Food Processing Technology

LUT Kouvola

EXPERTISE IN FOOD PROCESSING TECHNOLOGY
Department of Separation Science

CORE TEAM AT LUT KOUVOLA

Assistant Prof. Samuel B. Perez Vega
- Food engineering
- Design, evaluation and implementation of sustainable process systems

Post-doc Marjo Pöysä
- Food sciences and analysis

Post-doc Abayneh Demesa
- Bioprocessing

Project Eng. Ville Hamara
- Foodtech laboratories

Development Manager, Matti Lampinen
- RDI actions, external collaboration

Junior researchers: Savindi Wanninayake Unnahalage, Rahul Biswas, Anh Hoang, Okba Guedri

COMPLEMENTARY EXPERTISE

Prof. Mika Mänttäri
- Membrane technology

Prof. Tuomas Koiranen
- Ultrasound treatment

Prof. Tuomo Sainio
- Chromatographic separation

Assoc. Prof. Teemu Kinnarinen
- Solid-liquid separation

Assoc. Prof. Ikenna Anugwom
- Biorefineries

MASTER’S PROGRAMME IN FOOD PROCESSING TECHNOLOGY

- The Master's Programme in Food Processing Technology is a two-year programme.
- Blended learning at Kouvola Regional Unit
- The programme leads to the degree of Master of Science in Technology, M.Sc. (Tech.), which is 120 ECTS credits.
- Approx. 20-30 students intake annually. The programme started in autumn 2024.
- For applicants having completed or about to complete their Bachelor's degree in Finland or anywhere worldwide.
- The Master’s Programme in Food Processing Technology focuses on processing technologies and unit processes used in food manufacturing.


Koulutus

Kouvola on elintarvikealan koulutuksen jättiläinen – nyt kaupungissa aloittivat uudet maisteriopiskelijat

Ensimmäiset opiskelijat perehtyvät muun muassa prosessi- ja tuotekehitykseen.

Lähde: Yle

MASTER´S PROGRAMME IN FOOD PROCESSING TECHNOLOGY

Core studies	Specialisation Studies to Food Process Engineering	Alternative Specialisation Studies
Obligatory, 8-10 ECTS	**Obligatory, 80 ECTS**	**10-35 ECTS, select min 10 ECTS**
Orientation to M.Sc. Studies (1)	Introduction to Food Processing Technologies (5)*	Current Issues in Enabling Technologies for Circular Economy (5)
Laboratory Safety Course (1)	Instrumental Food Analysis (5)*	Biological Waste Water Treatment (5)
Introduction to Food Sector (1)*	Industrial Solid-Liquid Separation (5)	Precipitation, Crystallization … Methods in Water Treatment (5)
Research Methodology (5)	Membrane Technology in Biorefining and Food Technology (5)	Process intensification (5)
Work Experience in Master's Degree (2)	Adsorption Separations in Biorefining and Food Processing (5)	Development of New Sustainable Products and Solutions (5)
	Fluid dynamics in chemical engineering (5)	Academic writing (3)
	Bioprocessing and Microbiology in Food and Biomaterials (5)*	
	Modelling and Simulation of Food Processes (5)*	**Elective studies, credits to complete degree (120 ECTS, 2 years)**
	Project course in Food Technology (10)*	Include freely selected courses from any discipline at LUT
	Master's Thesis and Seminar (30)	

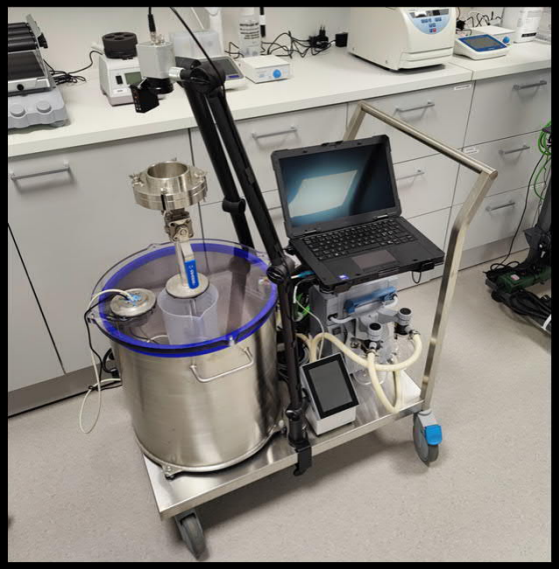
SYSTEMIC FOOD PROCESSING (SFP)

