NSLS Advisory Committees

1996-1997
Users' Executive Committee

The Users' Executive Committee (UEC) provides for organized discussions among the user community, NSLS administration, and laboratory directorate. It aims to communicate current and future needs, concerns, trends within the user community to NSLS staff and management, and to disseminate to the users information about NSLS and BNL plans. Members were:

Chairperson: Peter Stephens, SUNY-Stony Brook
Vice-Chairperson: Joel D. Brock, Cornell U.
Past -Chairperson: Paul Zschack, ORNL
Secretary: Ben Ocko, BNL-Physics
Doon Gibbs, BNL-Physics
Kim Mohanty, BNL-Physics
Ian Robinson, U. of Illinois
Thomas Russell, IBM
D. Peter Siddons, NSLS
Ex-Officio: Eva Rothman, NSLS

Special Interest Group Representatives

Special interest groups in areas of common concern communicate with NSLS management through the UEC. Group representatives were:

Biological Scattering, Crystallography	Stephan Ginell, ANL
Energy Dispersive Diffraction	No SPIG elected as of this date
Imaging	Carl Zimba, MIT
Industrial Users	Richard Harlow, Dupont
Nuclear Physics	Steven C. Whisnant, U. of S. Carolina
Students and Post Docs	David Johnson, BNL-Chemistry
Time Resolved Spectroscopy	Ralf Wehlitz, U. of Tennessee
Topography	Michael Dudley, SUNY-Stony Brook
UV Photoemission, Surface Science	Yves Idzerda, Naval Research Laboratory
XAFS	Mark Chance, Albert Einstein Coll. of Med.
X-Ray Scattering , Crystallography	Ben Ocko, BNL-Physics

Science Advisory Committee

The Science Advisory Committee (SAC) evaluates the science programs at the NSLS and makes recommendations to the Chairman. The SAC met in March of 1996 and its members were:

B. Batterman, CHESS, Cornell U.
Stephen Harrison, HHMI, Harvard U.
Franz Himpsel, U. of Wisconsin, Madison
Jochen Schneider, HASYLAB, DESY
Albert J. Sievers, Cornell U.
Paul Sigler, HHMI, Yale U.
Sunil Sinha, APS, Argonne National Laboratory

General User Proposal Study Panels

The Proposal Study Panels met in November 1995, March 1996, and July 1996 to review and rate General User research proposals for the FY 1996 cycles. PSP members are drawn from the scientific community and usually serve a two year term. Members during FY 1996 were:

UV Panel

David Hanson	SUNY
Boris Sinkovic	NYU
David Tanner	U. of Florida

X-Ray Imaging/Other Panel

Alastair MacDowell	AT&T
Steve Sutton	U. of Chicago

X-Ray Biology

Howard Einspahr	Bristol-Myers Squibb
Thomas Terwilliger	LANL

X-Ray Spectroscopy Panel

Chuck Bouldin	NIST
Steven Heald	APS
Linda Powers	Utah State U.
William Orme-Johnson	MIT
Dale Sayers	U. of NC

X-Ray Scattering Panel

Jerome Cohen	NWU
Simon Moss	U. of Houston
Thomas Russell	IBM
Sunil Sinha	ANL
Ian Robinson	U. of Illinois
Cullie Sparks	ORNL

General User Oversight Committee

The General User Oversight Committe (GUOC) met in November 1995, March 1996, and July 1996 to allocate time on beamlines to each General User proposal for the FY 1996 cycles. GUOC members are drawn from the scientific community and usually serve a two year term. Members during FY 1996 were:

