Financial Statements

December 31, 2013 and 2012

(With Independent Auditors' Report Thereon)

## BATCHELOR, TILLERY & ROBERTS, LLP

CERTIFIED PUBLIC ACCOUNTANTS
POST OFFICE BOX 18068
RALEIGH, NORTH CAROLINA 27619

RONALD A. BATCHELOR ANN H. TILLERY FRANKLIN T. ROBERTS WM. JAMES BLACK, JR. SCOTT E. CABANISS 3605 GLENWOOD AVENUE, SUITE 350 RALEIGH, NORTH CAROLINA 27612 TELEPHONE (919) 787-8212 FACSIMILE (919) 783-6724

#### **Independent Auditors' Report**

The Executive Committee
International Union of Pure and Applied Chemistry:

#### Report on the Financial Statements

We have audited the accompanying financial statements of International Union of Pure and Applied Chemistry ("IUPAC"), which comprise the statements of financial position as of December 31, 2013 and 2012, and the related statements of activities, cash flows, and functional expenses for the years then ended, and the related notes to the financial statements.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of IUPAC as of December 31, 2013 and 2012, and the changes in its net assets and its cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

Batchelor, Tilley & Roberts, LLP

May 9, 2014

## Statements of Financial Position

## December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
<u>Assets</u>		
Current assets:		
Cash and cash equivalents	\$ 402,248	682,592
Subscriptions receivable (net of allowance for doubtful		
accounts of \$36,700 in 2013 and \$56,000 in 2012)	72,000	102,600
Inventories	31,052	29,937
Prepaid expenses and other assets	1,853	41,325
Total current assets	507,153	856,454
Investments, at market value	3,897,078	4,000,346
Furniture, fixtures, and equipment, net	26,696	50,495
	\$ 4,430,927	4,907,295
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued expenses	107,567	81,916
Unearned subscriptions	99,275	388,645
Total current liabilities	206,842	470,561
Commitments		
Net assets:		
Unrestricted	3,955,711	4,193,519
Temporarily restricted	76,017	50,858
Permanently restricted	192,357	192,357
Total net assets	4,224,085	4,436,734
	\$ 4,430,927	4,907,295

Statements of Activities

Year ended December 31, 2013, with comparative totals for 2012

	2013				
	Unrestricted	Temporarily restricted	Permanently restricted	<u>Total</u>	<u>2012</u>
Support:					
Grants and contributions	\$ 48,990	16,000	-	64,990	115,238
National subscriptions and	898,072			898,072	072 010
service charges	ŕ	-	-	42,937	873,918
Affiliate membership program	42,937			42,937	42,081
Total support	989,999	16,000	-	1,005,999	1,031,237
Other revenue:					
Publications	563,844	-	-	563,844	613,882
Investment return, net	399,645	9,717	-	409,362	459,288
Other income		_			794
Total other revenue	963,489	9,717		973,206	1,073,964
Total support and other revenue	1,953,488	25,717	-	1,979,205	2,105,201
Net assets released from					
restrictions	558	(558)			
	1,954,046	25,159	-	1,979,205	2,105,201
Expenses:					
Program and publications	1,322,532	-	-	1,322,532	996,799
Management and general	869,322			869,322	1,168,065
Total expenses	2,191,854			2,191,854	2,164,864
(Decrease) increase in net assets	(237,808)	25,159	-	(212,649)	(59,663)
Net assets, beginning of year	4,193,519	50,858	192,357	4,436,734	4,496,397
Net assets, end of year	\$ 3,955,711	76,017	192,357	4,224,085	4,436,734

