



Linking Industry to Neutrons and X-rays

**An innovative approach
to industry research**

Analytical Research for Industry – State-of-the-Art in Europe

Lesson - Innovation does not happen over night

Basic research

... new discoveries, new potential applications
university driven

The industry follows progress with interest

Transformation to applied science

... universities are conceptualizing potential application

The industry supports the development

Initial implementation of applications

... partnership between universities and industry

The industry partake in active pilot use on selected projects

Applied technology

... a generally applied technology used by industry in the development of new drug candidates using own instruments

Universities

Industry

Time

Purpose

The LINX Association is a triple helix setup consisting of industry, government and universities.

LINX is a focal point for creating commercial value through innovative material science solutions based on advanced neutron & x-ray technology in collaboration with facilities, such as MAX IV, ESS and XFEL.

LINX shall develop and mature an industry portal for Danish companies to improve their R&D capability by exploiting the potential of advanced neutron and X-ray techniques.



The Association LINX

- Partners:
 - 15 Industry partners
 - 3 Universities
 - 2 Danish Regions
 - Danish Industry (DI)
- Work place:
 - DI House
- Budget:
 - EUR 12 M
- Sponsor:
 - Danish Innovation Fund



LINX Structure

LINX Association

Board

Director

Administration and Management

LINX
Projects

LINX
Academy

LINX Portal

LINX
Facilities

Outreach

Global Development Projects

LINX Projects

Currently 11 projects decided by the industry within 6 focus areas:

- Colloid materials
- Drug discovery, protein based pharmaceuticals & protein engineering
- Sorption of liquids and humidity
- Fibre structure and dynamics
- Materials at operating and processing conditions
- Quality assurance

Outreach and development of new methods

LINX Academy

Based on Requirement & Needs analysis

- Classroom training with tailored syllabus
- Computer Based Training for advanced neutron & x-ray technologies and/or methods
- Hands-on training at universities and big-scale facilities
- Insourcing of industry resources to the LINX organisation across projects and universities
- Workshops on bespoke and prioritised subjects
- Shared or pooled Ph.D. students

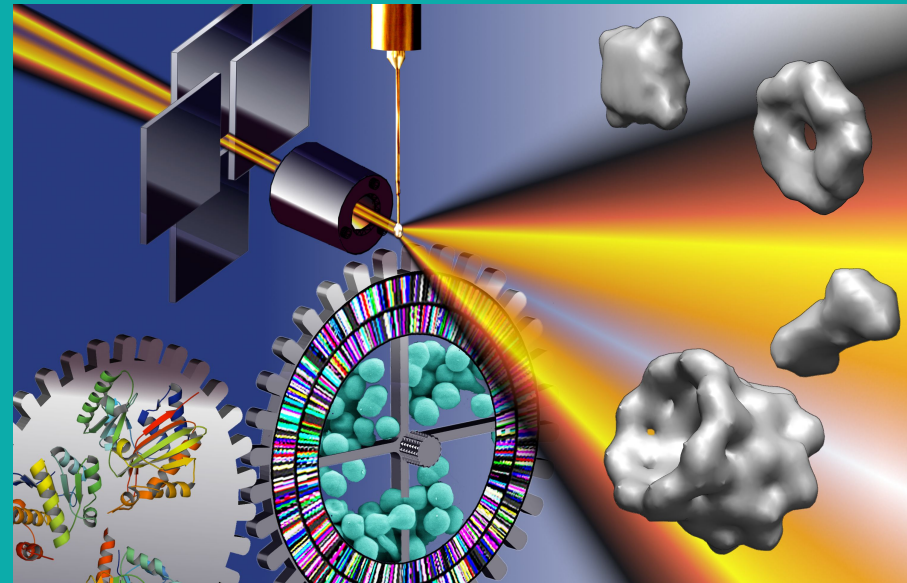
LINX Portal

Information management

- Current articles
- Video and sound clips
- Contacts to experts
- Methodology
- Preparation
- Validation

Tools for:

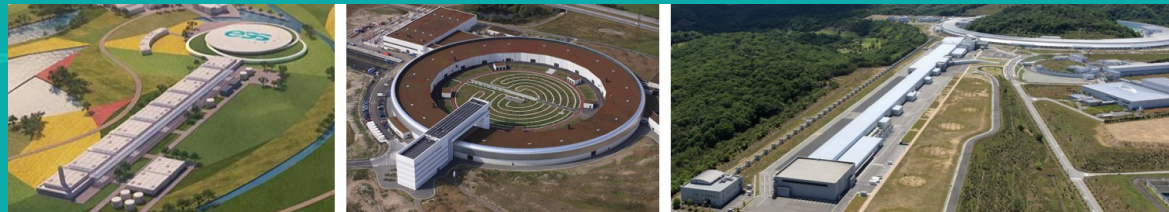
- Simulation
- Modelling
- Visualisation



LINX Facilities

LINX Facilities will support and coordinate access and use of facilities within different categories:

- Big scale facilities (MAX IV, ESS, XFEL, CERN, etc.)
- Small scale facilities at the universities
- Facilities available in industry, primarily with LINX members
- LINX facilities: offices, meetings, workshops, courses



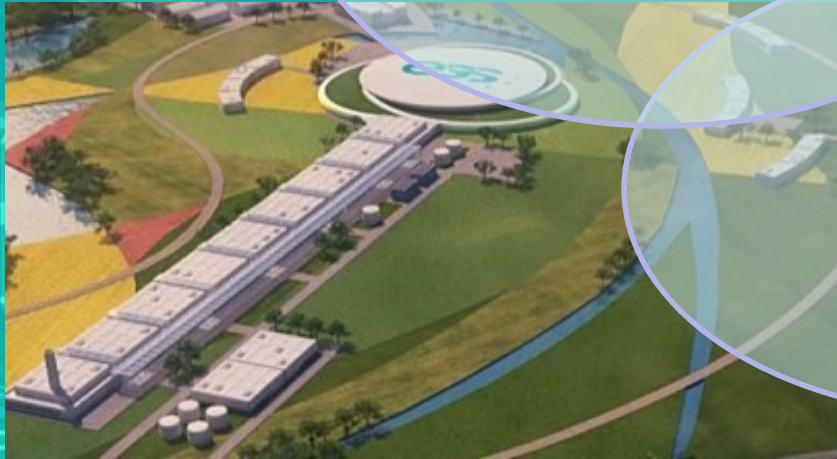
LINX will ease and enable the use of facilities for all members so resources, value and quality is at the highest possible.

Maximising Value

Universities

Government

Industry



- Gearing own R&D activities
- Access to other companies results and experiences
- Close collaboration with three leading universities
- Access to research facilities
- Preparation for ESS, MAX IV & XFEL usage

The LINX Connection

How can we help?

- Access Baltic material industry
- National LINX associations
- Invitation to join LINX:
 - Public
 - Academia
 - Industry

We want to make a difference!

