Service SIG Salary and Work Environment Survey - 2016

Notes: a total of 164 people responded to the 2016 survey.

In 2007 there were 85 respondents

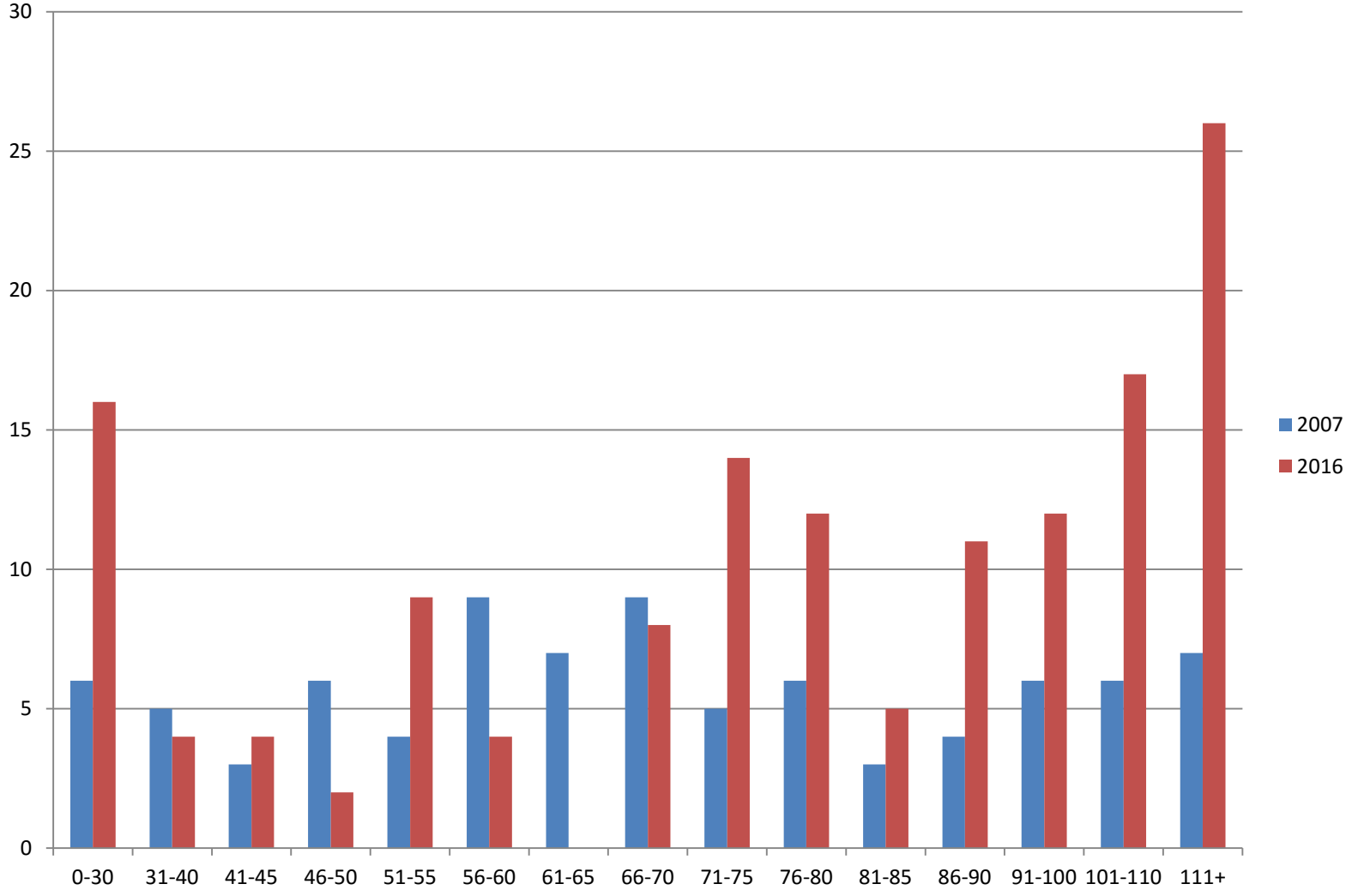
Categories were defined further to included retiree and other answers

Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

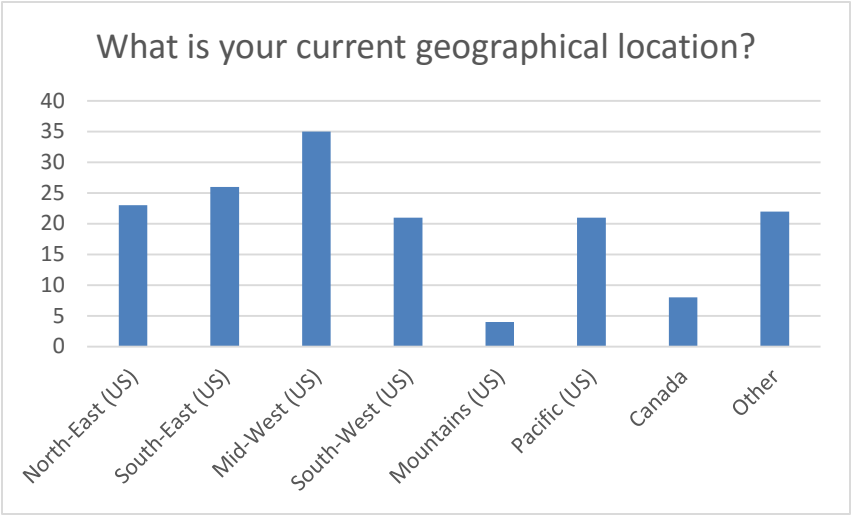
Service SIG Salary and Work Environment Survey - 2016

