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**Report of the Executive Committee for 2019**

**A. T. Ashcroft**

**INTERNATIONAL UNION OF  
CRYSTALLOGRAPHY**

**ANNUAL REPORT AND FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED 31 DECEMBER 2019**

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

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# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## EXECUTIVE COMMITTEE'S REPORT

### FOR THE YEAR ENDED 31 DECEMBER 2019

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#### Executive Committee Members

President:	Professor S Lidin
Vice President	Dr H A Dabkowska
General Secretary and Treasurer:	Professor L Van Meervelt
Immediate Past President:	Professor M L Hackert
Ordinary Members:	Professor W Depmeier Professor G C Díaz de Delgado Professor S Garcia-Granda Professor R Kuzel Professor J L Martin Professor M Takata
Executive Secretary:	Dr A Ashcroft

#### Statement of the Executive Committee's Responsibilities

The Statutes and By-laws of the Union require the Treasurer to exhibit a general statement of the pecuniary affairs of the Union with detailed accounts of the income and expenditure. In preparing these non-statutory financial statements, the Executive Committee is required to:

- i) select suitable accounting policies and then apply them consistently;
- ii) make judgements and estimates that are reasonable and prudent;
- iii) state whether applicable accounting standards have been followed; and
- iv) prepare the non-statutory financial statements on the going concern basis unless it is inappropriate to presume the Union will continue in business.

These financial statements are to be audited by a professional auditor appointed by the Executive Committee.

The Executive Committee is responsible for keeping adequate accounting records which disclose with reasonable accuracy at any time the financial position of the Union and to ensure that the non-statutory financial statements comply with the Constitution of the Union. They are also responsible for safeguarding the assets of the Union and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the persons who is a member of the Executive Committee at the date of approval of this report confirms that:

- i) so far as the member is aware, there is no relevant audit information of which the Union's auditor is unaware; and
- ii) the member has taken all the steps that they ought to have taken as a member in order to make themselves aware of any relevant audit information and to establish that the Union's make themselves aware of any relevant audit information and to establish that the Union's auditor is aware of that information.

# **INTERNATIONAL UNION OF CRYSTALLOGRAPHY**

## **EXECUTIVE COMMITTEE'S REPORT**

### **FOR THE YEAR ENDED 31 DECEMBER 2019**

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By Order of the Executive Committee

Professor L Van Meervelt  
General Secretary and Treasurer

Professor S Lidin  
President

Dr A Ashcroft  
Executive Secretary

Date: .....

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## INDEPENDENT AUDITOR'S REPORT

### TO THE MEMBERS OF INTERNATIONAL UNION OF CRYSTALLOGRAPHY

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#### Opinion

We have audited the non-statutory financial statements of the International Union of Crystallography for the year ended 31 December 2019 which comprise the income and expenditure account, the balance sheet, the cash flow statement and the related notes 1 to 11. These non-statutory financial statements have been prepared under the accounting policies set out therein.

In our opinion, the non-statutory financial statements:

- give a true and fair view, of the state of the Union's affairs as at 31 December 2019 and of its surplus of income over expenditure for the year then ended; and
- have been properly prepared in accordance with the accounting policies stated in note 1 to the non-statutory financial statements.

#### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs(UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the non-statutory financial statements section of our report. We are independent of the Union in accordance with the ethical requirements that are relevant to our audit of the non-statutory financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with those requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Executive Committee's use of the going concern basis of accounting in the preparation of the non-statutory financial statements is not appropriate; or
- the Executive Committee has not disclosed in the non-statutory financial statements any identified material uncertainties that may cast significant doubt about the Union's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the non-statutory financial statements are authorised for issue.

#### Respective responsibilities of the Executive Committee

As explained more fully in the Statement of the Executive Committee's Responsibilities, the Executive Committee is responsible for the preparation of the non-statutory financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Executive Committee determines necessary to enable the preparation of the non-statutory financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the non-statutory financial statements, the Executive Committee is responsible for assessing the Union's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Executive Committee either intends to liquidate the Union or to cease operations, or have no realistic alternative but to do so.

#### Auditor's responsibilities for the audit of the non-statutory financial statements

Our objectives are to obtain reasonable assurance about whether the non-statutory financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could be reasonably expected to influence the economic decisions of users taken on the basis of these non-statutory financial statements.

A further description of our responsibilities for the audit of the non-statutory financial statements is located on the Financial Reporting Council's website at: <http://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

# **INTERNATIONAL UNION OF CRYSTALLOGRAPHY**

## **INDEPENDENT AUDITOR'S REPORT (CONTINUED)**

### **TO THE MEMBERS OF INTERNATIONAL UNION OF CRYSTALLOGRAPHY**

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#### **Use of our report**

This report is made solely for the exclusive use of the Union's members, as a body, in accordance with Section 11.1 of the Statutes of the Union for the purpose of showing the results of management's stewardship of the resources entrusted to it. Our report is not to be used for any other purpose, recited or referred to in any document, copied or made available (in whole or in part) to any other person without prior written express consent. We accept no duty, responsibility or liability to any other party in connection with the report or this engagement.

