



EUROPEAN
SPALLATION
SOURCE

ESS

Get Involved!

What is ESS ?

One of Europe's largest
planned research
infrastructures for materials
research

European partner countries
building together

2014: Start of construction phase for
the world's most powerful proton
accelerator

2020: Providing the world's most
advanced tools for studying
materials with neutrons

A European facility for materials research

FACILITY

A partnership of 17 European nations committed to the goal of collectively building and operating the world's leading facility for research using neutrons by the second quarter of the 21st century

SCIENCE

Researchers using ESS will produce new knowledge within:

- Life science
- Soft condensed matter
- Chemistry and functional materials
- Energy
- Magnetism and superconductivity
- Engineering materials & geosciences
- Archaeology and heritage conservation
- Fundamental and particle physics



SOCIETY

Transferring knowledge & technology to advance innovation, business life and society

17 nations committed to build ESS



Cash contributions
from Sweden, Denmark
and Norway

In-kind contributions
from the other
nations

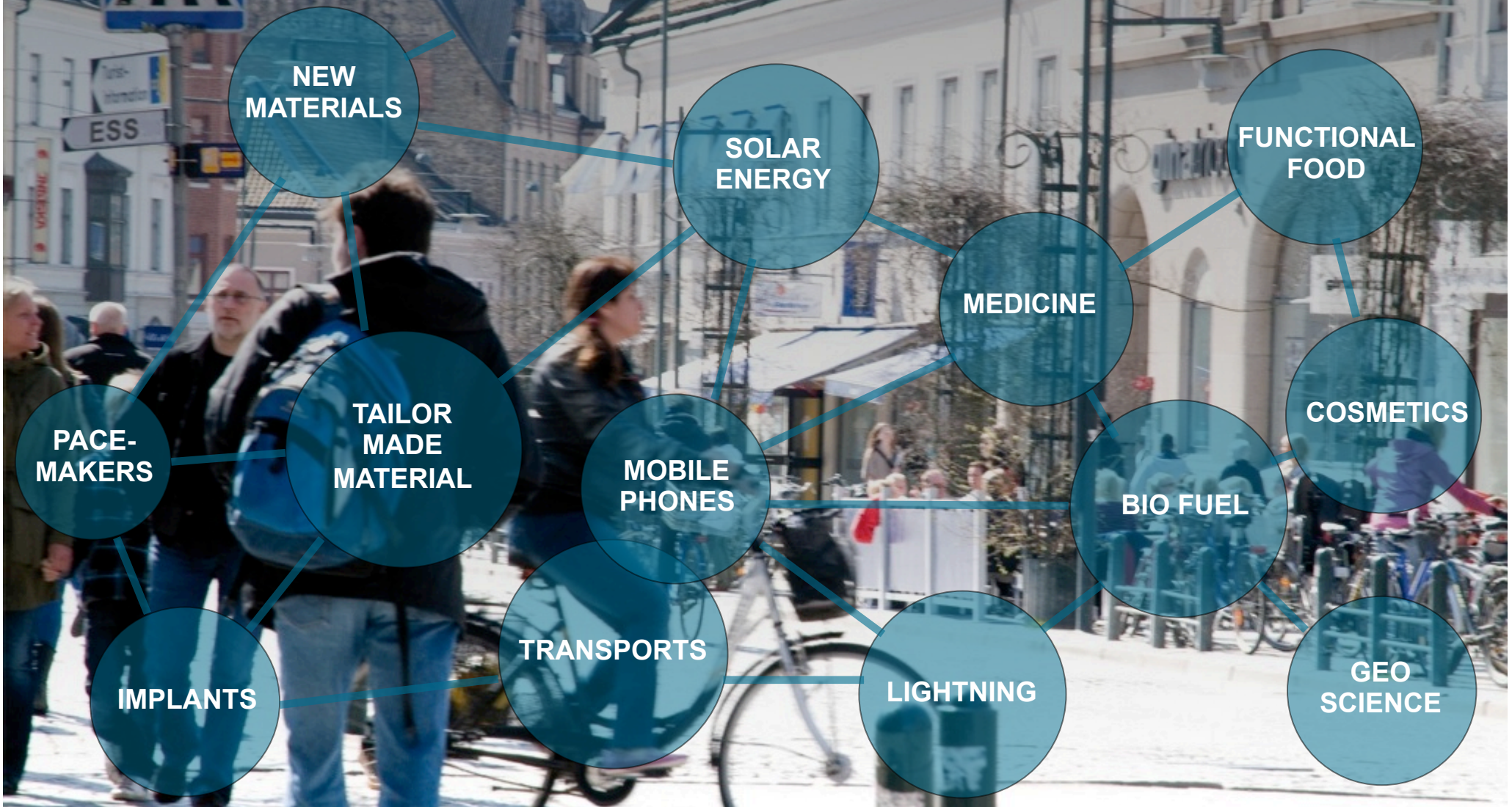


50% of construction and
20% of operations costs

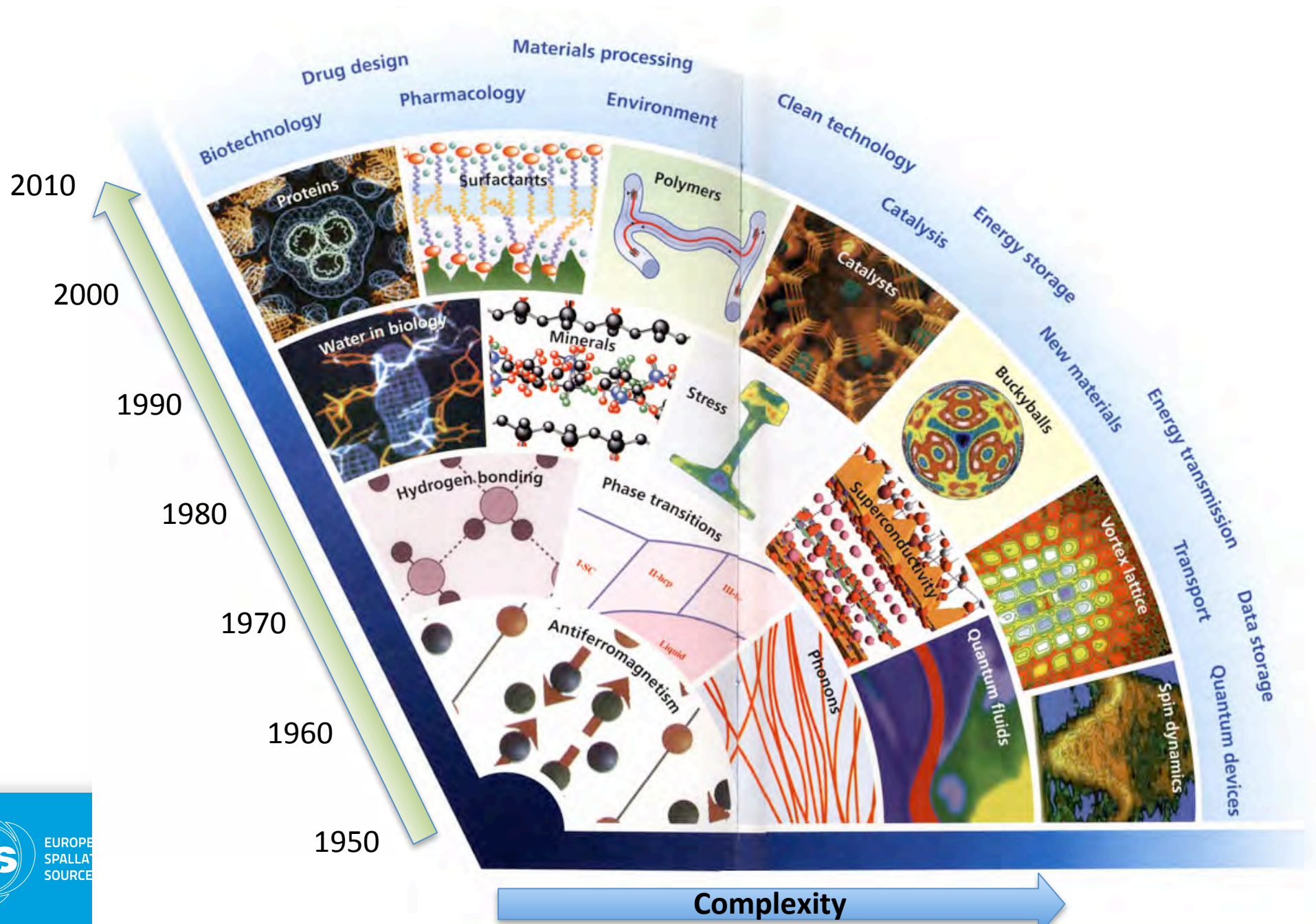
Construction cost: 1,843 B€



Materials Science and Society

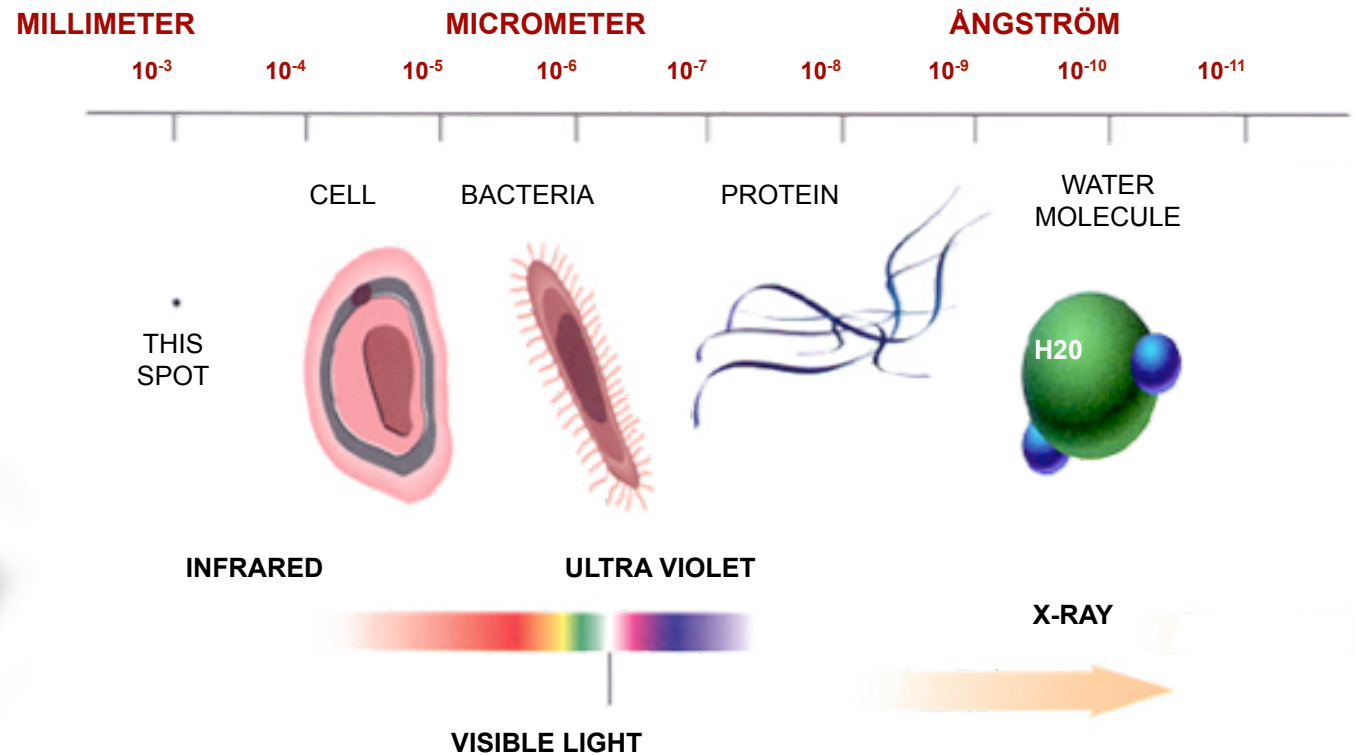


Neutron Science Spans Many Areas



Why Neutrons ?