UV Members

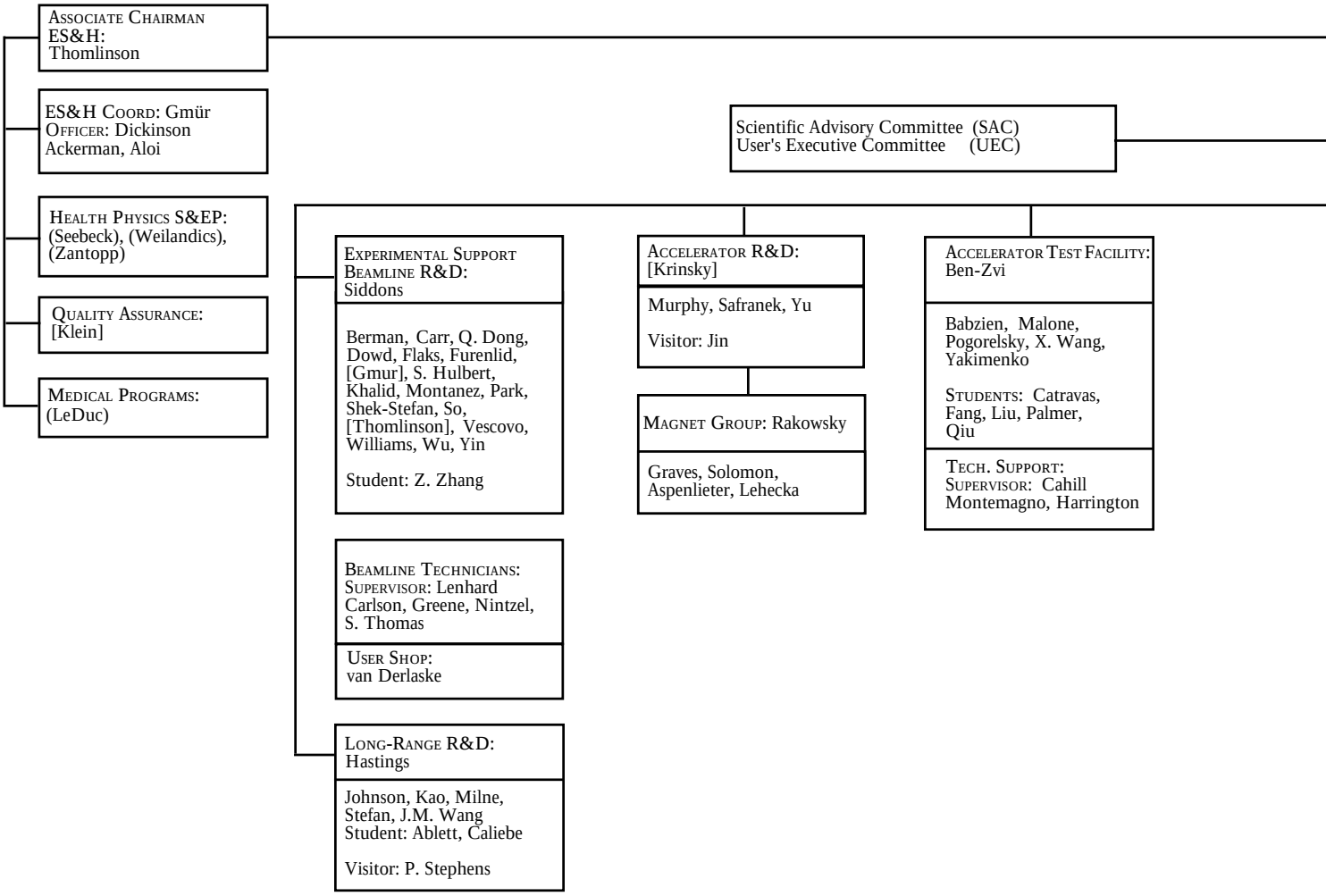
Harold Ade	NCSU
David Heskett	U. of R.I.
Jan Hrbek	BNL-Chemistry

X-Ray Members

Malcolm Capel	BNL-Biology
Mark Chance	Albert Einstein
Alex Darovsky	SUNY-Stony Brook
Lars Furenlid	BNL-NSLS
James McBreen	BNL-DAS
Gavin Watson	BNL-Physics

ORGANIZATION

NSLS STAFF



* Temporary

** Reports to Denis McWhan,
Assoc. Dir. for Basic Energy Sciences

[ ] NSLS personnel with multiple functions

( ) PRT personnel or member of non-NSLS division

NSLS STAFF

CHAIRMAN: Hart**
DEPUTY CHAIRMAN: Krinsky

General User's Oversight Committee (GUOC)
Proposal Study Panels (PSP)