**Helen Clayton BSc FCA (Senior Statutory Auditor)**

**for and on behalf of**

**PM+M Solutions for Business LLP**

**Statutory Auditor**

**Chartered Accountants**

**Blackburn, United Kingdom**

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# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## DETAILED INCOME AND EXPENDITURE ACCOUNT

FOR THE YEAR ENDED 31 DECEMBER 2019

		2019 \$	2018 \$
<b>Income</b>			
Membership income		177,767	168,278
Journals, back numbers and single issues	2,573,585	2,624,275	
Open access income	580,318	371,204	
Books	118,153	118,336	
		<b>3,272,056</b>	3,113,815
Income from investments	28,408	17,104	
Bank interest	4,271	1,104	
Profit/(loss) on disposals of investments	42,363	(33,902)	
		<b>75,042</b>	(15,694)
Royalties and copyright fees	24,232	17,575	
Advertising income	22,068	53,645	
Checking services	9,899	28,853	
Associate programme	13,612	14,936	
		<b>69,811</b>	115,009
<b>Total income</b>		<b>3,594,676</b>	3,381,408
<b>Journals</b>			
Publication costs	(347,547)	(243,703)	
Editorial expenses	(78,136)	(72,468)	
Technical editing	(1,149,447)	(1,223,707)	
Subscription administration	(40,621)	(42,816)	
Journal development costs	(499,281)	(438,661)	
		<b>(2,115,032)</b>	(2,021,355)
<b>Books</b>			
Publication costs	(21,023)	(13,177)	
Editorial expenses	(13,972)	(30,387)	
Technical editing	(93,569)	(74,852)	
		<b>(128,564)</b>	(118,416)
<b>Outreach and education</b>			
Outreach	(83,035)	(111,798)	
Young scientists' support	(111,772)	(134,536)	
Visiting professorship programme	(9,837)	(11,313)	
		<b>(204,644)</b>	(257,647)
General Assembly costs		<b>(4,704)</b>	(12,705)
Promotion, advertising and marketing costs		<b>(77,943)</b>	(120,937)
Newsletter costs		<b>(10,240)</b>	(9,915)



# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## DETAILED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2019

		2019 \$	2018 \$
<b>Administrative expenses</b>			
Committee meetings and expenses	(73,013)	(55,749)	
Subscriptions	(4,350)	(4,839)	
General Secretary and Treasurer expenses	(2,221)	(6,297)	
Audit and accountancy fees	(54,035)	(38,399)	
Legal and professional fees	(31,833)	(39,797)	
Bank charges	(15,529)	(18,949)	
Travel expenses	(7,152)	(17,274)	
Sponsorship of meetings	-	(2,353)	
Executive office salaries	(126,658)	(120,483)	
		<b>(314,791)</b>	<b>(304,140)</b>
<b>Chester office expenses</b>			
Office costs	(308,315)	(250,597)	
Staff overheads	(82,987)	(79,242)	
		<b>(391,302)</b>	<b>(329,839)</b>
Depreciation		<b>(34,246)</b>	<b>(23,650)</b>
<b>Total expenditure</b>		<b>(3,281,466)</b>	<b>(3,198,604)</b>
<b>Surplus of income over expenditure</b>		<b>313,210</b>	<b>182,804</b>
<b>Other gains and losses</b>			
Movement in the market value of investments	170,654	(32,769)	
Exchange movements on trading activities	41,185	(92,599)	
Exchange differences on investment activities	36,738	(32,411)	
		<b>248,577</b>	<b>(157,779)</b>
<b>Total recognised gains relating to the year</b>		<b>561,787</b>	<b>25,025</b>

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## BALANCE SHEET

AS AT 31 DECEMBER 2019

	Notes	2019 \$	\$	2018 \$	\$
<b>Fixed assets</b>					
Tangible assets	5	63,158		40,057	
Investments	6	2,485,372		2,506,434	
		<u>2,548,530</u>		<u>2,546,491</u>	
<b>Current assets</b>					
Stocks		78,804		66,793	
Debtors	7	547,842		371,522	
Cash at bank and in hand		1,855,689		821,353	
		<u>2,482,335</u>		<u>1,259,668</u>	
<b>Creditors: amounts falling due within one year</b>	8	<u>(1,155,039)</u>		<u>(492,120)</u>	
<b>Net current assets</b>		<u>1,327,296</u>		<u>767,548</u>	
<b>Total assets being total funds</b>		<u><u>3,875,826</u></u>		<u><u>3,314,039</u></u>	

The financial statements were approved by the Executive committee on

Professor L Van Meervelt  
General Secretary and Treasurer

Professor S Lidin  
President

Dr A Ashcroft  
Executive Secretary

Date: .....

