Transferring "conventional" catalysis experiments to the NSLS-II

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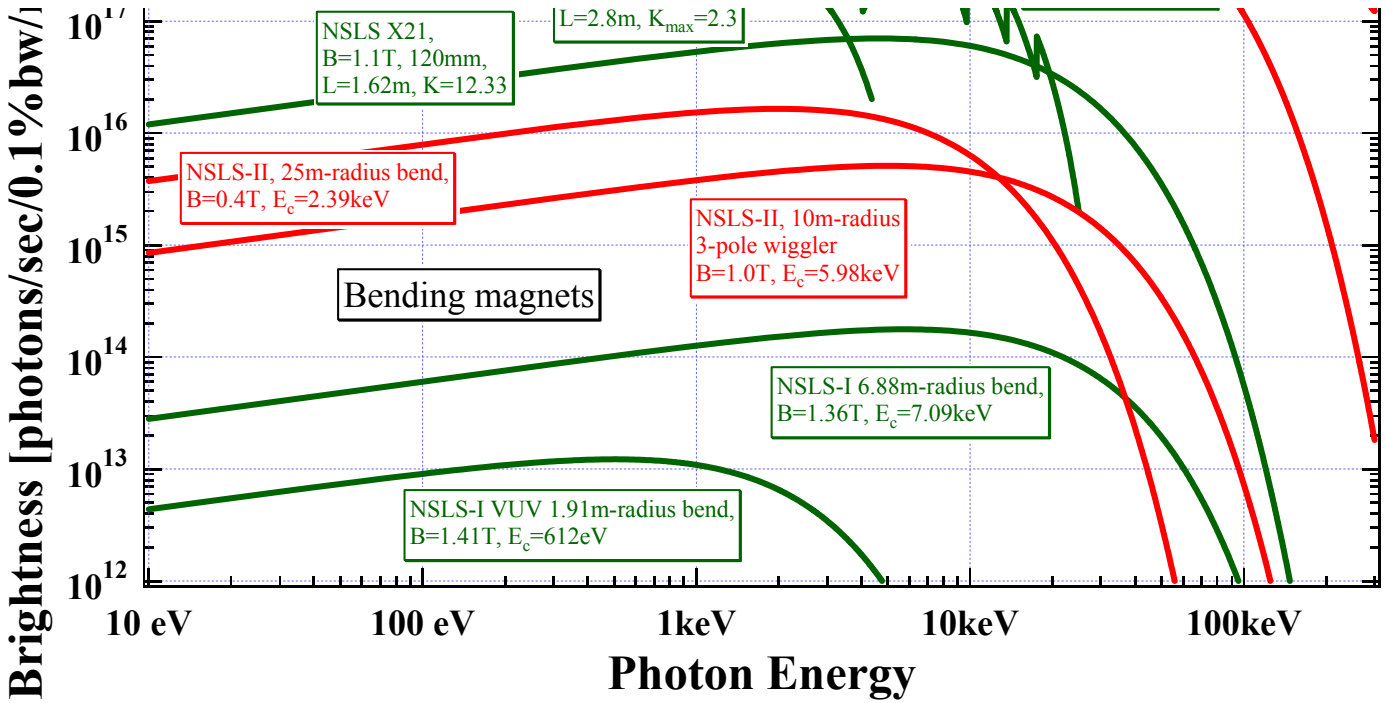
Moving beamlines from NSLS to NSLS II

	NSLS-II			NSLS		
Type	IDs	BMs	Total	IDs	BMs	Total
IR/UV/Soft x-ray spectroscopy	1	11	12	3	7	10
x-ray spectroscopy	6	3	9	0	9	9
soft matter/biophysics scattering	4	0	4	0	8	8
hard matter/strongly correlated scattering	9	1	10	3	5	8
powder/single crystal/high P/optics	7	3	10	3	8	11
Imaging/micro-probe	4	5	9	2	7	9
macromolecular crystallography	7	0	7	2	8	10
	38	23	61	13	52	65

Brightness



NSLS II bending magnet only useful for VUV beam lines

NSLS II 3 pole wiggler lowest cost source useful for XAFS and XRD. (Brightness at 10Kev 50 times greater)

Access of Catalysis Users

- Dedicated bending magnet
  - Moderate pressure XPS
- Dedicated 3 pole wiggler experiments
  - XRD (move pieces of X7B front end)
  - XAF (move front end from X18B and QEXAFS mono)
  - XRD+XAF (Move front end X18A and QEXAFS mono)
- Facility Beam lines (damping wiggler)
  - high throughput mode
  - in situ dilute samples.
- Portable Standard Catalysis systems

Input to NSLS

- Overview letter to NSLS planning committees outlining need of catalysis community at NSLS II with proposed BAT's
- BAT for TR XAFS at project XFS line
  - With materials chemistry and environmental science groups
- BAT for 3 pole wiggler line for classical users (Industry/Lab/University or SCC) use front ends from NSLS I lines.