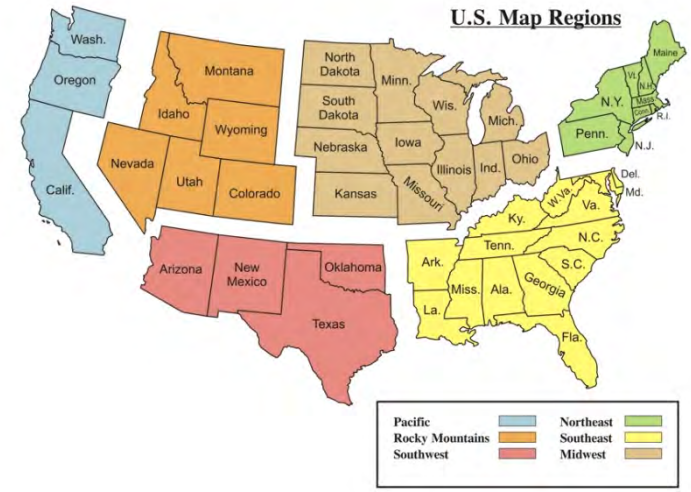
Salary and Tasks – Salary distribution 2007 *cf* 2016



Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

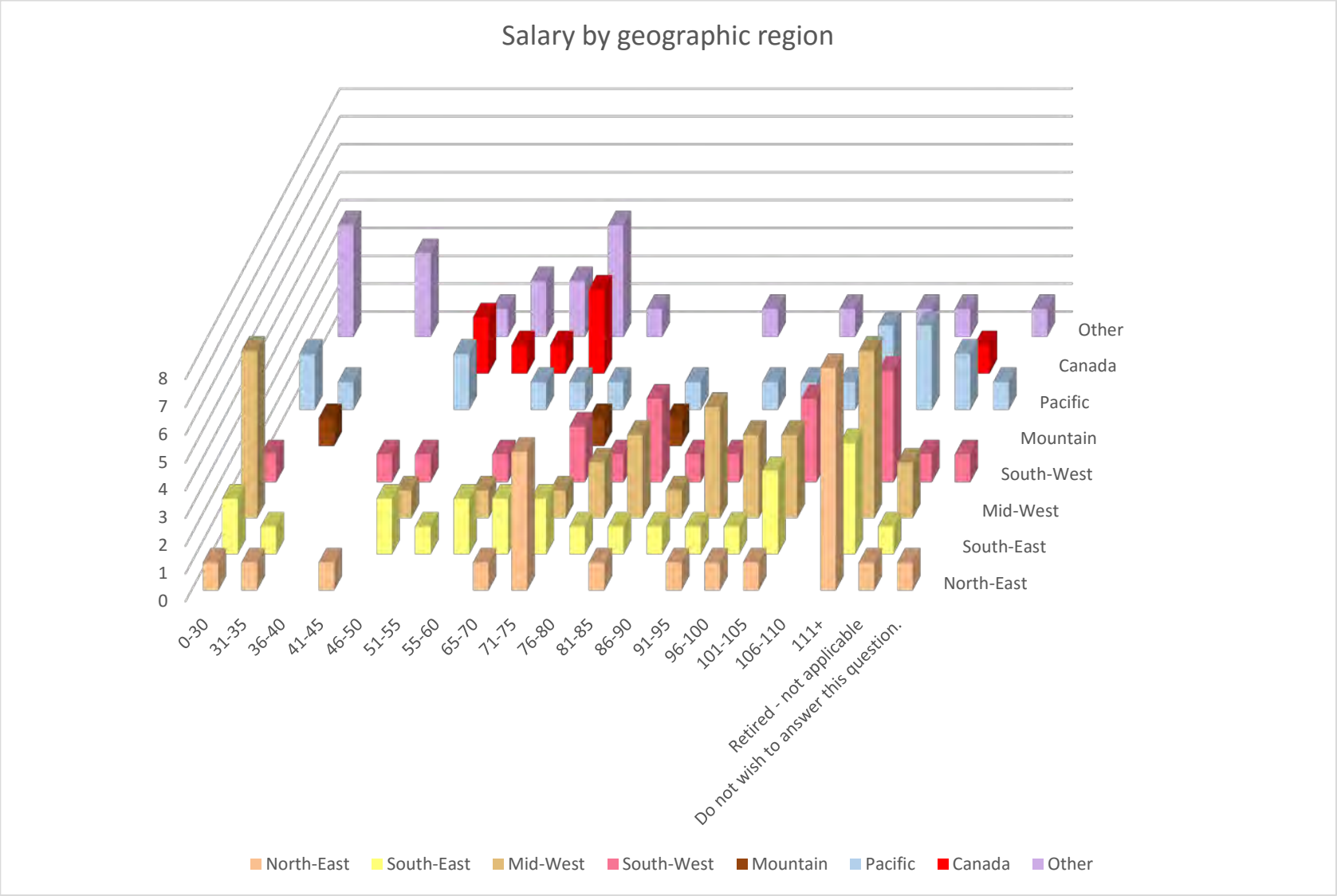




	0-30	31-35	36-40	41-45	46-50	51-55	55-60	65-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	106-110	111+
North-East	1	1		1				1	5		1		1	1	1		8