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	2019 \$	\$	2018 \$	\$
<b>Cash flows from operating activities</b>					
Cash generated from operations	10	802,142		133,637	
<b>Investing activities</b>					
Purchase of tangible fixed assets		(57,347)		(55,595)	
Purchase of fixed asset investments		(153,696)		(884,731)	
Proceeds from sale of investments		410,558		461,941	
Interest received		4,271		1,104	
Other investment income received		28,408		17,104	
<b>Net cash generated from/(used in) investing activities</b>		232,194		(460,177)	
<b>Net increase/(decrease) in cash and cash equivalents</b>		1,034,336		(326,540)	
Cash and cash equivalents at beginning of year		821,353		1,147,893	
<b>Cash and cash equivalents at end of year</b>		1,855,689		821,353	

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS

### FOR THE YEAR ENDED 31 DECEMBER 2019

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#### 1. ACCOUNTING POLICIES

The principal accounting policies adopted are summarised below. They have all been applied consistently throughout the year and preceding year.

##### **Basis of accounting**

The non-statutory financial statements have been prepared under the historical cost convention, with the exception of investments which are stated at market value, and in accordance with applicable law and United Kingdom accounting standards.

##### **Going concern**

The Union has considerable financial resources in terms of investments held and cash deposits. As a consequence, the members of the Executive Committee believe that the Union is well placed to manage its business risks successfully despite the current uncertain economic outlook and the impact this has on the market valuation of the investments.

After making enquiries, the members have a reasonable expectation that the Union has adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going concern basis of accounting in preparing the annual non-statutory financial statements.

##### **Rates of exchange**

Transactions denominated in foreign currencies are translated into US Dollars at the rates ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated at the rates ruling at that date.

All profits and losses arising from exchange rate fluctuations are taken through the income and expenditure account.

##### **Publication costs**

Publication, editorial and administrative expenses of publications are charged in the appropriate income and expenditure account on an accruals basis.

##### **Stocks**

Stocks of International Tables are included at the lower of cost and net realisable value. Stocks of all other publications, including back issues of journals, are not valued for accounts purposes as sales are uncertain.

##### **Expenditure on premises**

Expenditure on maintenance of leasehold premises is charged against the appropriate income and expenditure accounts in the year on an accruals basis.

##### **Depreciation**

- (i) Office equipment is depreciated on the straight line basis at a rate of 20% per annum.
- (ii) Computer equipment is depreciated on a straight line basis at a rate of 33 1/3% per annum.
- (iii) Leasehold property improvements are depreciated over the term of the lease.

##### **Investment income**

Notional dividend income re-invested in accumulation investment funds is treated as income when declared and added to the accumulated cost of investments.

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2019

### 1. ACCOUNTING POLICIES

(Continued)

#### Investments

Investments are stated at market value. Changes in market value are taken through the income and expenditure account.

#### Income recognition

Income is recognised on publications when the risks and rewards of ownership are transferred to the buyer. Subscription income is recognised over the period to which the subscription relates. Investment and other income is recognised on an accruals basis.

#### Lease costs

Operating lease costs are charged to the income and expenditure account on a straight line basis over the term of the lease. Where reduced rents are payable on property in the earlier years of the lease, the total cost for the period to the first rent review date are spread on a straight line basis, and the appropriate creditor balance is maintained.

#### Pension costs

The Union operates a defined contribution pension scheme for its employees. The assets of the scheme are held separately from those of the Union. The amount charged to income and expenditure in the year in respect of pensions represents employer's contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown in either accruals or prepayments in the balance sheet.

#### Sponsorship

The IUCr sponsors symposia and workshops on topics relevant to crystallography. IUCr sponsorship can only be given to meetings that are international in character and open to participants from all countries. National meetings are only supported if held in developing countries. Sponsorship payments are accounted for once the Union has made an unconditional commitment to pay the grant and this is communicated to the beneficiary or the grant has been paid, whichever is earlier. Where sponsorship is conditional and compliance is within the control of the Union, sponsorship is not recognised until the conditions are met. Where sponsorship is conditional and outside the control of the Union, the grant is recognised and accounted for in the same way as an unconditional grant.