## Statements of Activities, Continued

Year ended December 31, 2012

	Temporarily Permanently					
		<u>Unrestricted</u>	restricted	restricted	<u>Total</u>	
Support:						
Grants and contributions	\$	115,238	_	_	115,238	
National subscriptions and	*	110,200			110,200	
service charges		873,918	_	-	873,918	
Affiliate membership program		42,081	_		42,081	
Total support		1,031,237			1,031,237	
Other revenue:						
Publications		613,882	-	-	613,882	
Investment return, net		446,852	12,436	-	459,288	
Other income		794			794	
Total other revenue		1,061,528	12,436		1,073,964	
Total support and other revenue		2,092,765	12,436	-	2,105,201	
Net assets released from						
restrictions		13,377	(13,377)	-	-	
		2,106,142	(941)	-	2,105,201	
Expenses:						
Program and publications		996,799	-	-	996,799	
Management and general		1,168,065	-	_	1,168,065	
Total expenses		2,164,864			2,164,864	
Decrease in net assets		(58,722)	(941)	-	(59,663)	
Net assets, beginning of year		4,252,241	51,799	192,357	4,496,397	
Net assets, end of year	\$	4,193,519	50,858	192,357	4,436,734	

## Statements of Cash Flows

## Years ended December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
Cash flows from operating activities:		
Decrease in net assets	\$ (212,649)	(59,663)
Adjustments to reconcile decrease in net assets to		
net cash used in operating activities:		
Depreciation and amortization	26,594	88,377
Realized (gains) losses on investments	(7,667)	170,728
Unrealized gains on investments	(257,296)	(460,077)
Changes in operating assets and liabilities:		
Subscriptions receivable	30,600	(78,195)
Inventories	(1,115)	(3,033)
Prepaid expenses and other assets	39,472	(14,643)
Accounts payable and accrued expenses	25,651	(27,191)
Unearned subscriptions	(289,370)	(64,158)
Net cash used in operating activities	(645,780)	(447,855)
Cash flows from investing activities:		
Proceeds from sales of investments	408,125	1,074,801
Purchases of investments	(39,894)	(615,726)
Purchases of furniture, fixtures, and equipment	(2,795)	
Net cash provided by investing activities	365,436	459,075
Net (decrease) increase in cash and cash equivalents	(280,344)	11,220
Cash and cash equivalents, beginning of year	682,592	671,372
Cash and cash equivalents, end of year	\$ 402,248	682,592

## Statements of Functional Expenses

Year ended December 31, 2013, with comparative totals for 2012

	P	rogram and	Management		
	I	oublications	and general	<u>Total</u>	<u>2012</u>
Travel and subsistence	\$	589,039	109,363	698,402	606,049
Salaries		-	396,186	396,186	503,261
Contracted services		377,926	9,141	387,067	428,352
Administrative and project costs		210,551	92,334	302,885	140,471
Payroll taxes and benefits		-	110,824	110,824	122,485
Postage		62,161	5,877	68,038	65,944
Prizes and awards		51,689	-	51,689	500
Office supplies and expenses		-	37,450	37,450	32,997
Audit and accounting		-	36,540	36,540	28,102
Contributions		28,472	-	28,472	26,344
Building operations		-	25,539	25,539	26,086
Depreciation and amortization		-	26,594	26,594	88,377
Utilities		-	17,162	17,162	17,154
Printing and publications		2,694	5,181	7,875	8,603
Advertising and recruiting		-	-	-	10,074
Grant refund		-	-	-	9,664
Bad debt (recoveries) expense		-	(9,500)	(9,500)	44,865
Miscellaneous		-	6,631	6,631	5,536
	\$	1,322,532	869,322	2,191,854	2,164,864

## Statements of Functional Expenses, Continued

Year ended December 31, 2012

	Program and publications	Management and general	<u>Total</u>
Travel and subsistence	\$ 430,680	175,369	606,049
Salaries	-	503,261	503,261
Contracted services	398,654	29,698	428,352
Administrative and project costs	73,067	67,404	140,471
Payroll taxes and benefits	-	122,485	122,485
Depreciation and amortization	-	88,377	88,377
Postage	53,906	12,038	65,944
Bad debt expense	-	44,865	44,865
Office supplies and expenses	-	32,997	32,997
Audit and accounting	-	28,102	28,102
Contributions	26,344	-	26,344
Building operations	-	26,086	26,086
Utilities	-	17,154	17,154
Advertising and recruiting	-	10,074	10,074
Grant refund	9,664	-	9,664
Printing and publications	3,984	4,619	8,603
Prizes and awards	500	-	500
Miscellaneous		5,536	5,536
	\$ 996,799	1,168,065	2,164,864

Notes to Financial Statements

December 31, 2013 and 2012

## (1) Nature of Organization and Significant Accounting Policies

International Union of Pure and Applied Chemistry ("IUPAC"), founded in 1919, is a voluntary nongovernmental, nonprofit association of sixty-one national adhering organizations representing the chemists of their countries. Additionally, there are two associate national adhering organizations, sixty-three company associates, and thirty-four associated organizations.