ELECTRICAL SYSTEMS: Keane

ENGINEERING: R. Biscardi, Buda, Pietraski, Sheehan, O. Singh, Towne, M. Thomas,

COMPUTER SYSTEMS:
HEAD: Keane (Acting)
Dabrowski, Feng-Berman
Flannigan, Langenbach, Pearson, Ramamoorthy, Smith, Tang, Teng

DIAGNOSTICS:
HEAD: Nawrocky

TECH SUPERVISION:
SR. SUP.: Rasmussen
P/S: Meier
RF: D'Alsace
DIAGNOSTICS: Rambo
ES&H Interlocks: Gallagher
ELECT. DES/DRFT: Neuls

POWER SUPPLIES: Borrelli, Fulkerson, Garrison, McDonald, Seda, P. Singh

RF: Ramirez, Rodriques, Vaughn

CONTROLS & DIAGNOSTICS: Frisbie, Link, Nielson, Tallent

INTERLOCKS: Best, Hughes, Poshka

DESIGN:
CHECKER: L. Hulbert
Bohenek, Rubino

SPECIAL PROJECTS: Romano

ELECTRICIANS: (Didio), (Hughes), (Lacy), (Rodzevik), (Thompson), (Yang)

MECHANICAL ENGINEERING: Woodle

ENGINEERING: Beauman, Chou, Lynch, Mortazavi, Skaritka

DESIGN/DRAFTING GROUP:
MECH. LEADER: Pjerov
Checker: Palo
Almasy, Gross, Gugileimino, Kim, Staicu, Stelmach, Stoeber, Wiseman

VACUUM GROUP: Foerster

TECH SUPERVISION:
SR. SUPERVISOR: McKenna
MECH: Scheuerer
VACUUM: DeBoer
UTILITIES: White

MECHANICAL: (Pagano, A/C), Breck, Newburgh, Pop, Radulescu, Rosenberg, Santangelo,

VACUUM: Caruso, de Toll, Fruedenberg, Lanni, Tardd

CLEANING SHOP: Cernyar

STAFF SHOP: (Shea)

OPERATIONS: Heese

RING MANAGERS:
INJECTION: Blum
VUV: Kramer
X-RAY RING MANAGER & BEAMLINE LIAISON: Klaffky
OPERATIONS: J. Rothman
MAINTENANCE COORDINATOR: [Kemp]

CONTROL ROOM SUPERVISOR: Church

OPERATORS: Jahnes, Santana, Weiner, Zeitler

COORDINATORS:
LEADMAN: Kemp
Buckley, Chmiel, Jew, Klug, Pharr, Ratzke, Warburton

ASSISTANT TO CHAIRMAN ADMINISTRATION: Terrano

ADMINISTRATION:
LEAD: J. Desmond
DiFilippo, Koebel, LeBrun, White-DePace

STOCKROOM: (Lamb), (Reisig)

SECRETARIAL SUPPORT:
HEAD: McBrien
D. Buckley, Ciufo, Loverro, Marshall, Messana, Thompson, Wrigley

DATABASE DEVELOPMENT: Hicks

USER ADMINISTRATION:
HEAD: E. Rothman
Feierabend, Pinkston, Rogers, Wright

TRAINING: Klein

BUILDING MANAGER: Kelly

CARPENTERS: (Gildersleeve), (Riddick)

(Custodial Staff)
(Bounauito), (McPherson),(Ormandy), (Quigley), (Williams)

PRT PERSONNEL: (S. Bennett), (Lamble), (Mingino),

(signed) **Michael Hart, Chairman**

October 1, 1996

NSLS BEAMLINE GUIDE

OCTOBER 1996

This table lists the abbreviations appearing in the Beamline Guides.

ARUPS	=	Angle-Resolved Ultraviolet Photoemission Spectroscopy
CD	=	Circular Diachroism
C-T	=	Czerney-Turner
ERG	=	Extended Range Grasshopper
EXAFS	=	Extended X-ray Absorption Fine Structure
IR	=	Infared
LEGS	=	Laser Electron Gamma Source
MCD	=	Magnetic CD
MI	=	Michelson Interferometer
NEXAFS	=	Near Edge X-ray Absorption Fine Structure
NIM	=	Normal Incidence Monochromator
PGM	=	Plane Grating Monochromator
SEXAFS	=	Surface EXAFS
SGM	=	Spherical Grating Monochromator
S-N	=	Seya-Namioka
SXES	=	Soft X-ray Emission Spectroscopy
TGM	=	Toroidal Grating Monochromator
TOK	=	Transverse Optical Krystron
UPS	=	Ultraviolet Photemission Spectroscopy
WB	=	White Beam
WDI	=	Wavefront Dividing Interferometer
XPS	=	X-ray Photoemission Spectroscopy
XAS	=	X-ray Absorption Spectroscopy