Research with neutrons gives us knowledge that improves our everyday lives, our health and our environment.



Spallation: Next Generation Neutron Sources

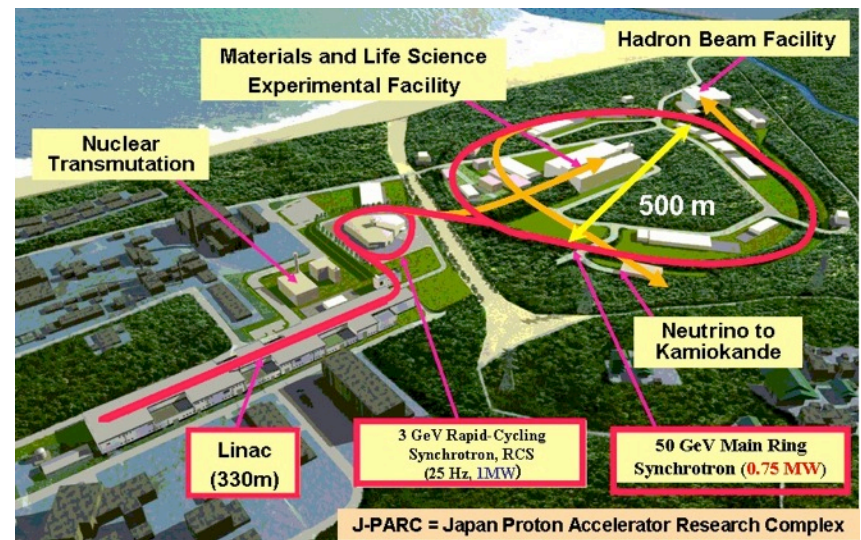
USA 2008:
SNS (1.4 MW)



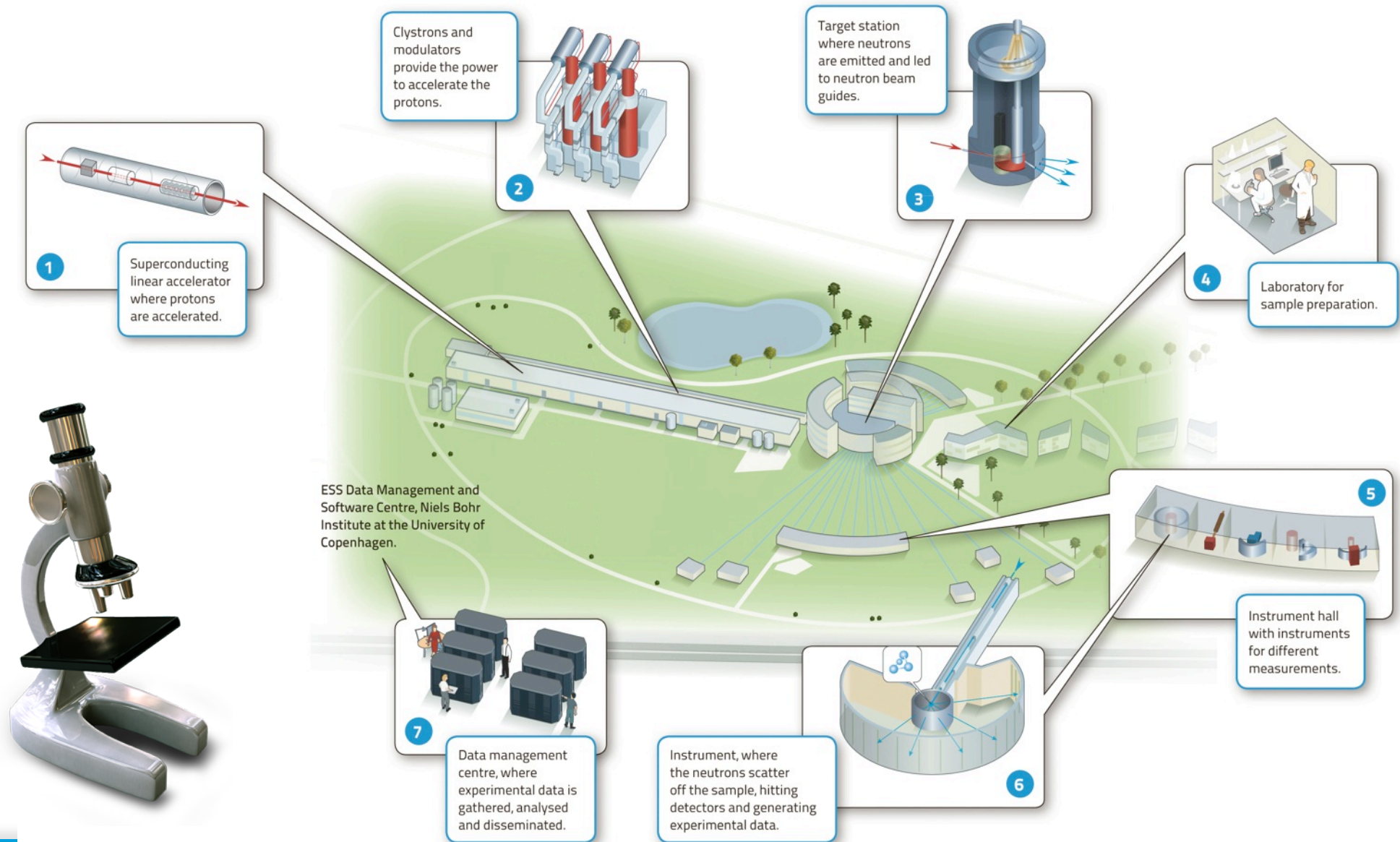
- Existing research reactors in Europe are aging
- Two Large Spallation Sources exist on other continents
- UK's ISIS and PSI SINQ significant European spallation facilities