South-East	2	1			2	1	2	2	2	1	1	1	1	1	3		4
Mid-West	6				1		1	2	1	2	3	1	4	3	3		6
South-West	1			1	1		1		2	1	3	1	1		3		4
Mountain		1							1		1	1					
Pacific	2	1			2		1	1	1		1		1	1	1	3	3
Canada					2	1	1	3									
Other	4		3		1	2	2	4	1			1		1		1	1

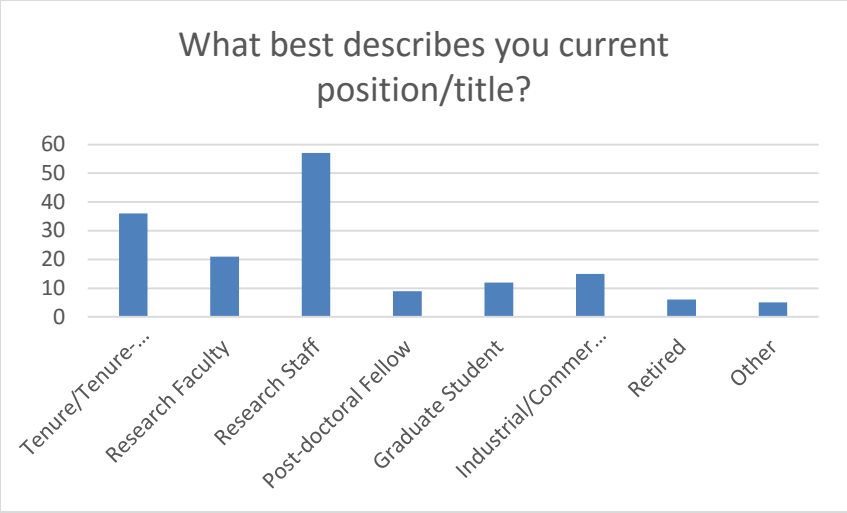
Service SIG Salary and Work Environment Survey - 2016