VUV BEAMLINE GUIDE

Beam line	Research Program	Mono.	Affiliation	Local Contact	Spokesperson
U1A	SEXAFS, ARUPS, XPS	ERG	Exxon	B DeVries 516-344-5206 516-344-5206	J Chen 908-730-2738
U1B	(Conceptual)	TGM	Exxon	B DeVries 516-344-5206 516-344-5206	J Chen 908-730-2738
U2A	(Unassigned)				
U2B	High pressure, pump-probe, high Tc abs., IR microscopy	MI	SUNY@SB BNL-NSLS Northrop Grumman Carnegie Inst. Wash	G Williams 516-344-7529	G Carr 516-344-5502 516-344-2237
U3A	Time-resolved and DC radiometry; reflectometry for optical constants	DC/DG	Los Alamos Natl Lab Smiths Astro Obs Bechtel Nevada	A Burek 516-344-5503	R Blake 516-344-5521 505-466-0566
U3B	(Conceptual)				
U3C	Photoelectron spect.; exp. system and detector calibrations	ERG	Bechtel Nevada Sandia Natl Lab Los Alamos Natl Lab	W Towell 516-344-7245	R Bartlett 516-344-5708 505-667-5923
U4A	ARUPS of solids,surfaces; hi res. core level photo-emission; total yield absorption	TGM	No Carolina St U BNL - NSLS Boston U	S Dhesi 516-344-5504	K Smith 617-353-6117
U4B	Soft x-ray photoemission spectroscopy; NEXAFS; SXMCD	SGM	Naval Res Lab BNL-NSLS	V Chakarian 516-344-7718 J Freeland 516-344-7718	Y Idzerda 516-344-7718 202-767-4481 J Park 516-344-7290 516-344-4744

Beam line	Research Program	Mono.	Affiliation	Local Contact	Spokesperson
U4IR	Vibr. spectr of molecules on surfaces; abs of hi Tc superconductors; hi res gas abs.; fast detectors	MI,WDI	BNL-NSLS Lucent Tech Fairleigh Dickinson U Exxon	D Van Campen 516-344-7419 516-344-2738	G Williams 516-344-7529
U5	Diagnostics		BNL-NSLS	R Nawrocky 516-344-4449	R Nawrocky 516-344-4449
U5UA	Spin polarized angle-resolved ultraviolet photoemission	TGM	BNL-NSLS U of Nebraska U of Texas New York U ANL	E Vescovo 516-344-7399 S Hulbert 516-344-7570	E Vescovo 516-344-7399
U6	Lithography	WB	IBM	J Silverman 914-945-2099	J Silverman 914-945-2099
U7A	Photoemission; SEXAFS; Fluorescence yield spectroscopy	TGM	BNL-Chemisry BNL-Physics Rutgers U Dow Chemical NIST U of Michigan Texas A&M	D Fischer 516-344-5177	Q Dong 516-344-5507 516-344-5505
U7B	Photoemission; SEXAFS	PGM	BNL-Physics SUNY@SB	Q Dong 516-344-5507 516-344-5505	M Strongin 516-344-3763
U8A	ARUPS NEXAFS	TGM	IBM	R McFeely 914-945-2068	R McFeely 914-945-2068
U8B	ARUPS NEXAFS	TGM	IBM	K Zhang	J Yarmoff 909-787-5336 909-787-3537
U8C	Zone plate monochr evaluation; reflectivity measurements of thin films and multilayers	ZONE PL.	IBM	R McFeely 914-945-2068	R McFeely 914-945-2068
U8D	(Conceptual) Scanning soft x-ray microscopy		IBM	R McFeely 914-945-2068	R McFeely 914-945-2068