Strategic need for a new high flux cold neutron source in Europe identified in 1990s

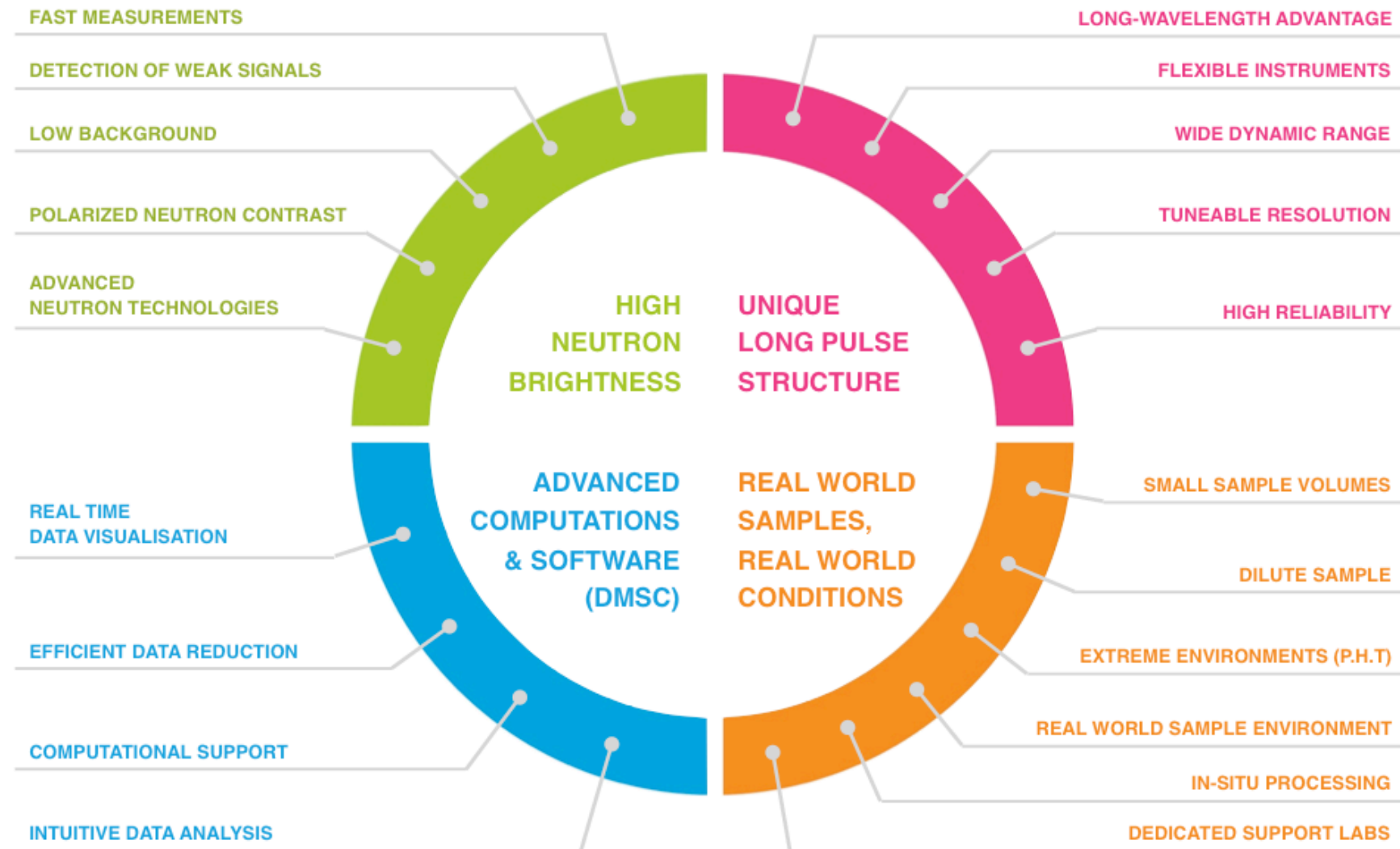
Japan 2008:
JPARC (1MW)



