 11:20 | **Piloting Operations to Commercial Feasibility for Alternative Proteins**  
Mat Koppang, Technical Sales Manager, Crown Iron Works |
| 11:25 – 11:50 | **Scaling Supercritical Carbon Dioxide Extraction for Plant De-oiling and Protein Purification**  
Lalit Chordia, Founder, Thar Process Inc |
| 11:55 am – 12:20 pm| **Process Efficiency in Second Generation of Pulse Protein Concentrates**  
Denis Chéreau, General Manager & Founder, IMPROVE SAS |
| 12:20 – 1:20  | **LUNCH**                                                           |
| 1:25 – 1:50   | **Harnessing Filtration Technology for Sustainable Down Stream Processing Solutions**  
Elizabeth Teigland, Application Sales Manager, Tetra Pak |
| 1:55 – 2:20   | **Thermal Heat Treatments for Protein Modification**  
Andy Christensen, Business Development Representative, Bepex |
| 2:25 – 2:50   | **Mastering the Art of Enzyme Scale-Up:**  
*A Roadmap for Enzyme Discovery and Food Innovation*  
Nicholas Broches, Food Application Scientist, Amano Enzyme USA |
| 2:50 – 3:25   | **BREAK & NETWORKING SESSION**                                      |
| 3:30 – 3:55   | **Introduction to the Production and Application of Enzymes for Plant-based Foods**  
James Chapa, Scientist, Novozymes |
| 4:00 – 4:25   | **Fermentation Scale Up Overview - Idea to Facility**  
Matt Tom, Founder & President, MTCC |
| 4:30 – 4:55   | **Designing & Building a Precision Fermentation Facility for Alternative Proteins**  
Derik Ward, Sr. Director of Project Engineering, Liberation Labs |
| 6:30 – 8:00   | **NETWORKING DINNER**  
Courtyard Marriott Minneapolis Downtown, 1500 Washington Avenue South |
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### Tuesday, November 7th, 2023

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<tbody>
<tr>
<td>8:00 – 9:00 am</td>
<td>Breakfast</td>
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<td>9:05 – 9:30</td>
<td><strong>Breakfast</strong></td>
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<tr>
<td>9:35 – 10:00</td>
<td><strong>From Prototype to Production – Scalable Technologies for Protein Texturization</strong> Volker Lammers, Platform Manager, DIL</td>
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<td>9:35 – 10:00</td>
<td><strong>Techno-economic Analyses of Large-Scale Alternative Protein Production Facilities</strong> Karen McDonald, Professor Emerita, UC Davis</td>
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<td>10:05 – 10:30</td>
<td><strong>Basics of LCA: What You Need to Know</strong> Bryce J. Weinand, Climate Solutions Subject Matter Lead, Black &amp; Veatch</td>
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<td>10:35 – 11:00</td>
<td><strong>How to Save Millions and Have No Emissions from Your Processing Line</strong> Christine Lewington, Founder &amp; CEO, PIP International Inc.</td>
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<td>11:00 – 11:35</td>
<td><strong>BREAK &amp; NETWORKING SESSION</strong></td>
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<tr>
<td>11:40 – 12:40</td>
<td><strong>Panel Discussion</strong></td>
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<tr>
<td>12:40 – 12:45 pm</td>
<td><strong>Closing Remarks</strong></td>
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<td><strong>Boxed Lunch</strong></td>
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**From Prototype to Production – Scalable Technologies for Protein Texturization**
Volker Lammers, Platform Manager, DIL

**Techno-economic Analyses of Large-Scale Alternative Protein Production Facilities**
Karen McDonald, Professor Emerita, UC Davis

**Basics of LCA: What You Need to Know**
Bryce J. Weinand, Climate Solutions Subject Matter Lead, Black & Veatch

**How to Save Millions and Have No Emissions from Your Processing Line**
Christine Lewington, Founder & CEO, PIP International Inc.

**Panel Discussion**
Kushal Chandak, VP of R&D, PURIS
Justin Shimek, CEO and Chief Technology Officer, Mattson
Kip Underwood, CEO, Burcon NutraScience Corporation
Dilek Uzunalioglu, Senior Director, Food Discovery & Design, Motif FoodWorks
Jamie Valenti-Jordan, CFS, CEO, Catapult Commercialization Services Inc

**Closing Remarks**
Pam Ismail, Professor and PPIC Director and Founder, University of Minnesota

**Boxed Lunch**