Beam line	Research Program	Mono.	Affiliation	Local Contact	Spokesperson
U9A	(Planned) Lithography				M Strongin 516-344-3763
U9B	CD; MCD; time-resolved fluorescence (lifetimes)	C-T	BNL-NSLS BNL-Biology	J Sutherland 516-344-3406 516-344-3279	J Sutherland 516-344-3406 516-344-3279
U10A	(Unassigned)				
U10B	PSD - general vacuum R&D	WB	BNL-NSLS		
U11	Gas phase photo-ionization and Spectroscopy	NIM	BNL-NSLS BNL-Biology Brandeis U BNL-DAS	S Kuo 516-344-7003 516-344-4001	S Hulbert 516-344-7570 B Klemm 516-344-4022 516-344-4001
U12	High resolution core level Spectroscopy ARUPS	TGM	U of Pennsylvania Oak Ridge Natl Lab	P Lyman 516-344-5615 516-344-7395	E Plummer 423-974-3055 D Zehner 516-344-5512 615-574-6291
U12A	High resolution core level spectroscopy (construction)	TGM	Oak Ridge Natl Lab U of Tennessee	P Lyman 516-344-5615 516-344-7395	E Plummer 423-974-3055 D Zehner 516-344-5512 615-574-6291

Beam line	Research Program	Mono.	Affiliation	Local Contact	Spokesperson
U12B	Angle-resolved photoemission	TGM	Oak Ridge Natl Lab U of Tennessee	P Lyman 516-344-5615 516-344-7395	D Zehner 516-344-5512 615-574-6291 E Plummer 423-974-3055
U13UA	High res. VUV/soft x-ray abs and electron spectroscopy (incl. spin-pol photoem.)	SGM	BNL-NSLS	S Hulbert 516-344-7570	S Hulbert 516-344-7570
U13UB	Optical metrology for extreme ultraviolet projection lithography	WB	Sandia Natl Lab BNL-Instrum	A MacDowell 516-344-5334	A.MacDowell 516-344-5334
U14A	Solid state photoemissions studies	PGM	BNL-NSLS	M Shek 516-344-5930 S Hulbert 516-344-7570	M Shek 516-344-5930 S Hulbert 516-344-7570
U14B	Detector Research and Development	WB	BNL-NSLS	J Hastings 516-344-3930	J Hastings 516-344-3930
U15	Soft x-ray spectroscopy (solids and gases)	TGM	BNL-NSLS SUNY@SB SUNY@Buff	A Wen 516-632-7918 Y Soo 516-344-2702 716-645-2576	D Hanson 516-632-7917 Y Kao 716-645-2576
U16A	(Unassigned)				
U16B	ARUPS; XPS; SEXAFS; stimulated desorption; NEXAFS	ERG	Cornell U Sandia Natl Lab		R Merrill 607-255-9857

X-RAY BEAMLINE GUIDE

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X1A	Soft x-ray imaging	10-80 Å	BNL-NSLS SUNY@SB LBNL No Carolina St U ANL	S Wirick 516-344-4723 516-632-8095	J Kirz 516-344-4723 516-632-8106
X1B	Soft x-ray spectroscopy	10-50 Å	BNL-NSLS BNL-Physics FA - Juelich Fritz-Haber-Inst	P Johnson 516-344-3705 F Loeb 516-344-2092	P Johnson 516-344-3705
X2A	Surface scattering		Exxon ORNL U of Tennessee	V Jahns 516-344-2823 516-344-5057 S Bennett 516-344-4719	K Liang 908-730-3032 A Baddord 423-574-5241
X2B	X-ray microtomography	6.5-30, WB	Exxon	J Dunsmuir 908-730-2548	J Dunsmuir 908-730-2548
X3A1	Short wavelength crystallography, diffraction and scattering	14, 19, 31	SUNY@SB SUNY@Buff	A Darovsky 516-344-3770	P Coppens 716-645-6800 ext. 2217
X3A2	Diffractometry; x-ray spectroscopy; scattering; crystallography; small angle scattering	3-31	SUNY@SB SUNY@Buff	A Darovsky 516-344-3770	P Coppens 716-645-6800 ext. 2217
X3B1	X-ray spectroscopy; powder diffraction	4.6-40	SUNY@SB SUNY@Buff	P Stephens 516-344-3176 516-344-5634 516-632-8156	P Coppens 716-645-6800 ext. 2217
X3B2	Surface science	4-20	SUNY@SB SUNY@Buff	P Stephens 516-344-3176 516-344-5634 516-632-8156	P Coppens 716-645-6800 ext. 2217