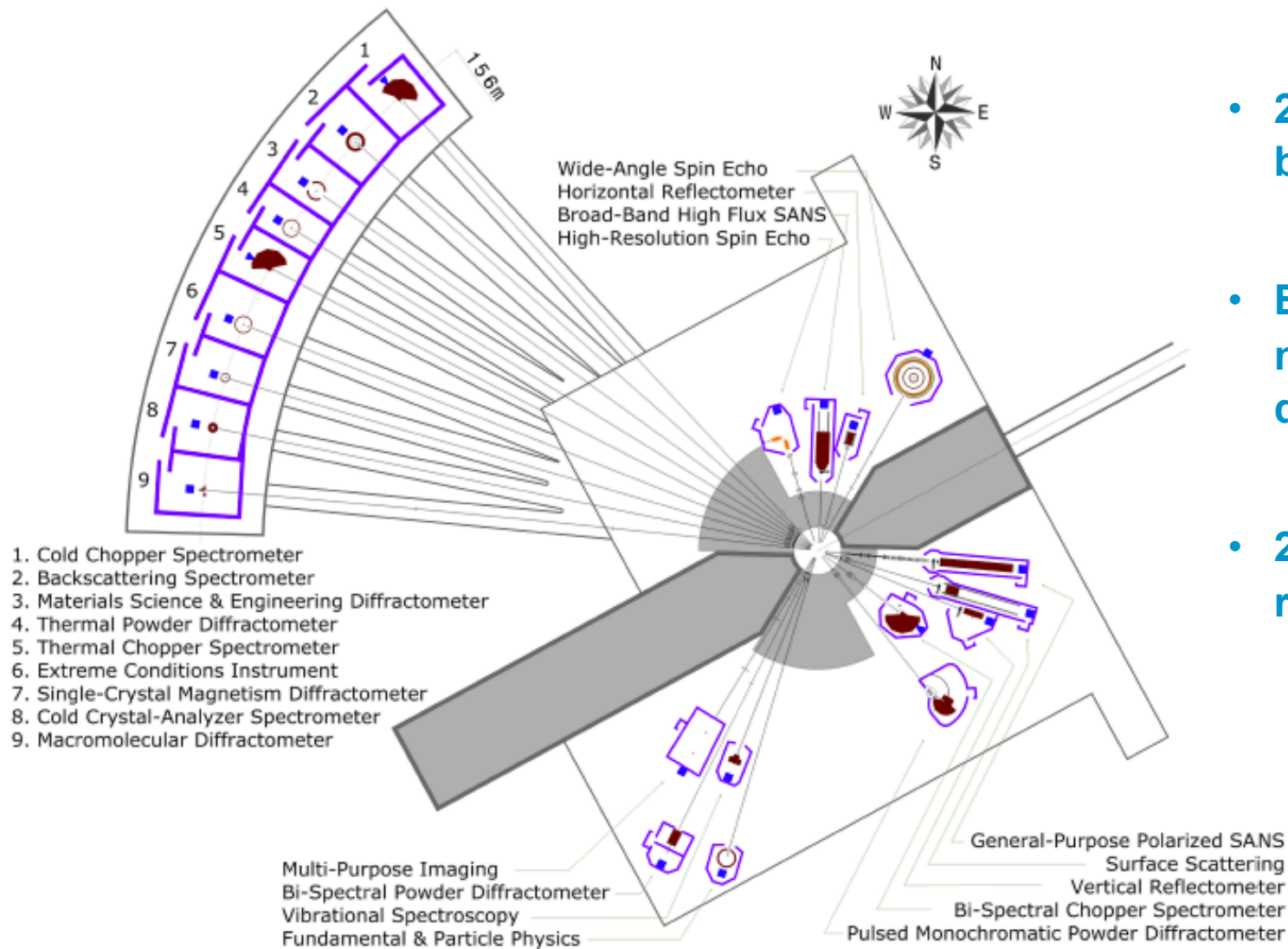
The Technology



ESS Unique Advantages



The ESS reference suite of instruments



- 22 instruments in baseline design
- Beamlines guide the neutrons to the different instruments
- 2000 visiting researchers per year

Eight ESS Science Focus Areas

Life Science

Soft Condensed Matter

Chemistry of Materials

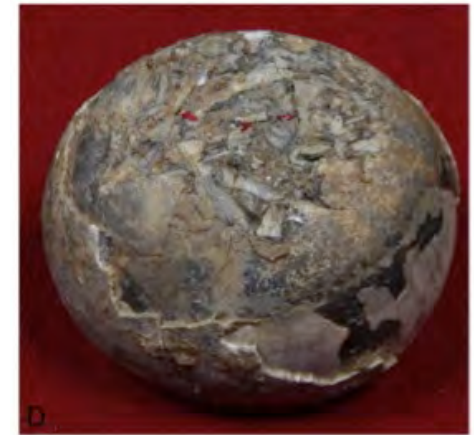
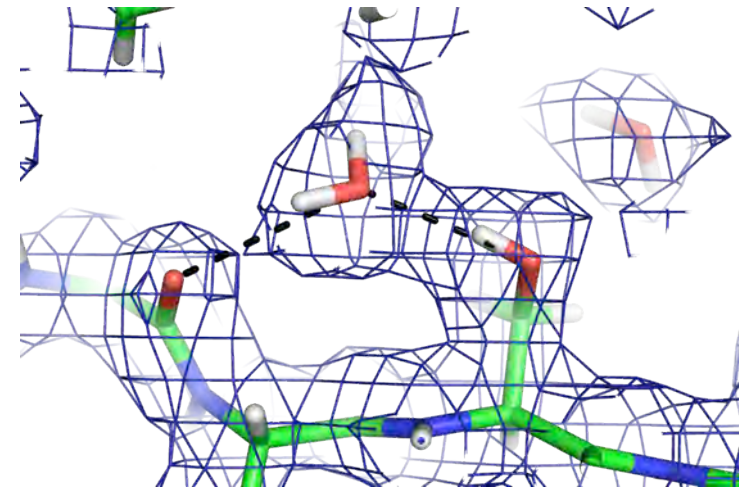
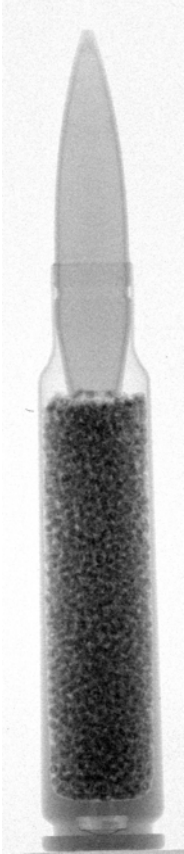
Energy Materials