The objectives of IUPAC are to promote continuing cooperation among the chemists of the member countries, to study topics of international importance to pure and applied chemistry which need standardization or codification, to cooperate with other international organizations which deal with topics of a chemical nature, and to contribute to the advancement of pure and applied chemistry in all its aspects.

The significant accounting policies of IUPAC are as follows:

#### (a) Support, Revenues, and Expenses

IUPAC derives its revenues primarily from national subscriptions, publication income, and investment income. Support, revenues, and expenses are recorded on the accrual basis of accounting, and revenue received for future subscriptions is deferred until the applicable year.

Contributions received are measured at their fair values and are reported as an increase in net assets. IUPAC reports contributions of cash and other assets as restricted support if they are received with donor stipulations that limit the use of the donated assets or if they are designated as support for future periods. When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. Donor restricted contributions whose restrictions are met in the same reporting period are reported as unrestricted support.

## (b) Endowment Funds

The Executive Committee of IUPAC has interpreted relevant state law as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, IUPAC classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by IUPAC in a manner consistent with the relevant endowment fund. IUPAC considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (1) Nature of Organization and Significant Accounting Policies, Continued

#### (b) Endowment Funds, Continued

- (1) The duration and preservation of the fund
- (2) The purposes of the organization and the donor-restricted endowment fund
- (3) General economic conditions
- (4) The possible effect of inflation and deflation
- (5) The expected total return from income and the appreciation of investments
- (6) Other resources of the organization
- (7) The investment policies of the organization

### Funds with Deficiencies

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor requires the organization to retain as a fund of perpetual duration. In accordance with accounting principles generally accepted in the United States of America ("GAAP"), deficiencies of this nature are reported in unrestricted net assets. There were no such deficiencies as of December 31, 2013 and 2012.

#### Return Objectives and Risk Parameters

IUPAC has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Endowment assets include those assets of donor-restricted funds that IUPAC must hold in perpetuity or for a donor-specified period(s), as well as any board-designated funds. Under this policy, as approved by the Executive Committee, the endowment assets are invested in a manner that is intended to produce results that exceed the price and yield results of a benchmark portfolio and its respective market index, while assuming a moderate level of investment risk. IUPAC expects its endowment funds, over time, to provide an average rate of return of approximately 4.5% annually. Actual returns in any given year may vary from this amount.

### Strategies Employed for Achieving Objectives

To satisfy its long-term rate-of-return objectives, IUPAC relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). IUPAC targets a diversified asset allocation for its entire investment portfolio that places an emphasis on mutual funds, bonds and cash equivalents to achieve its long-term return objectives within prudent risk constraints.

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (1) Nature of Organization and Significant Accounting Policies, Continued

### (b) Endowment Funds, Continued

Spending Policy and How the Investment Objectives Relate to Spending Policy

IUPAC has a policy of appropriating for distribution each year the interest income allocated to each of its endowment funds, with such allocation approximating a 4% and 5% return for 2013 and 2012, respectively. In establishing this policy, management of IUPAC considered the long-term expected return on its endowment. This is consistent with IUPAC's objective to maintain the purchasing power of the endowment assets held in perpetuity or for a specified term as well as to provide additional real growth through new gifts and investment return.

#### (c) Cash and Cash Equivalents

Cash and cash equivalents include commercial checking and money market accounts. At yearend and throughout the year, IUPAC had on deposit with a financial institution amounts in excess of FDIC insurance limits of \$250,000. IUPAC has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents.