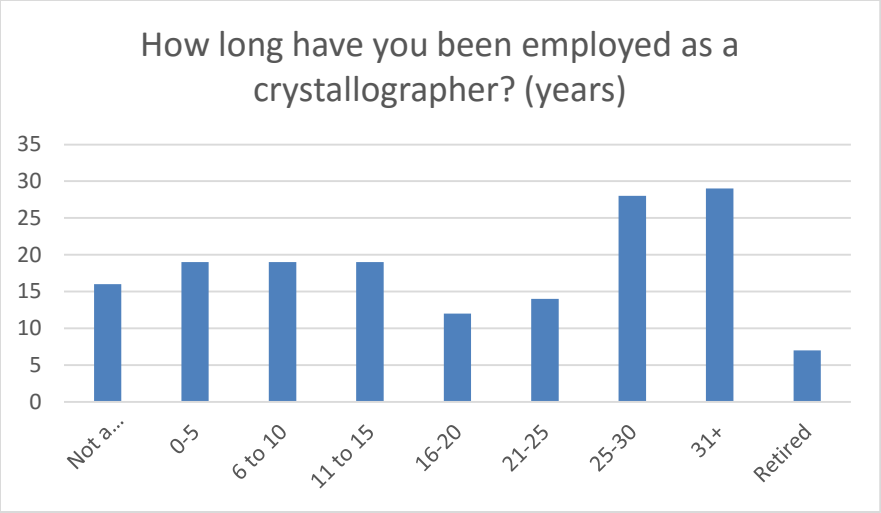
Salary and Tasks



Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

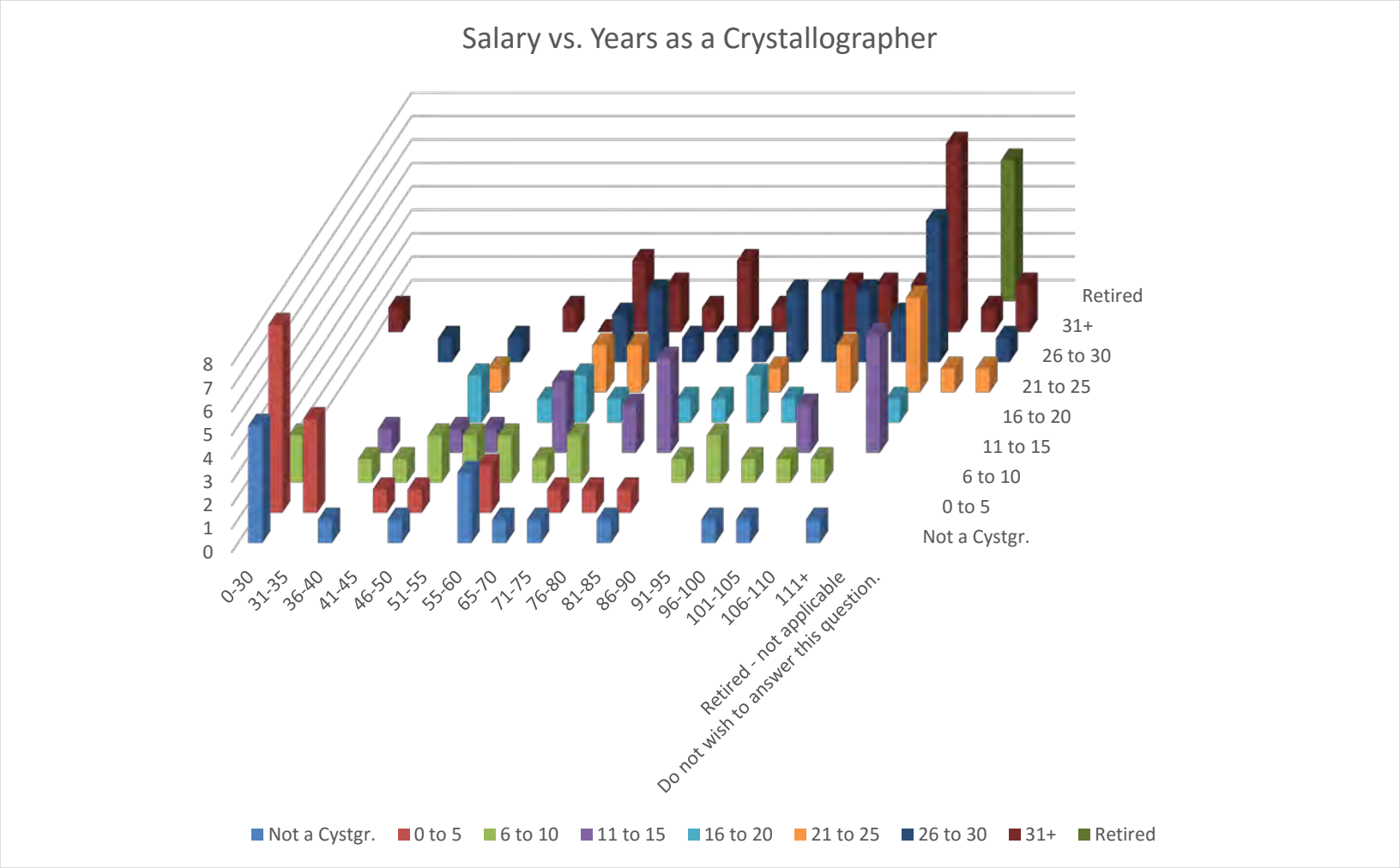




	0-30	31-35	36-40	41-45	46-50	51-55	55-60	65-70	71-75	76-80	81-85	86-90	91-95	96-100	101-105	106-110	111+
Not a Cystgr.	5		1		1		3	1	1		1			1	1		1
0 to 5	8	4		1	1		2		1	1	1						
6 to 10	2		1	1	2	2	2	1	2			1	2	1	1	1	
11 to 15			1		1	1		3		2	4				2		5
16 to 20					2		1	2	1		1	1	2	1			1
21 to 25					1			2	2				1		2		4
26 to 30			1		1			2	3	1	1	1	3	3	3	2	6
31+	1					1		3	2	1	3	1		2	2	2	8

Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks



Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

What **tasks related to crystallography** do you undertake? (Check all that apply)

Crystal Growth	70
Crystal Growth Advice	94
Data Collection	141
Structure Solution/Refinement	149
Graphics/Diagrams (beyond a numbering scheme)	109
Report Generation	116
Instrument Maintenance	96
Manuscript Preparation	135
Course Instruction (Crystallography)	86
Instrument Training (Formal through a Course)	43
Instrument Training (Informal; one-on-one)	103
Programming	30
Grant Writing	67
Powder / Polycrystalline (please answer additional below)	71
Synchrotron data collection	72
Macromolecular crystallography	49
Journal Article reviewing	93
Other	15

If you undertake **Powder/Polycrystalline** studies, what tasks do you perform? (check all that apply)

