

MBB KI

PSF Xray Newsletter 4

Quarter 2, 2014

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4/23/2014

The ambition of this newsletter is to create a simple summary of current actions and issues taking place at PSF Xray instead of sending out several emails.

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Motivation for increased PSF Xray prices

After SGC shutdown, PSF were generously given economical support by MBB and KI centrally however this support is significantly reduced when entering 2014 and PSF Xray are therefore increasing its prices to cover more of the true cost. In the future we hope to secure more funding to subsidize our service to same extent as 2011-2013.

Prices on current services are increasing

The cost of the current services will be calculated on the actual usage of the instruments, this means that e.g. maintenance costs and licenses will be divided on a smaller number of experiments compared to previously. For instance the number of Mosquito plates per year is around 1800 per year and our prices are based on our maximum capacity of 4000 plates per year.

New Phoenix and Mosquito prices includes imaging

The new standard rate for a Mosquito robot run using Corning 3550 is SEK 450 that includes Phoenix liquid transfer and six imaging events per drop in the 4C or 20C imager (in total $6 \times 288 = 1728$ images per plate).

Standard rate exceptions when PSF customers are:

- not using PSF crystal screens and plastics => SEK 350 per Mosquito run, where the cost of Corning 3550 plate, Clear Seal Film, Crystal screen and Adhesive PCR foil seal have been subtracted from SEK 450 per Mosquito run and should be provided by the user.
- running Swiss-LCP plates will be charged SEK 500 per run due to expensive LCP plates.
- running their own LCP plates will be charged by SEK 370 where the cost of a Corning 3550 plate, Clear Seal Film and crystal screen (to some extent) have been subtracted from the SEK 450.
- taking additional images beyond six images per plate will be charged by an additional SEK 45 per plate.

PSF compatible plastics: <http://psf.ki.se/Xray/ConsumablesTable.html>

PSF crystal screens today: http://psf.ki.se/Xray/PSF_Crystal_Screens_2013.html

A personal charge for maintaining the PSF Xray infrastructure

PSF coordinates BioStruct-X funding and two BAGs for beamtime at Bessy and Diamond creating five reports and applications per year describing results and ambitions of seventeen different research groups in Stockholm, Uppsala and Linköping. PSF provide administrative support for all 20+ beamtime events resulting from these applications every year and secure startup of remote data collection events. PSF have excellent facilities for manipulating and freezing of crystals prior to synchrotron trips.

Beamtime administration, use of remote data collection setup, labspace-including 4C/20C rooms, and equipment such as tools, dewars, pucks and vials have historically been offered free of charge to all PSF Xray facility users, however this will end now and each employee working at PSF Xray will be charged by SEK 1000 each quarter or SEK 4000 per year and simply continue to use all tools, space and beamtime provided like today.

Remote or infrequent PSF Xray users, i.e. researchers from Stockholm University will not be charged when not being physically present at PSF during a full quarter. A PSF Xray user list will be specified at each research group quarterly invoice.

Charging research groups for salary cost during compulsory PSF Xray instrument training

Historically user training on protein crystallography instruments was free of any charges and introduced in 2007 simply to end chaos and frustration created when non trained people were guessing on how to use the various instruments resulting in costly repairs and instrument downtime. The content of user training is described online at (<http://psf.ki.se/Xray/UserTrainingXray.html>). When PSF started in 2011, the research groups start to pay PSF rates for the plates manufactured during training sessions. To partly cover the true cost of this training we now decided to charge SEK 2000 per person and training event in addition to the plates manufactured during training sessions. Each instrument training session take 2-4 hours depending on trainee previous knowledge and endurance. The new user training charges will be applied from today's date 23 April 2014.

Introduce new hands on services for remote clients or customers without manpower

Sometimes PSF are getting inquiries regarding doing work for remote research groups or groups lacking manpower. For these clients PSF Xray will provide hands-on services that include salary cost therefore being substantially more expensive as compared to running your own experiments. Hands-on service requires a startup project meeting with PSF representatives.

Crystal mounting, data processing and phasing training with client crystals and data

PSF users frequently ask how to mount crystals, collect and process data and sometimes how to perform phasing, model ligands, run refinement software or how to calculate various electron density maps such as fo-fo difference map, anomalous map, anomalous difference map etc. Today advice and assistance is provided when time permits however this supervision could also be organized as regular charged training sessions using fresh customer data and models to maximize trainee attention. The content of this crystal mounting or software training will be agreed in writing between tutor, trainee and trainee-PI in advance of training and tailor-made to requirements and data available.

