

Xampla

Experts in Drop-In High Performance Natural Polymer Materials





Xampla – a Cambridge University spin-out



Breakthrough science

- Founded in 2018
- Spin-out from the University of Cambridge Chemistry Dept
- Over 15 years of research
- 15 patents filed
- R&D team with 11 PhDs and leading academic experts in field of materials science, protein science, encapsulation and biomaterials.



Industry expertise

- 42 employees, some with Xampla since its inception
- Breadth of experience recruited from leading companies: Unilever, P&G, Britvic, Johnson Matthey, Hexcel, Arm, MoD
- Diverse and inclusive team: 43% female, representation from UK, Europe, Asia and the Americas from 10 different countries

2 CONFIDENTIAL

Business ready to deliver commercial revenues from 2024

- Strengthened senior leadership team with new CEO and CFO; bringing in expertise to position Xampla for rapid commercialisation and growth
- Licence partnership agreement signed with 2M Group of Companies which will ۲ deliver commercial revenues in 2024

Launch of consumer brand, Morro, to strengthen market position both B2B and

- Xampla 2023 highlights

3

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Xampla



Xampla leadership team



Alexandra French CEO

Alexandra joined Xampla in 2023. She is an experienced chemist with a degree in Natural Sciences from the University of Cambridge. She brings extensive global experience from 25 years at Johnson Matthey, and CEO of AIM listed business, Titon Holdings.



Marc Rodriguez Garcia CTO

Marc is Xampla's co-founder and leads Xampla's technical development, having developed the technology with Professor Knowles at the University of Cambridge. He received his PhD from the University of Glasgow and his expertise lies in the use of natural biopolymers in microencapsulation and other structured materials.



Dan Hawksley CFO

Dan joined Xampla in 2023. Originally a chemist, Dan retrained as an accountant with Deloitte before moving on to work for a variety of companies including venture capital firm, Amadeus Capital Partners and systematic hedge fund, Cantab Capital Partners.



Xampla leadership team



Stanley Mitchell Head of Business Development

Stanley brings a wealth of experience in working with multinational corporations across a range of sectors including healthcare, FMCG, oil and gas, and aerospace.



Sabina Burmester Head of Engineering

Sabina brings nearly 30 years of experience, working on the development and manufacturing of innovative materials for commercial goods.



Scott Thompson Head of R&D

Scott brings over 10 years experience in leading R&D of novel technologies. He has a PhD in Polymer Chemistry and extensive experience of developing and scaling advanced polymer materials at Hexcel.



Amy Charbonneau Head of Operations

Amy joined Xampla as one of the first employees from Better Origin, who turn food waste into animal feed. Amy gained her PhD at University of Cambridge in microbiology.



Katrina Curl Head of Marketing & Communications

Katrina brings experience across tech, FMCG and retail and has delivered award-winning marketing campaigns for brands including Unilever and Britvic.



Lynette Holland Principal Scientist

Lynette brings 20 years experience at Procter & Gamble in R&D and over 30 patent filings. She is a Chartered Chemical Engineer and a Fellow of the Royal Society of Chemistry.



Faye Haddadi-Tehranian Head of HR

Faye gained experience working for small cells company, ip.access, followed by Mavenir. Faye has an Advanced Diploma in Strategic People Management.



Zoe Rose General Counsel

Zoe spent 18 years working at Arm, initially in IP licensing. Later she specialised in incubating new business lines and integrating acquisitions for a range of technologies.



Xampla Board



Pete Hutton Chairman

Pete Hutton is Chairman of Xampla, and an Angel investor and Advisor for several startups and scale-ups in Cambridge, Edinburgh, London, and Oxford. His previous full-time role was President of Product Groups at Arm.



Tuomas Knowles Scientific Advisor

Professor Tuomas Knowles is the co-founder of Xampla. He has has received a number of distinguished awards, including the Corday-Morgan Prize from the Royal Society of Chemistry and the Raymond and Beverly Sackler International Prize in Biophysics.



Amelia Armour

Amelia Armour is a Partner at Amadeus Capital Partners and is a board member of several deep tech businesses including Paragraf and Riverlane.



Bart Swanson

Bart Swanson is an Advisor at Horizons Ventures, the private investment fund of Solina Chau. He is a board member of multiple disruptive technology businesses including Zoom and Impossible Foods.



Elaine Loukes

Elaine Loukes is Investment Director at Cambridge Enterprise, and has a 20 year track record in venture capital.



Our core technology

Xampla develops high-performance natural polymer materials which are without chemical modification, fully biodegradable, drop-in replacement for the most polluting plastics





Xampla technology has superior biodegradability

	Commodity Plastics	Bio-PP Bio-PE Bio-PET	PLFs	PLA	PBAT	Starch Blends	PHA	Xampla - Morro Materials
Industrial Composting	•	•	•	•	•	•	•	•
Home Composting	•	•	•	•	•	•	٠	•
Soil	•	•	•	•	•	•	•	•
Fresh Water	•	•	•	•	•	•	•	•
Marine Water	•	•	•	•	•	•	•	•
Landfill	•	•	•	•	•	•	•	٠
Single Use Plastic directive compliant	•	•	•	•	•	•	•	•



1st product line – Coatings

Cardboard/Paper coatings

- Protein-based coating to provide grease, oxygen and water barrier for takeaway food boxes, and Home Care & Personal Care packaging
- Compliant with EU Single Use Plastic Directive
- · Fully compatible with paper recycling
- Joint projects with supply chain to replace competition at significant end customers
- Coating characteristics:
 - Aqueous or solvent-based dispersions
 - Compatible with rollercoat, gravure and spray coating
 - Suitable for food-contact applications
 - Provides high grease barrier (up to Kit 12+)
 - Provides good water barrier properties (Cobb60 <3 g/m2)
 - Additional novel properties





Signed licence agreement with 2M Group of Companies

- Licence partnership signed November 2023 to scale up production of resin for Morro coatings (and microcapsules) to tonnes/day scale
- Will deliver commercial revenues in 2024
- 2M production facility located in Milton Keynes, UK
- First licence partner for UK and Europe customers
- Launch applications are coatings on food service packaging
- Established value chain and proven drop-in technology with kms coated paper and thousands of boxes produced in trials on existing production equipment
- Focus in 2024 on establishing similar resin and coatings partners in Asia and N America













Other product lines

Microcapsules

Driven by:

- ECHA's microplastic ban
- Demand for novel functionality in food and beauty

Providing:

- Stabilisation of sensitive actives (volatiles, UV sensitive ingredients)
- Targeted/enteric release
- Controllable release profile (burst vs steady)
- Flavour masking





BRITVIČ

Soluble films

Driven by:

- Single use plastics ban
- Increased scrutiny of PVOH
- Demand for novel product formats

Providing:

- Films of variable solubility
- Heat and solvent seal materials
- Edible packaging or an alternative to PVOH





IP portfolio

PLANT BASED FUNCTIONAL MATERIALS WO 2020/177881 & WO 2020/178448								
PLANT PROTEIN-BASED MICROCAPSULES WO 2022/053553	PROTEIN DISPERSIONS WO 2002/053555							
FRAGRANCE MICROCAPSULES WO 2023/170158	PLANT PROTEIN FILMS WO 2023/079112 & WO 2023/079115							
DISPERSION SPRAY DRYING WO 2023/170156	DISPERSION EMULSIONS WO 2023/170176	New patent filed						
New patent filed (x2)	New patent	t filed						