Superconductivity and Magnetism

Engineering Materials and Geosciences

Archaeology and Heritage Conservation

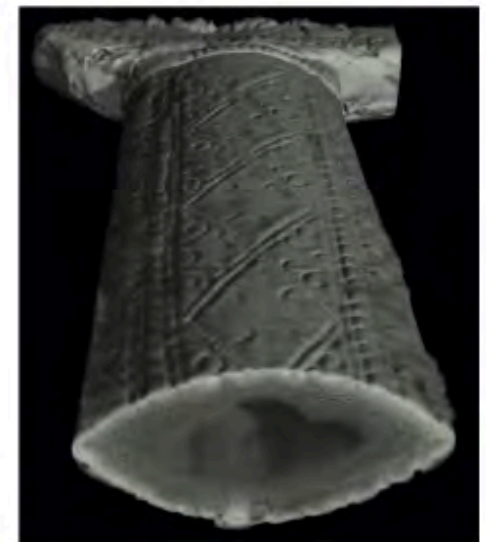
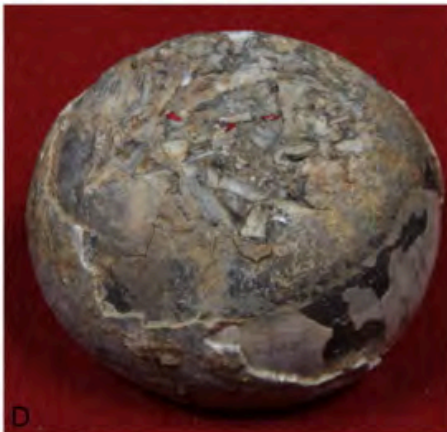
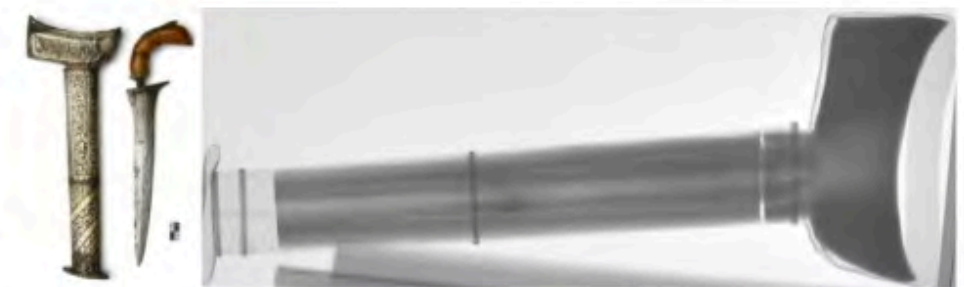
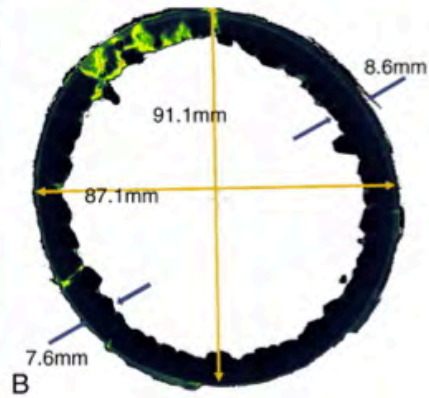
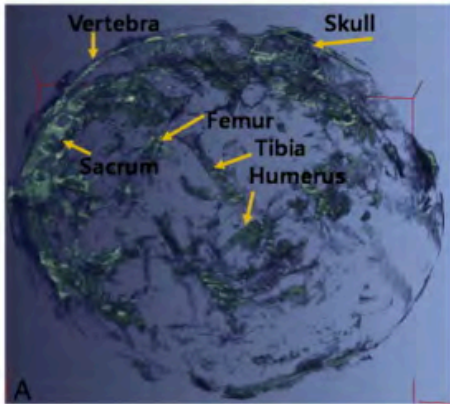
Fundamental and Particle Physics