Enable PSF software access and backup using computers owned by research groups

The most modern PSF computers are from 2009 and research groups with modern computers might want to run Protein Crystallography software on their fast computers using the PSF Xray software setup and backup system. PSF will then install Linux to the computer owned by the customer and this computer can be located in the customer area or at PSF floor 3. The customer will login to the PSF network using PSF credentials on his/her PSF account as any PSF software user are doing today. The PSF user account on fileserver is backed up every day and disk space on the customer computer can be used for storing synchrotron data of the research group however the local computer disk will not be backed up by PSF.

Future use of PSF computer, backup and software access will be charged by SEK 2750 per research group as today. Customers that want to add their own computers to the PSF network will have to pay SEK 3750 per quarter. More than one user owned computer can be added to PSF network for the same price of SEK 3750 per quarter and research group.

PSF Xray pricelist from June 1, 2014

You can help us by acknowledge the new prices, support the upcoming KI core facility applications 2015 and 2016-2019 that if granted, would enable us to offer more subsidized prices at PSF Xray again.

Self-services charges	Academics	Companies	Without consumables		With consumables items included
Phoenix & Mosquito	450 kr	650 kr	-100 kr	per plate	Mosquito Tips, Strip & BarCode, Plate, ClearSeal, Tape, Screen, Additive HT & imaging
Swiss-LCP	500 kr	690 kr	-130 kr	per plate	Mosquito Tips, BarCode, Screen, Swiss-LCP plate, 96 clear TTP plate & imaging
24 Well Hanging Tecan	400 kr	550 kr	-70 kr	per plate	24 well VDXm greased, 24 Cover Slides, BarCode & Chemicals & imaging
24 Well Sitting Tecan	380 kr	530 kr	-50 kr	per plate	24-4 IntelliPlate, ClearSeal Film, Barcode and Chemicals & imaging
Greiner Deep Well	240 kr	320 kr	-40 kr	per plate	Greiner Deep Well Block, Tape, BarCode and Chemicals
Extra imaging	45 kr	65 kr	Not available	per plate	More than six imaging events to be charged by SEK 45 per plate
12 PCR tubes	150 kr	190 kr	-10 kr	12 PCR tubes	12 PCR tubes and Chemicals
PSF software and backup	2750 kr	Not available	Not available	per quarter	Computer, Licenses, backup tapes and support
Adding computers to PSF network	1000 kr	Not available	Not available	per quarter	SEK 1000 for PSF software clients. SEK 3750 for first computer of non PSF software clients
Personal charges	1000 kr	1 500 kr	Not available	per person & quarter	SEK 1000 per person and quarter. Visitor list per quarter specified at invoice.
Liquid Nitrogen	- kr	- kr	Not available	per event	http://psf.ki.se/Xray/protocol/111202_PSF_Xray_meeting_%233_protocol_PSFxrayCharges.pdf
Training charges					
User training 1 (compulsory)	2000 kr	3000 kr	Not available	per trainee	Instrument access: Phoenix & Mosquito & RockMaker/Imager
User training 2 (compulsory)	2000 kr	3000 kr	Not available	per trainee	Instrument access: Tecan and more RockMaker
User training 3 (optional)	4000 kr	6000 kr	Not available	per trainee	Not compulsory: Tailor made: Agreed: Crystal Mounting, design of cryo-solutions, HA soaking
User training 4 (optional)	4000 kr	6000 kr	Not available	per trainee	Not compulsory: Tailor made: Agreed: Data processing, phasing, ligand-building, refinement
PSF services (hands on)					
Crystal Mounting	350 kr	500 kr	Not available	per crystal	Includes bases/loops/work and nitrogen
Xray Data Collection	350 kr	Not available	Not available	per crystal	Includes nitrogen and dewar-shipment when PSF collects data at beamline.
Phoenix & Mosquito	1000 kr	1 500 kr	Not available	per plate	Includes setup work and all consumables & imaging.
24 Well Hanging Tecan	1000 kr	1 500 kr	Not available	per plate	Includes setup work and all consumables & imaging.
24 Well Sitting Tecan	1000 kr	1 500 kr	Not available	per plate	Includes setup work and all consumables & imaging..

Table 2. New PSF Xray prices valid from 1 June 2014.