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X4A	Multiwavelength anomalous diffraction analysis of crystalline biological macromolecules	4-30	Howard Hughes Med In	C Ogata 516-344-7435 516-344-5466	W Hendrickson 516-344-4938 212-305-3456
X4B	(Conceptual)				
X4C	Diffraction measurements from biological macromolecules	7-20	Howard Hughes Med In	C Ogata 516-344-7435 516-344-5466	W Hendrickson 516-344-4938 212-305-3456
X5A	Laser Electron Gamma Source (LEGS); medium energy nuclear physics	80-400 MeV	BNL-Physics	C Thorn 516-344-7798 O Kistner 516-344-3991	A Sandorfi 516-344-7951 B Preedom 803-777-6559
X5B	Diagnostic				
X6A	Time and space resolved dispersive x-ray spectroscopy	4-20	ANL	P Lee 516-344-2210 516-344-3955	P Montano 708-252-6239
X6B	X-ray scattering	2.4-21.0	ANL U of Illinois Northwestern U BP	P Lee 516-344-2210 516-344-3955	P Montano 708-252-6239
X7A	Structural char. through powder diffraction	5-45, WB	BNL-NSLS BNL-Physics Carnegie Inst of Was E I DuPont Mobil UOP Air Products Corp SUNY@SB U of Cal @ Santa Barbara U of Pennsylvania NIST Chevron	D Cox 516-344-3818 Q Zhu 516-344-3818	D Cox 516-344-3818 Q Zhu 516-344-3818
X7B	Crystallography; wide angle scattering	5-21	BNL-Chemistry Swedish Nat Res Coun	J Hanson 516-344-4381 516-344-4378	T Koetzle 516-344-4384 J Larese
X8A	Photoionization cross-sections; photoelectron spectr; mirror reflect.; detector calib.; spectr.	0.26-5.9	Los Alamos Natl Lab Smiths Astro Obs	M Sagurton 516-344-5708	R Blake 516-344-5521 505-466-0566

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X8C	Diffraction from biological macromolecules and detector calibrations	5-20	Los Alamos Natl Lab Sandia Natl Lab LLNL ANL	M Sagurton 516-344-5708	G Idzorek 516-344-7245 505-667-8848
X9A	XAS	3.4-18.6	Albert Einstein	M Sullivan 516-344-3800 L Miller 516-344-2091 516-344-3800	M Chance 516-344-3800 718-430-2894
X9B	Time resolved x-ray spectroscopy; scattering; diffraction; XAS	3.2-18.8	Albert Einstein	M Sullivan 516-344-3800 L Miller 516-344-2091 516-344-3800	M Chance 516-344-3800 718-430-2894
X10A	Diffraction; small angle scattering; crystallography; scattering	6-15.2	Exxon	S Bennett 516-344-4719	E Sirota 908-730-3407 K Liang 908-730-3032
X10B	Scattering; crystallography	8, 12	Exxon	S Bennett 516-344-4719	E Sirota 908-730-3407 K Liang 908-730-3032
X10C	EXAFS	3.5-24.7	Exxon	M Sansone 516-344-5759 908-730-0100 B DeVries 516-344-5206	P Stevens 516-344-4828 908-730-2584
X11A	EXAFS	4.5-35	No Carolina St U U of Connecticut BNL-NSLS Naval Res Lab Mobil E I DuPont Hoechst Celanese Naval Surf Warf Center Notre Dame U U of Washington Ill Inst of Tech Georgia Inst of Tech Rice U	G Lamble 516-344-7734	G Lamble 516-344-7734 D Sayers 516-344-7731 919-515-4453