2013-09-30

Sindra Petersson Årsköld

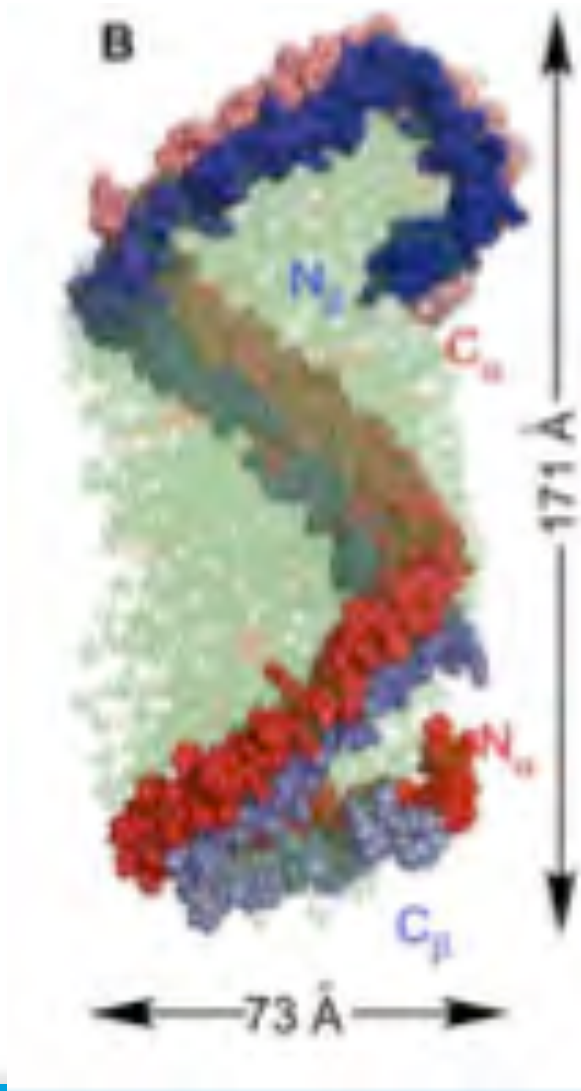
Archaeology and Cultural Heritage



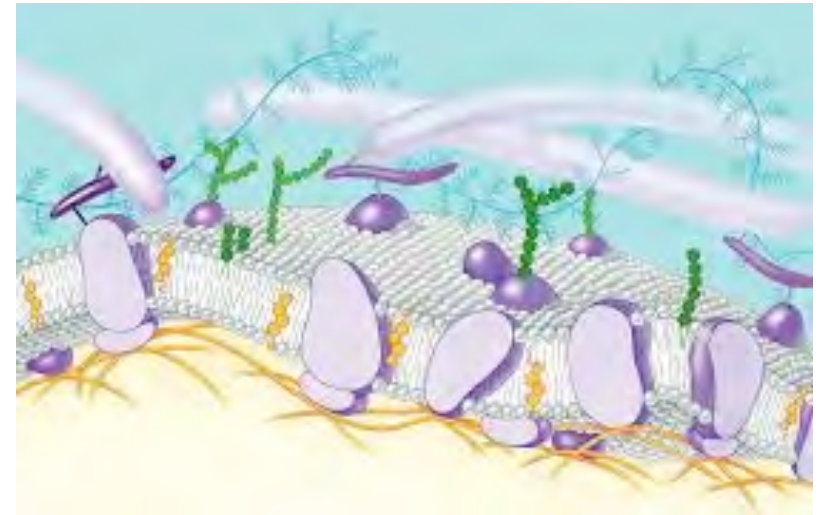
Dinosaur egg

Indonesian dagger sheath, silver outside wood.

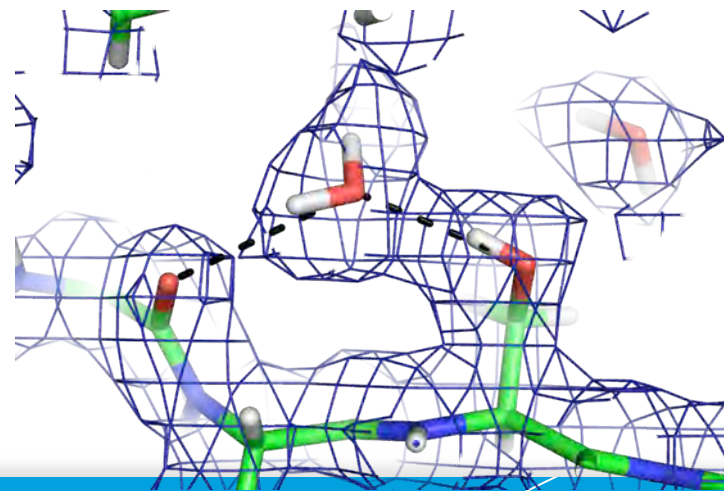
Life Science



Structure of multicomponent complexes



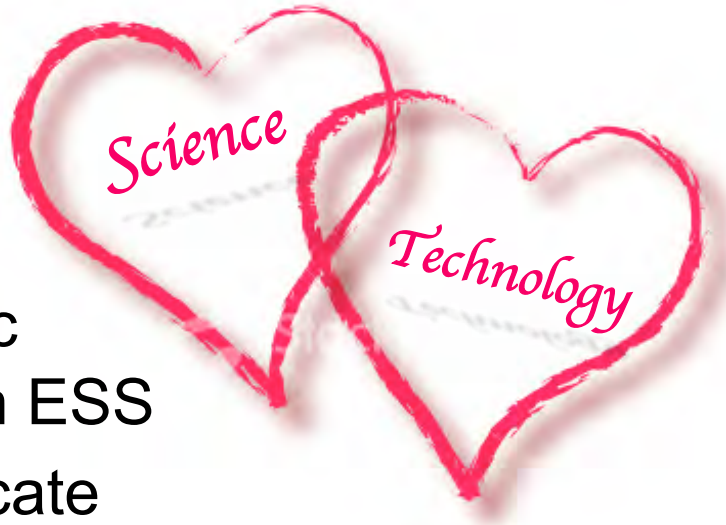
Membranes



Protein structure, drug design

Building Instruments for Science

- Be an active part of the scientific community
- Current users
- Potential users
- Identify scientific requirements on ESS
- Inform and educate
- Maintain community engagement
- DO SCIENCE!



- Develop & construct novel instrument concepts
- Coordinate instrument development around Europe
- R&D of enabling technologies: detectors, choppers, guides...
- Design support laboratories

New Technology for New Science

The strongest source of neutrons for science offers new opportunities – and poses new challenges.

- Scientific Collaborations
- Neutron Instrument Development
- Sample Environment Development
- Support Laboratories
- Neutron Technologies R&D

ESS is being built for scientists, by scientists.

Get involved! We need you.