Do not have PXRD access	24
Have access to PXRD in another facility within my institution	20
Simple diffractograms	70
Phase quantification	47
Crystalline size/strain analyses	34
Rietveld refinement	43
Texture Analyses	11
Pair Distribution Function (PDF) analyses	12
X-ray reflectivity (XRR) studies	10
Variable-pressure studies	9
Variable-temperature studies	33
Other	7

Service SIG Salary and Work Environment Survey - 2016

Salary and Tasks

Does your job involve **tasks not directly related** to crystallography? (check all that apply)

No	**20**
Course instruction – non-crystallographic courses	**47**
Group meetings	**74**
Grant applications/writing (non-crystallography)	**48**
Departmental/University Committees	**67**
Secretarial work	**13**
Synthetic research	**30**
Computer support (IT)	**24**
Workshop/conference organization	**31**
Instrument support (non X-ray)	**32**
Laboratory support (research or teaching lab)	**48**
Chemical Store Management	**3**
Extracurricular work	**20**
Administrative work	**55**
Manuscript preparation	**77**
Other	**8**

Are you expected to **recover/supplement** your salary from recharge fees?

Yes – My salary is solely from recharge fees	**7**
Yes - >50% of my salary is from recharge fees	**3**
Yes - 1-50% of my salary is from recharge fees	**12**
No – My salary is a departmental budget item	**84**
No – my salary is sourced by a commercial enterprise	**10**
No – My salary is supported by a grant	**29**
Other not listed	**15**

Service SIG Salary and Work Environment Survey - 2016

Facility Operations and Facility Revenue

Do you have a **charging scheme/fee scheme** for your facility?

Yes – Charge is an hourly rate	**15**
Yes – Charge is by collection-type (e.g. matrix, full data set, full structural work-up/report)	**35**
Yes – Charge by a unit (e.g. per reflection recorded)	**3**
Yes – Charge a flat rate/flat rate to a certain time/limit then an additional fee thereafter	**12**
No – Costs are part of the departmental operating budget	**29**
Not applicable (do not answer the next two questions)	**41**
Other not described here	**10**

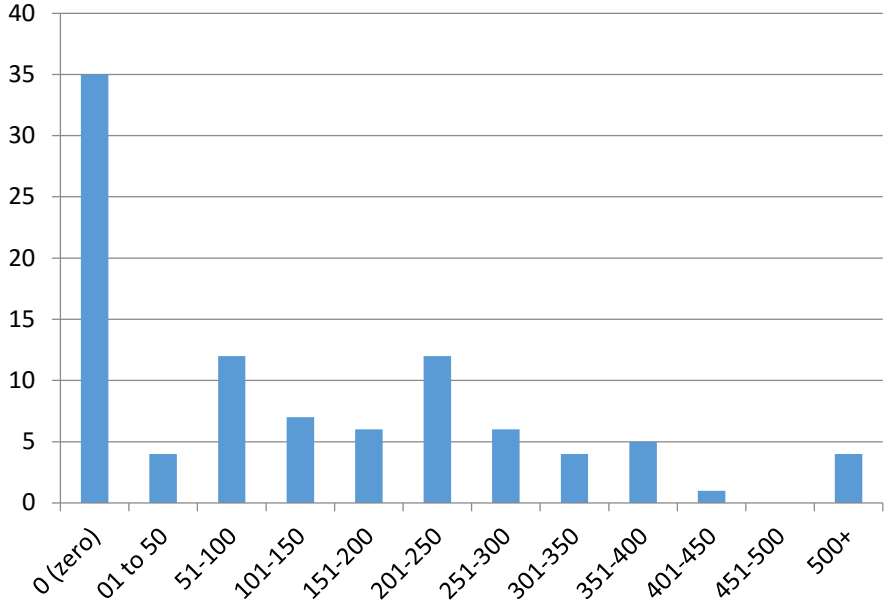
If you have a fee structure, **how are the fees determined**? (please check all that apply)

The facility should be self-supporting; the fee structure was determined by cost analysis	**37**
Data are categorized by a "tier" system and charges applied accordingly	**14**
There is historical precedent for the fees charged	**17**
A flat fee for the facility usage is offered to users	**25**
Separate fees are applied for different "items" (e.g. data collection is a separate charge from crysogens)	**18**
Other	**4**