- Resarch areas
- Processing and Separation Technologies
- Raw Materials and Functionality
- Sustainability and Environmental Impact

KEKE-project - LUT FoodTech

- Investments & RDI
- Solid/liquid separation equipment
- Chromatographic separation equipment

- RDI
- Ultrasound assisted processing



Euroopan unionin osarahoittama

KYMEN LAAKSON LIITTO

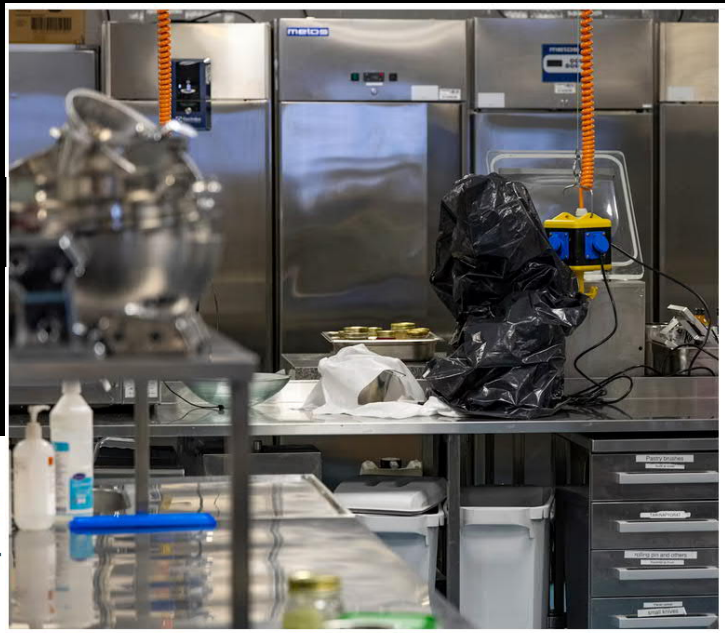
FROM RESEARCH TO BUSINESS – ULTRASOUND BASED TASTE RELISHES TO RESTAURANT KITCHEN

Ruoka

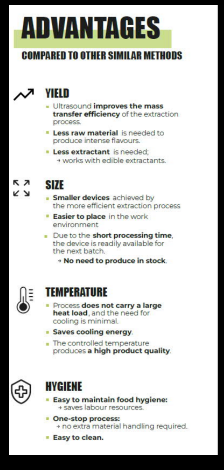
Lappeenrannassa keksittiin laite, jolla limoncello-likööorikin valmistuu kymmenessä minuutissa

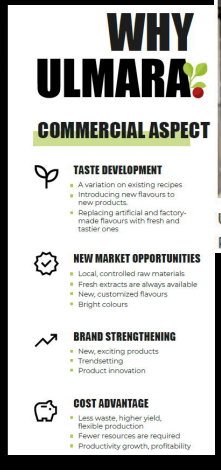
Ultraääntä käyttävä uuttolaite nopeuttaa esimerkiksi yrttiöljyn ja likööorin valmistusta.