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X11B	EXAFS	1.7-8	No Carolina St U U of Connecticut BNL-NSLS Mobil E I DuPont Naval Res Lab Hoechst Celanese Naval Surf Warf Center Notre Dame U U of Washington Ill Inst of Tech Georgia Inst of Tech Rice U	G Lamble 516-344-7734	G Lamble 516-344-7734 D Sayers 516-344-7731 919-515-4453
X12A	Instrument development		BNL-NSLS	B Dowd 516-344-2738	DP Siddons 516-344-2738 516-344-5627
X12B	Time-resolved and static x-ray diffr. of macromol. systems in both wide and small angle regimes	6-15	BNL-NSLS BNL-Biology	M Capel 516-344-5712	T Langdon 516-344-5712 M Capel 516-344-5712
X12C	Protein crystallography	7.8-13.6	BNL-Biology	R Sweet 516-344-3401	R Sweet 516-344-3401
X13	R&D optics development; soft x-ray utilization		BNL-NSLS	E Johnson 516-344-4603 J Hastings 516-344-3930	E Johnson 516-344-4603
X14A	Scattering; crystallography; spectroscopy	3.5-40	Oak Ridge Natl Lab U of Illinois	R Eisenhower 516-344-5614	G Ice 423-574-2744
X14B	(Conceptual) X-ray microprobe; x-ray micro-focussing; micro-diffraction	WHITE	Oak Ridge Natl Lab	E Johnson 516-344-4603 J Milne 516-344-5910	E Johnson 516-344-4603 P Siddons 516-344-5627 516-344-2738
X15A	X-ray standing waves	3-20, WB	ANL Northwestern U Harvard U	P Lyman 516-344-5615 516-344-7395	M Bedzyk 516-344-7395 708-252-7763

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X15B	SEXAFS EXAFS NEXAFS	1.5-15	Lucent	P Northrup 516-344-5334 A MacDowell 516-344-5334	P Citrin 908-582-5275
X16A	Surface diffraction	4-12	Lucent U of Illinois	W Lehnert 516-344-5715 A MacDowell 516-344-5334	K Evans-Lutterodt 516-344-2125 908-582-2154 I Robinson 516-344-7024 217-244-2949
X16B	Diffraction	7.85	Lucent	L Flaks 516-344-2738	P Siddons 516-344-5627 K Evans-Lutterodt 516-344-2125 908-582-2154
X16C	Novel spectroscopy; diffraction	3-16	Lucent U of Illinois	W Lehnert 516-344-5715 A MacDowell 516-344-5334	W Brown 908-582-3941 M Marcus 908-582-2749
X17A	(Conceptual)				
X17B1	Chemical crystallography; hi P physics; tomography; x-ray scattering; x-ray fluorescence microprobe	10-100, WB	BNL-NSLS	J Hastings 516-344-3930 P Siddons 516-344-5627 516-344-2738	J Hastings 516-344-3930 P Siddons 516-344-5627 516-344-2738
X17B2	Medical research: Angiography; computed tomography; radiotherapy	33.02,33.3	BNL-NSLS Stanford U Illinois Inst Tech SUNY@SB LBNL BNL-Medical	N Gmür 516-344-2490	W Thomlinson 516-344-3937
X17C	Hi P research; energy dispersive diffraction from microscopic sample volumes	10-100, WB	Naval Res Lab Carnegie Inst of Was LLNL U of Chicago	J Hu 516-344-5343 202-686-2410	H Mao 202-686-2410 ext. 2467 E Skelton 202-767-3014
X18A	Diffuse and surface scattering	4-20	Purdue U Northwestern U U of Illinois U of Missouri Penn State U	S Ehrlich 516-344-7862 J Schwanof 516-344-5618 516-344-5635	G Liedl 317-494-4100 S Ehrlich 516-344-7862