Registrace do databáze dodavatelů ESS:

<http://europeanspallationsource.se/invitation-business-profiles>

In-kind contribution: www.esss.se/eoi

Jiří Janošec

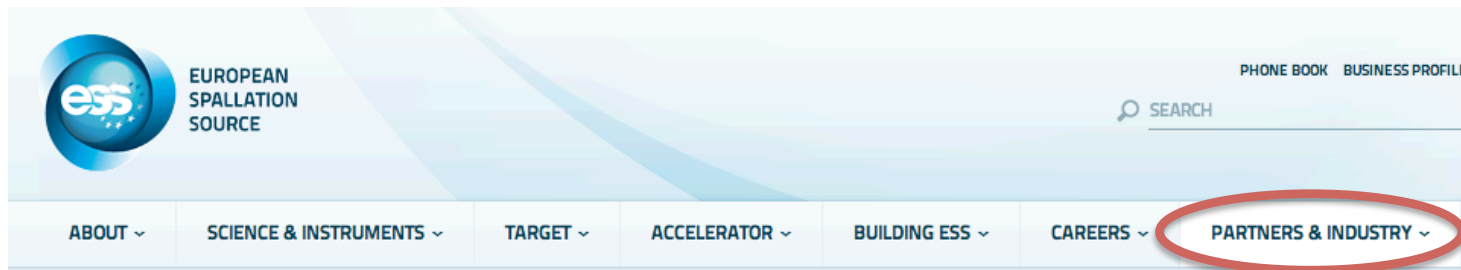
ESS Industry Liason Officer pro ČR

Technologické centrum AV ČR

Tel.: 234 006 136

MailTo: janosec@tc.cz

Partners and Industry at ESSS.se



Partners and Industry


The ESS Partners and Industry portal is a one-stop shop for anyone who is interested in ESS calls for tender and wants to learn more.

The portal includes a supplier registration, which allows companies to make themselves more visible for ESS and is useful for companies looking for partners and wanting to network.

Additionally, the portal offers links to key reference documents and contacts details to all national ILOs.

The 'Announcement' section of the portal will provide information about upcoming deadlines for calls for tenders and any future events related to ESS procurement.

Business Profile Registration



EUROPEAN SPALLATION SOURCE

PHONE BOOK BUSINESS PROFILE

SEARCH

ABOUT ~ SCIENCE & INSTRUMENTS ~ TARGET ~ ACCELERATOR ~ BUILDING ESS ~ CAREERS ~ PARTNERS & INDUSTRY ~

Invitation for Business Profiles



In the context of ESS building relations and kick-starting its cooperation with Industry, ESS invites all companies, firms, partnerships, small and medium enterprises and service providers to submit their on-line Business Profiles. The Business Profile tool is user maintained and gives ESS and Industry a platform to work together to fulfill the goal of building and operating the next generation research facility.

The ESS Business Profile platform is an industrial outreach tool to provide information concerning future tenders, develop local and international sourcing, convey ESS industrial developments, procurements needs and innovation projects . It will not serve as an accreditation to ESS nor as a pre-qualification to participate in any future ESS tender exercise.

If you are interested in completing your unique Business Profile with ESS please [go to this link](#) and fill out the required details correctly.

Once your Business Profile is completed you will receive a password which will enable you to update your profile when required.

The ESS Procurement Division thanks you in advance for your cooperation.

[To register, please click here](#)
Already registered?

CALL FOR EOI

IN-KIND CONTRIBUTION



COMPLETE AND OPERATE THE BEST AND MOST POWERFUL NEUTRON SOURCE IN THE WORLD BY THE END OF THE DECADE

- ESS

Business Profile Registration

User account | Business Profile

Name of Company / Firm / Institution / Organisation / Entity *

Street Address / P.O. Box *

Visiting address *

Postal Code *

City *

Country *

Contact person:

First name *

Last name *

Title *

Direct number *

E-mail address *

Company telephone number *

Homepage

Parent company (if applicable)

Type of business *

Type of business (if other)

Nature of business *

Nature of business (if other)

Year established *

Number of full-time employees *

Company registration no. *

Country where registered *

VAT no. / Tax ID *

International Offices / Representation

List your services or goods offered to ESS (one per line)

Please enter the service or goods description (automatically referenced to EU CPV-code)
Fx. if the code is 31131100-04 you write "Actuators" (without quotations)

Annual turnover for the last 3 years

2012 (in €) *

2011 (in €) *

2010 (in €) *

Does your company have an environmental policy? *

- No
 Yes

Has your company been involved in any disputes or litigation over the last three years? *

- No
 Yes

List any national or international trade or professional organizations of which your company is a member

List one per line

For goods only, do those offered for supply conform to national or international quality standards?

- International
 National

Click relevant box. Do not click if none applicable.

Certification *

- I the Authorized Officer warrant that the information provided here is correct and understand it is the obligation of the submitting entity to update its Business Profile when required.

Register business profile

Up-coming Procurements



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SEARCH

ABOUT ▾

SCIENCE & INSTRUMENTS ▾

TARGET ▾

ACCELERATOR ▾

BUILDING ESS ▾

CAREERS ▾

PARTNERS & INDUSTRY ▾

Ongoing Procurement

Here you can find information about ongoing procurement.

Ongoing procurement

[Open Call for solutions reaching recycling goal of surplus energy at European Spallation Source](#)

[Design, Production, Testing and Supply of a Pulsed Klystron Modulator based on Solid State Technology](#)

[Engineering Services 2013/S 155-270763](#)

[Engineering Services 2013/S 155-270705](#)

[Open Call for Tender Magnetron Sputtering System](#)

Please note that the last date for submission of proposals has been extended, and is now 4pm CET on 9th of September 2013

Content manager: Roger Eriksson

THE ESS PROGRAMME

THE ESS COLLABORATIONS

ONGOING PROCUREMENT

BUILDINGS & ARCHITECTURE

ENERGY & SUSTAINABILITY

LICENSING & PLANNING

RADIATION PROTECTION & SAFETY



COMPLETE AND OPERATE THE BEST AND
MOST POWERFUL NEUTRON SOURCE IN
THE WORLD BY THE END OF THE DECADE

- ESS

Thank You



EUROPEAN
SPALLATION
SOURCE