### 2 Employees

The average monthly number of persons (including directors) employed by the Union during the year was:

	2019 Number	2018 Number
Employees	25	26

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2019

### 2 Employees

(Continued)

Their aggregate remuneration comprised:

	2019 \$	2018 \$
Wages and salaries	1,547,505	1,651,060
Social security costs	144,908	157,899
Pension costs	285,495	298,139
	<u>1,977,908</u>	<u>2,107,098</u>

### 3 Interest receivable and similar income

	2019 \$	2018 \$
<b>Income from fixed asset investments</b>		
BDP Equity Income Fund	-	9,539
Camber International Equity Fund	-	794
Corbiere Discretionary Fund	4,480	3,975
Praemium (Portfolio Management)	19,610	2,976
Indian Deposit	3,255	-
	<u>28,408</u>	<u>17,104</u>

### 4 Gain/(Loss) on Disposal of Investments

	2019 \$	2018 \$
Proceeds	410,558	461,941
Book Value	(368,195)	(495,843)
	<u>42,363</u>	<u>(33,902)</u>

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2019

### 5 Tangible fixed assets

	Leasehold improvements	Computers	Total
	\$	\$	\$
<b>Cost</b>			
At 1 January 2019	103,922	561,493	665,415
Additions	-	57,347	57,347
At 31 December 2019	103,922	618,840	722,762
<b>Depreciation and impairment</b>			
At 1 January 2019	103,922	521,436	625,358
Depreciation charged in the year	-	34,246	34,246
At 31 December 2019	103,922	555,682	659,604
<b>Carrying amount</b>			
At 31 December 2019	-	63,158	63,158
At 31 December 2018	-	40,057	40,057

### 6 Fixed asset investments

	2019	2018
	\$	\$
Unlisted investments	2,485,372	2,506,434

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

### FOR THE YEAR ENDED 31 DECEMBER 2019

#### 6 Fixed asset investments

(Continued)

##### Movements in fixed asset investments

	Held by SWM Synergy	Held by Genworth	Held by Aviva	Held by Athene Choice	Held by Voya	Held by Jackson	Held by Transamerica	Held in India	Cash held in USA	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Valuation</b>										
At 1 January 2019	801,970	318,728	324,496	306,972	260,257	257,352	236,659	-	-	2,506,434
Additions	-	-	-	-	-	-	-	150,000	3,696	153,696
Dividends	25,153	-	-	-	-	-	-	3,255	-	28,408
Valuation changes	119,639	3,997	-	-	-	22,064	24,954	-	-	170,654
Exchange fluctuations	36,738	-	-	-	-	-	-	-	-	36,738
Disposals	(10,467)	(32,225)	(32,450)	-	(26,000)	(279,416)	(30,000)	-	-	(410,558)
At 31 December 2019	973,033	290,500	292,046	306,972	234,257	-	231,613	153,255	3,696	2,485,372
<b>Carrying amount</b>										
At 31 December 2019	973,033	290,500	292,046	306,972	234,257	-	231,613	153,255	3,696	2,485,372
At 31 December 2018	801,971	318,728	324,496	306,972	260,257	257,352	236,659	-	-	2,506,435



# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2019

### 7 Debtors

	2019	2018
	\$	\$
<b>Amounts falling due within one year:</b>		
Trade debtors	150,121	103,356
Other debtors	262,521	154,504
Prepayments and accrued income	135,200	113,662
	<u>547,842</u>	<u>371,522</u>

### 8 Creditors: amounts falling due within one year

	2019	2018
	\$	\$
Creditors, accruals, deferred income	972,793	235,508
Taxation and social security	182,246	256,612
	<u>1,155,039</u>	<u>492,120</u>

### 9 Voluntary Activity

The members have estimated the value of voluntary activity that was deployed by the members, as follows:

		2019
Total voluntary activities	No. of Hours	10,182
Total value of voluntary activities	CHF	3,054,600

### 10 Cash generated from operations

	2019	2018
	\$	\$
Profit for the year	561,787	25,025
<b>Adjustments for:</b>		
Investment income	(32,679)	(18,208)
Depreciation and impairment of tangible fixed assets	34,246	23,650
Movements in investments	(235,800)	191,681
<b>Movements in working capital:</b>		
(Increase)/decrease in stocks	(12,011)	1,880
(Increase)/decrease in debtors	(176,320)	1,243,372
Increase/(decrease) in creditors	662,919	(1,333,763)
<b>Cash generated from operations</b>	<u>802,142</u>	<u>133,637</u>

# INTERNATIONAL UNION OF CRYSTALLOGRAPHY

## NOTES TO THE FINANCIAL STATEMENTS (CONTINUED) FOR THE YEAR ENDED 31 DECEMBER 2019

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### 11 Analysis of changes in net funds

	1 January 2019 \$	Cash flows \$	31 December 2019 \$
Cash at bank and in hand	<u>821,353</u>	<u>1,034,336</u>	<u>1,855,689</u>