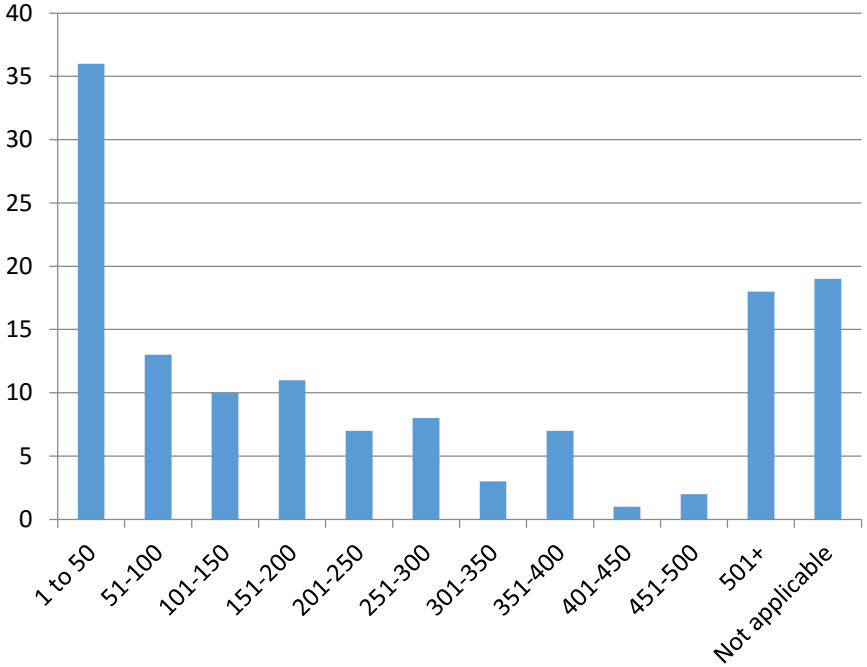
Service SIG Salary and Work Environment Survey - 2016

Facility Operations and Facility Revenue

What do you charge for a **full, internal structural data set** (including report generation or whatever is appropriate to your facility/department) (US$)



On average, **how many structures** are determined in your facility per year?



Do you charge **non-affiliated non-academic (commercial)** users more?

Yes	**75**
No	**10**
Not applicable/No external use	**47**

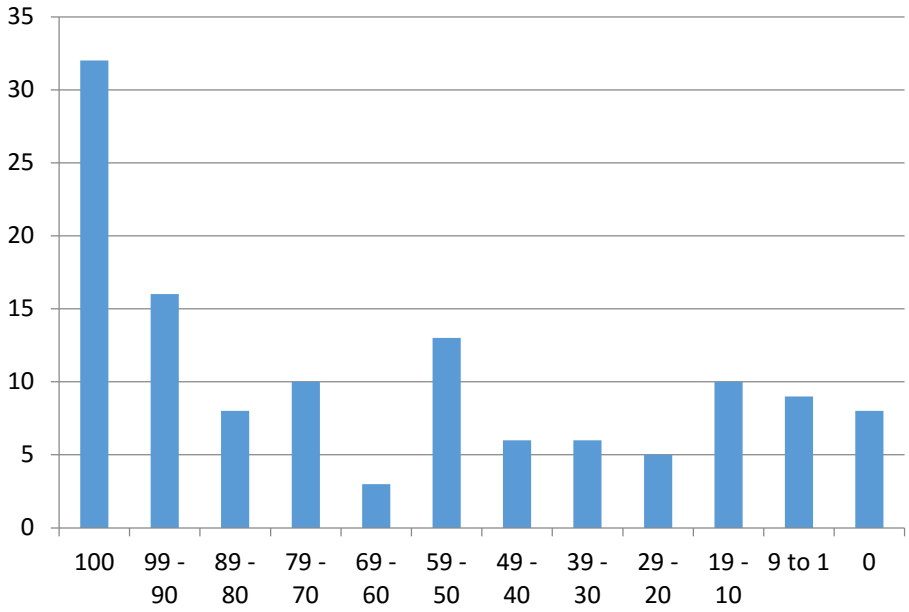
Is the facility a "**user access**" facility? (i.e. are users trained to collect their own data)

Yes	**89**
No	**44**

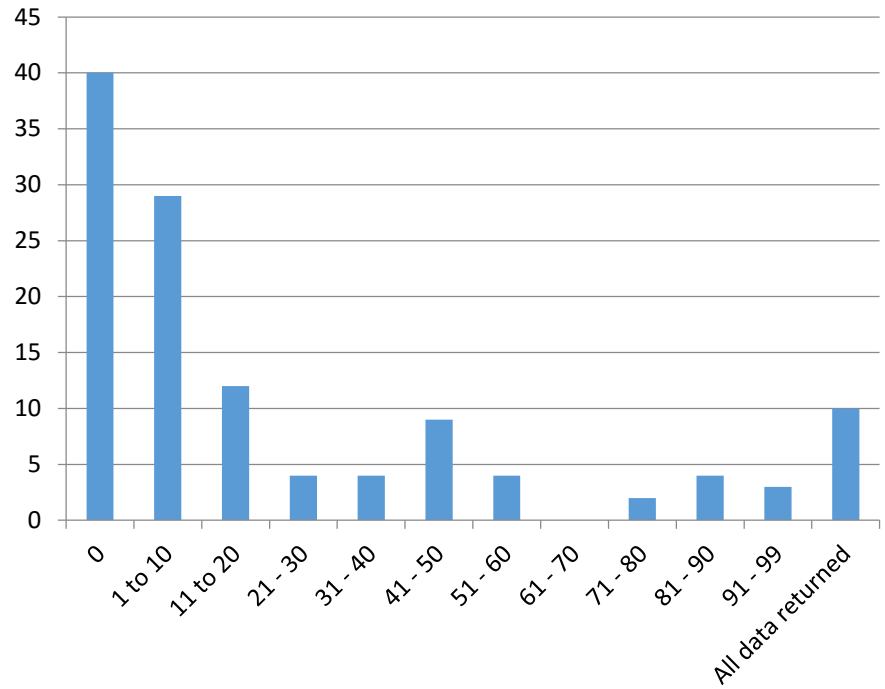
Service SIG Salary and Work Environment Survey - 2016

Facility Operations and Facility Revenue

What is the approximate **percentage** of data collected by the **facility staff**?