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X18B	EXAFS; optics char.; reflectivity measurements	4-26	BNL-NSLS AlliedSignal UOP Chevron	S Khalid 516-344-7496	DP Siddons 516-344-2738 516-344-5627 L Furenlid 516-344-5699
X19A	X-ray Absorption Spect.; EXAFS and XANES	2.1-25.6	BNL-NSLS UCA@Davis U of Kentucky U of Michigan BNL-DAS	F Lu 516-344-2338	L Furenlid 516-344-5699
X19C	Topography; liquid surface scattering	4-25, WB	BNL-NSLS SUNY@SB Johns Hopkins U Army Research Lab U of Illinois U of Chicago	M Dudley 516-632-8500	M Dudley 516-632-8500
X20A	Scattering (hi Q-res)	5.6-12	MIT IBM	J Jordan-Sweet 516-344-5192 914-945-3322	R Birgeneau 617-253-4937 J Jordan-Sweet 516-344-5192 914-945-3322
X20B	Scattering at fixed energy	17.36	IBM MIT	J Jordan-Sweet 516-344-5192 914-945-3322 R Birgeneau 617-253-4937	J Jordan-Sweet 516-344-5192 914-945-3322
X20C	Scattering (hi and low Q res)	4-11	IBM MIT	J Jordan-Sweet 516-344-5192 914-945-3322 R Birgeneau 617-253-4937	J Jordan-Sweet 516-344-5192 914-945-3322
X21	High energy resolution inelastic scattering	> 4	BNL-NSLS	C Kao 516-344-4494	C Kao 516-344-4494
X22A	In-plane diffr. & refl. studies of surfaces under electro-chem. cond., and thin films and multilayer	10 Nom.	BNL-Physics BNL-DAS	B Ocko 516-344-4299 B Ocko	D Gibbs 516-344-4608
X22B	High resolution x-ray diffraction	5-10	BNL-Physics Harvard U ANL	B Ocko 516-344-4299	D Gibbs 516-344-4608

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X22C	Diffraction studies of magnetic and structural phase transformations; surface scattering	3-12	BNL-Physics ANL	J Hill 516-344-3736 516-344-4730	D Gibbs 516-344-4608
X23A2	EXAFS	5.4-30	NIST	J Woicik 516-344-5823 516-344-5236 S Chu 516-344-3923 301-975-5975	J Woicik 516-344-5236 516-344-5823
X23A3	Topography; small-angle scattering	5-30, WB	NIST	D Fischer 516-344-5177 S Chu 516-344-3923 516-346-9285	G Long 301-975-5975
X23B	EXAFS; scattering; crystallography	3-11	Naval Res Lab	J Kirkland 516-344-2258	T Elam 202-767-3015
X24A	Atomic, molecular, and optical physics with x-rays	1.8-5.0	NIST ANL	B Karlin 516-344-7863 516-344-5624	T Jach 301-975-2362
X24C	Photoemission and reflectance spectroscopy	2-1500 eV	Naval Res Lab	J Rife 202-767-4654 J Kirkland 516-344-2258	J Rife 202-767-4654 J Kirkland 516-344-2258
X25	High Q-resolution elastic scattering	> 3	BNL-NSLS	L Berman 516-344-5333 Z Yin 516-344-5525 516-344-5625	L Berman 516-344-5333
X26A	Dev. and application of analytical techniques (e.g. microprobe)	4-20, WB	BNL-DAS U of Chicago U of Georgia BNL-Biology Cold Spring Harb Lab	G Shea-McCarthy 516-344-2229	S Sutton 312-702-9930
X26C	Dev. and applic. of x-ray microscopy techniques; Laue diffraction protein crystallography	4-30, WB	BNL-DAS U of Chicago BNL-Biology U of Georgia Cold Spring Harb Lab	G Shea-McCarthy 516-344-2229	S Sutton 312-702-9930
X27A	Instrument development		BNL-NSLS	B Dowd 516-344-2738	DP Siddons 516-344-2738 516-344-5627

Beam line	Research Program	Energy (keV)	Affiliation	Local Contact	Spokesperson
X27B	Instrument development		BNL-NSLS	E Johnson 516-344-4603	E Johnson 516-344-4603
X27C	Instrument development		BNL-NSLS	B Dowd 516-344-2738	DP Siddons 516-344-2738 516-344-5627
X28A	Instrument development; Photon-based diagnostics and detector development		BNL-NSLS	P Stefan 516-344-2117	P Stefan 516-344-2117
X28B	Photon-based diagnostics and detector development		BNL-NSLS	P Stefan 516-344-2117	P Stefan 516-344-2117
X28C	Photon-based diagnostics and detector development		BNL-NSLS	P Stefan 516-344-2117	P Stefan 516-344-2117
X29A	(Unassigned)				
X29B	(Unassigned)				
X30	Diagnostic				