

# CoNeXT

## CoNeXT NEWS March 2014

### The first issue of CoNeXT News

These pages represent the first issue of CoNeXT News. Most of the information in contains can also be found at the CoNeXT website, but the Project Management Team felt it would be useful to have regular overview of the activities of the CoNeXT in a different media. The publication of CoNeXT News was made possible thanks to the help from Rikke Bøyesen, Nano-Science Center, Department of Chemistry and Gitte Michelsen ([gitteM@nbi.ku.dk](mailto:gitteM@nbi.ku.dk)) from Niels Bohr Institute who provides support to the project.

It is the intention to have four issues of CoNeXT News per year. We urge you to send any relevant information and material to Sine Larsen ([sine@chem.ku.dk](mailto:sine@chem.ku.dk)). This includes information about meetings, publications etc. Ideas of what should be presented in CoNeXT News are also welcome.

### Second General CoNeXT meeting March 18 from 13.30 to 18.00

At this meeting you will hear about the first scientific CoNeXT results in humanities.

Presentations on publication strategies from the different faculties and the guidelines for scientific publications will form the start of a general discussion on the guidelines for CoNeXT publications, which could be of interest for a wider audience.

The meeting will be held in Faculty Club, the Panum Complex

#### Preliminary program for the meeting:

13.30-13.45 Report from the PMT what has happened in the CoNeXT project (Sine Larsen)

13.45- 14.15 First CoNeXT results in Humanities (Kim Ryholt, Poul Erik Lindelof and Thomas Christiansen)

14.15 - 14.20 Publications in HUM (Kim Ryholt)

14.20 - 14.25 Publications in SAMF (Karen Lisa Salamon)

14.25 - 14.30 Publications in LAW (Timo Minssen / Mads Bryde Andersen)

14.30 - 14.35 Publications in SCIENCE (Kell Mortensen)



14.35 - 14.40 Publications in HEALTH (Else Pinholt)

14.40 - 15.00 Coffee break

15.00 - 15.30 The development of publication guidelines (Povl Riis)

15.30 - 16.00 Establishing RCR guidelines at Aarhus University- Challenges and milestones  
(Jens Christian Djurhuus)

16.30 - 17.00 Guidelines for publication practice University of Copenhagen (Morten Pejrup)

17.00 - 17.15 Summary and general discussion

17.15 - 18.00 Continued discussions with refreshments

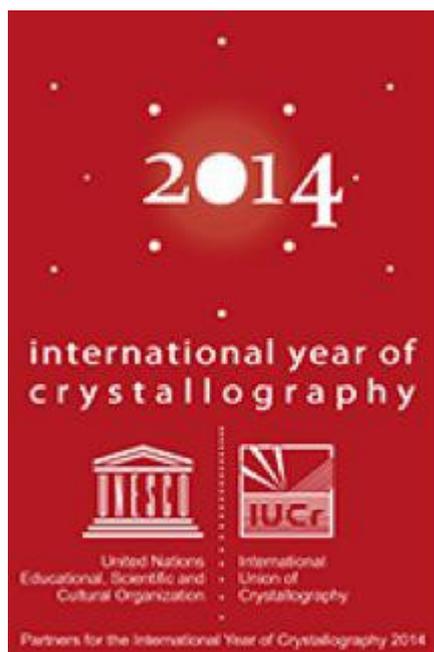
### **First CoNeXT publication**

The first publication resulting from the CoNeXT project was published late 2013 in the Journal of Cranio-Maxillo-Facila Surgery. The authors are Camilla Neidam (PhD student partly financed by CoNeXT) and Else Pinholt, Co-PI and member of the Project Management Team.

The title is: **Synchrotron  $\mu$ CT imaging of bone, titanium implants and bone substitutes. A systematic review of literature.**

The systematic review analyses the literature on high-resolution scans on bone microarchitecture and dental implants visualized by SR $\mu$ CT and its usability discussed in contrast to conventional  $\mu$ CT and histology. The review emphasizes the use of SR $\mu$ CT ranging from visualization of bone microstructure and vessels to development of newly formed bone within different bone substitutes.