What is the percentage (approximately) of data that **facility personnel** record that is **given back** to the **submitter** to solve and refine?



Service SIG Salary and Work Environment Survey - 2016

Laboratory / Work Space

Do you have an **assistant/co-worker** within your facility?

No	**68**
Yes (please answer the next question)	**58**
No – One is needed (please answer the next question)	**3**

If you have/will have an **assistant** how are/ would they be **supported**?

Recharge fees	**11**
Departmental salary	**33**
Grant (research or personal)	**13**
Commercial	**6**
Other	**8**

Office space provided to you is:

An office separate and external to the X-ray facility	**93**
An office enclosed within the X-ray facility	**23**
No office – all work is within the facility proper	**7**
No office or work space is provided anywhere	**1**
Other	**2**

With respect to the **size** of the facility:

Sufficient space exists for now and for future growth	**65**
Sufficient space for the current instrumentation; there is no room for growth	**55**
The current space is inadequate for current needs	**4**
Other	**2**

With regards to the **current appearance and condition** of the facility (consider also environment, support services (e.g. HVAC), cleanliness, modern):

The facility is in excellent condition and appearance	**42**
It is equal/similar to other facilities	**56**
It is in adequate condition. It is poor compared with other facilities	**21**
It is barely functional	**3**
The facility is a disgrace and needs thorough renovation	**1**
Other	**3**

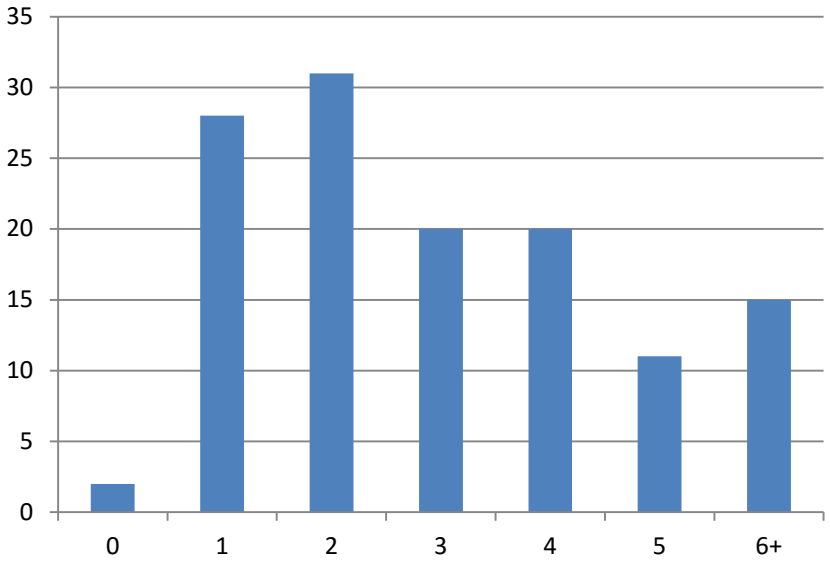
Service SIG Salary and Work Environment Survey - 2016

Laboratory / Work Space

What **instrumentation** do you have in your facility? (check all that apply)

3-circle - Area Detector	**56**
4-circle - Area Detector	**58**
Powder Diffractometer	**59**
3-circle - Point Detector	**2**
4-circle - Point Detector	**7**
Synchrotron source	**13**
Neutron source	**2**
Gunier camera	**2**
Image Plate system	**27**
SAXS	**17**
Other analytical instruments	**30**
None (all instruments are defunct/utilize nearby facilities)	**2**
Other (not listed)	**14**

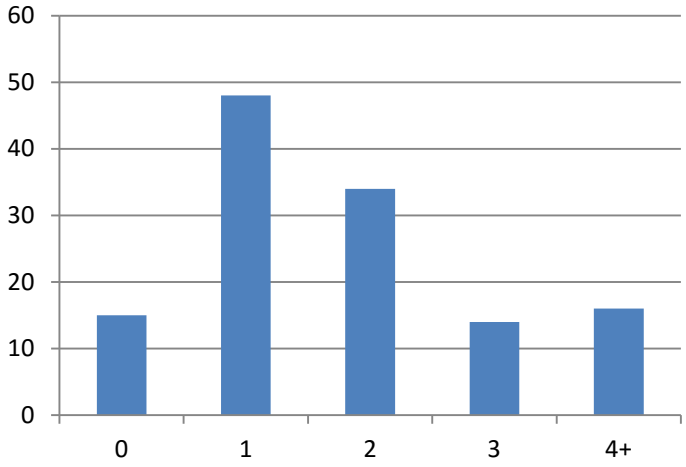
What is the **total number of X-ray instruments** in your facility?