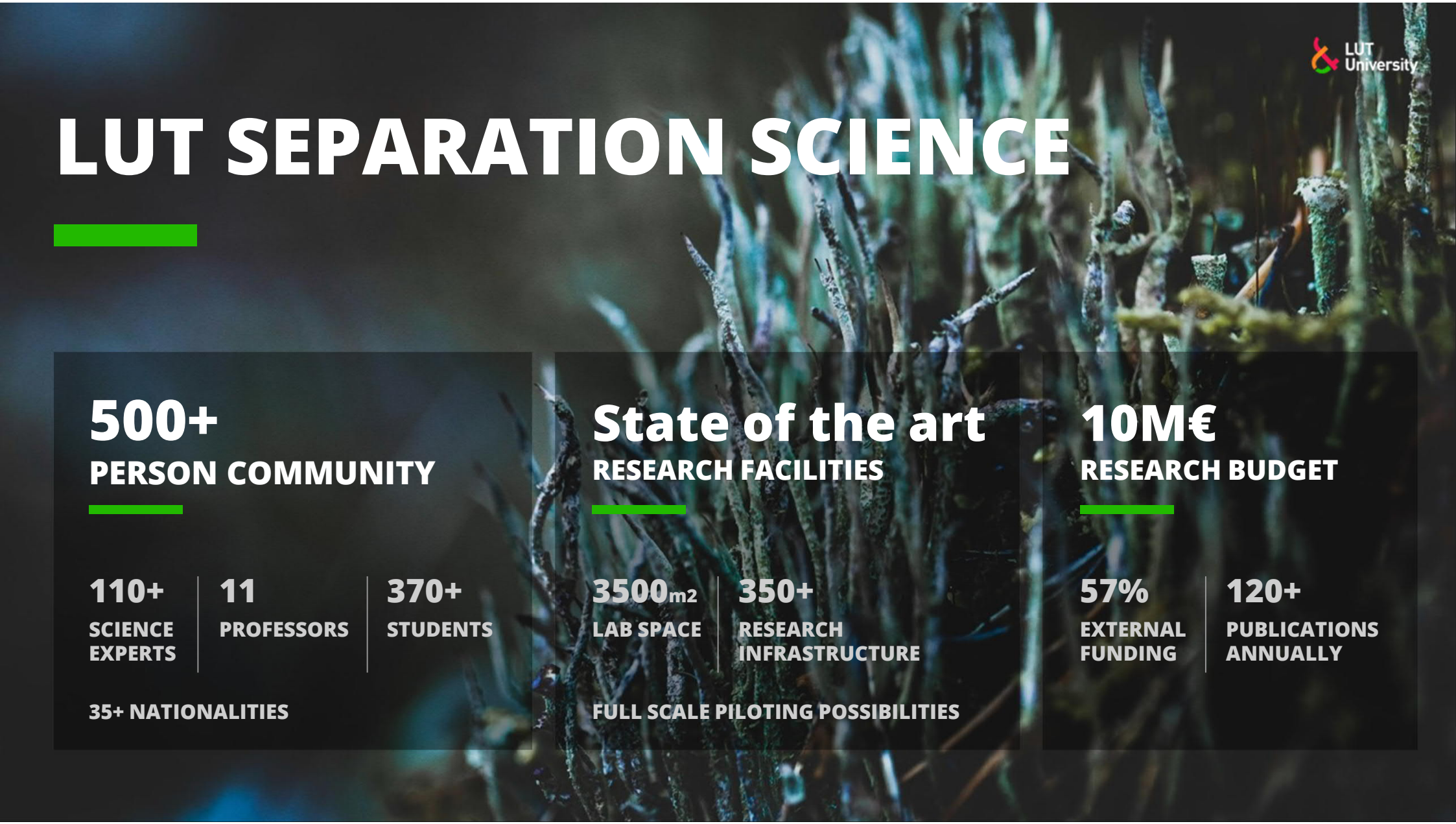
Lähde: Yle



Uuttolaite oli tiistaina piilossa medialta, sillä laitetta ei ole vielä patentoitu. Kuva: Kalle Purhonen / Yle






LUT University
LUT SEPARATION SCIENCE
500+
PERSON COMMUNITY
110+
SCIENCE EXPERTS
11
PROFESSORS
370+
STUDENTS
35+ NATIONALITIES
State of the art
RESEARCH FACILITIES
3500m2
LAB SPACE
350+
RESEARCH INFRASTRUCTURE
FULL SCALE PILOTING POSSIBILITIES
10M€
RESEARCH BUDGET
57%
EXTERNAL FUNDING
120+
PUBLICATIONS ANNUALLY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