### **2014 International Year of Crystallography (IYCr)**



The opening Ceremony for the International Year of Crystallography took place 20-21 January, 2014 in UNESCO's building in Paris. Copenhagen University and CoNeXT were well represented in this ceremony. Anders Østergaard Madsen, a CoNeXT Co-PI was representing Western Europe and North America in the session "Young talented crystallographers of the world", and Emil Makovicky emeritus professor in mineralogy with a presentation on Islamic ornamental art seen through crystallographers eyes.

The IYCr marks the centennial of the seminal experiments with X-rays by Max von Laue and the Braggs (father and son) that have led to a revolution of the understanding of matter. Crystallography encompasses studies of both crystalline and non-crystalline materials and underpins structural science at the molecular level across the sciences. Synchrotrons and neutron sources are leading the new developments of structural science, so crystallography has become the science that encompasses the experiments at the large facilities and thereby also the activities of CoNeXT. At the start of the

year Nature dedicated an issue to crystallography, (<http://www.nature.com/nature/journal/v505/n7485/full/>) and also Time Magazine marked the year with an article (<http://science.time.com/2014/01/09/crystallography-100-years/>).

All over the world IYCr 2014 will be celebrated by numerous events, they can be followed at ([www.iycr2014.org](http://www.iycr2014.org)).

## Danish Start of International Year of Crystallography (IYCr)



Thanks to the support from CoNeXT, DanScatt and Vækstmotor projektet it was possible to organize a special meeting held 22-23 January at the H.C. Ørsted Institute to mark the Danish start of IYCr. The programme

([www.crystallography.dk](http://www.crystallography.dk)) illustrated the width of crystallography with scientific talks ranging from materials science to snapshots on membrane proteins, to the use of crystallography in industry to

develop new forms of insulin. The Danish start of IYCr was flavored by presentations by members of the Executive Committee of International Union of Crystallography, so the participants got a good idea on what the crystallographic communities in Australia, Canada, Russian and USA have done to celebrate IYCr. Another highlight of the meeting was the tour to Lund in the afternoon of January 23 to visit the construction site of MAX IV. After talks on the potential of this new synchrotron facility, the participants were taken on a guided tour of the building site, where the exterior of all buildings are almost completed. The meeting was well attended not only by CoNeXT members, but also by crystallographers from all parts of Denmark.

## BioSAS14 - Copenhagen workshop on Biomacromolecules in solution studied with Small-Angle Scattering

This workshop organized by Bente Vestergaard and Lise Arleth, two CoNeXT PI's, was held the last week in February and financially supported by CoNeXT. The 27 participants spent an exciting week having lectures from the leading scientists in the field.

## CoNeXT Appointments partly or fully financed from the CoNeXT grant

### X-ray Analysis and the human sciences:

PhD student Thomas Christiansen

### Protein Fibril Structure:

Postdoc Carlotta Marasini



**Membrane proteins:**

Postdoc Nis Pedersen, November 15, 2013 - April 30, 2014

**Fibroblast Growth Factor Receptor interactions:**

Postdoc Kim Krighaar Rasmussen

***Plasmodium falciparum* Proteins implicated in severe malaria pathogenesis and immunity:** Postdoc Vladyslav Soroka

**Large Complexes:**

Postdoc Jerzy Dorosz

**Stem cell osseous reconstruction:**

PhD student Camilla Neidam

PhD student Morten Dahl

**Therapeutic Proteins at interface:**

PhD student Sofie Fogh Hedegaard

**Formulation and Structural Characterization of *Soft* Self-assembled nanopharmaceuticals:**

PhD student Aghiad Ghazal

**Detection of socio-cultural factors facilitating collaborative innovation related to the new large research facilities in the Øresund region:**

Two positions (postdoc/PhD) are about to be filled

**The Legal Dimension:**

1 postdoc position has been advertised