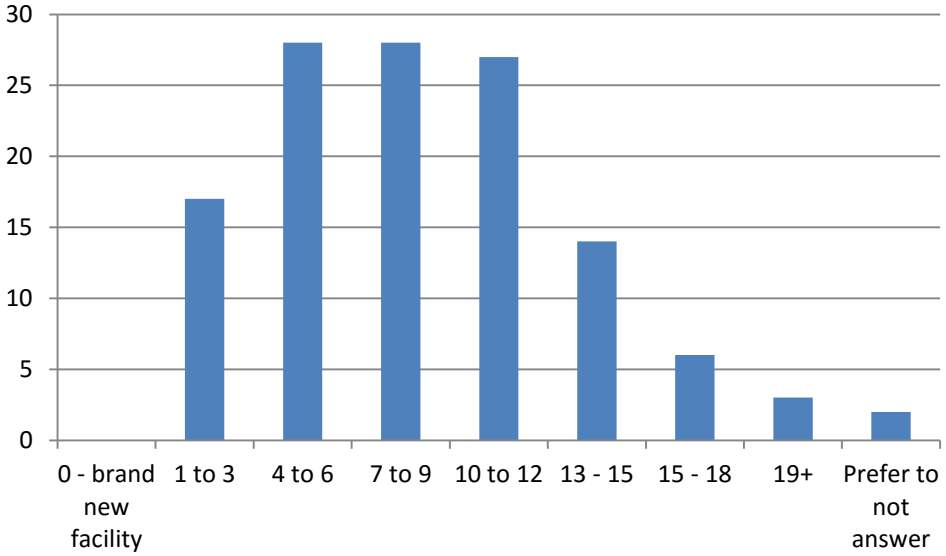
Service SIG Salary and Work Environment Survey - 2016

Laboratory / Work Space

How many **single-crystal** diffractometers do you have in your facility?



What is the **age** (average, in years) of the **instrumentation** in your facility? (consider the base instrument, not upgrades if any)



Do you maintain a **service contract** for your facility?

No	64
Parts only	9
Parts and Service/Maintenance	25
Full contract	16
Instrument is still under warranty	4
Commercial vendor	2

Service SIG Salary and Work Environment Survey - 2016

Affiliations and Travel Support

What type of **institution** are you primarily associated with?

Graduate-level University	96
Undergraduate University (PUI)	11
Commercial supplier (e.g. Instrument Vendor)	2
Industrial (e.g. Pharmaceutical)	10
Government Research Lab / National Lab	11
Other	2

Which **Scientific Interest Groups**, within the ACA, are you a member of? (check all that apply)

Service	56
Small Molecule	68
BioMac	27
General Interest	53
Powder Diffraction	32
Fiber Diffraction	2
Materials	29
Light Source	14
Small Angle Scattering	13
Industrial	11
Neutron Scattering	9
Young Scientists	18

To which **other professional organizations** do you belong? (Check all that apply)

None	21
IUCr	45
British Crystallographic Association	7
European Crystallographic Association	7
Asian Crystallographic Association	5
Pittsburgh Diffraction Society	8
American Chemical Society	68
Royal Society of Chemistry	8
American Association for the Advancement of Science	15
American Physics Society (APS)	10
Chemical Institute of Canada	2
American Institute of Chemical Engineers (AIChE)	0
Mineralogical Society of America	1
Other	21

Service SIG Salary and Work Environment Survey - 2016

Affiliations and Travel Support

In a given year, institutional support has **allowed** you to:

Attend any scientific meeting (in or out of field)	39
Attend two or more crystallographic meetings	13
Attend one crystallographic meeting	56
Not attend any meetings	16
Never attended a meeting	4

Institutional support to attend meetings generally **covers**: (select most appropriate)

All expenses (travel, board, food)	72
Almost all expenses	14
A majority of the expenses	16
A few expenses	8
No expenses (self-supported)	10
Have not attempted to obtain travel support	9

Support for travel comes from: (check all that apply)

Recharge/budget under your control	34
Provided as needed by department/institute	60
External grants	29
Internal grants	12
Professional body support	4
Personal funds	28
Industrial/Commercial sponsor	6
Other	5

Service SIG Salary and Work Environment Survey - 2016

Academic and Job Description

What is your **highest degree**?

Ph.D.	**117**
M.S./M.Sc.	**5**
B.S./B.Sc.	**10**
Other	**1**

In terms of **publication**, are you generally considered:

A collaborator with co-authorship rights	**116**
A collaborator with an acknowledgement	**6**
Simply acknowledged	**5**
Unrecognized for work	**2**

What is the **subject** of your highest degree?

Chemistry	**94**
Physics	**10**
Biology	**2**
Geology/Earth Science	**1**
Crystallography	**7**
Biochemistry/Biophysics	**12**
Other	**5**