#### (d) Allowance for Doubtful Accounts

An allowance is provided for uncollectible receivables equal to the losses that are estimated to be incurred in the collection of all receivables. The allowance is based on historical collection experience combined with a review of the current status of the existing receivables.

#### (e) Inventories

Inventories, consisting of various publications, are stated at the lower of cost or market, with cost determined on the weighted-average method.

#### (f) Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Relevant accounting standards establish a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Three levels of inputs may be used to measure fair value:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (1) Nature of Organization and Significant Accounting Policies, Continued

### (f) Fair Value Measurements, Continued

Level 3: one or more significant inputs or significant value drivers are unobservable or based on market assumptions

#### (g) Investments

Investments in marketable securities are stated at fair market value. The fair value of mutual funds is based on quoted prices in active markets (Level 1). The fair values of bonds and fixed rate securities are based on information from pricing services and yields currently available on comparable securities (Level 2). Investment income (including gains and losses on investments, interest, and dividends) is included in the statements of activities as a change in unrestricted net assets, except for earnings on permanently restricted net assets which are reported as temporarily restricted.

## (h) Furniture, Fixtures, and Equipment

Furniture, fixtures, and equipment are recorded at cost if purchased and fair value if contributed. Depreciation and amortization is provided over the estimated useful lives of the assets using the straight-line method.

### (i) Income Taxes

IUPAC is exempt from federal and state income taxes under Section 501(c)(3) of the Internal Revenue Code and applicable state statutes. Management of IUPAC does not believe the financial statements include any uncertain tax positions. Tax years ending December 31, 2010 through December 31, 2013 remain open for the examination by taxing authorities as of the date of this report.

### (j) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of changes in net assets during the reporting period. Accordingly, actual results could differ from those estimates.

## Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (2) Investments

IUPAC's investments are held by Wells Fargo Advisors. The following tables present the fair value of those investments (no individual investment represents ten percent or more of net assets):

		2013					
		Number of shares/par		Level 1	Level 2	Total	
Mutual funds		-	\$	1,707,428	-	1,707,428	
Corporate bonds (2.30% - 7.25%), with various maturities through February 2022	\$	1,250,000		-	1,346,830	1,346,830	
Foreign bonds (3.25%-6.50%), with various maturities through July 2018	\$	600,000			842,820	842,820	
			\$	1,707,428	2,189,650	3,897,078	
				2012			
	•	Number of shares/par		Level 1	Level 2	Total	
		shares/pai		Level 1	Level 2	10141	
Mutual funds		-	\$	1,371,701	-	1,371,701	
Preferred fixed rate cap security (5.88%), matures June 2033		6,000		-	151,020	151,020	
Corporate bonds (2.30% - 7.25%), with various maturities through February 2022	\$	1,375,000		-	1,505,285	1,505,285	
Foreign bonds (3.25%-6.50%), with various maturities through July 2018	\$	600,000		-	840,309	840,309	
FHLMC bond (4.75%), due January 2013	\$	100,000		_	132,031	132,031	
			\$	1,371,701	2,628,645	4,000,346	

The cost of investments totaled \$3,407,575 and \$3,768,139 as of December 31, 2013 and 2012, respectively.

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (2) Investments, Continued

Investment return, net, consists of the following:

	<u>2013</u>	<u>2012</u>
Dividends and interest	\$ 147,560	165,053
Realized gains (losses)	7,667	(170,728)
Unrealized gains	257,296	460,077
Foreign exchange rate (losses) gains	(3,161)	4,886
	\$ 409,362	459,288

## (3) Furniture, Fixtures, and Equipment

Furniture, fixtures, and equipment consist of the following:

	<u>2013</u>	<u>2012</u>
Equipment	\$ 66,423	63,628
Furniture and fixtures	48,877	48,877
Leasehold improvements	16,097	16,097
Website	264,145	264,145
	395,542	392,747
Less accumulated depreciation and amortization	(368,846)	(342,252)
	\$ 26,696	50,495

## (4) Leases

IUPAC leases its facilities under an operating lease, which began in March 1997. This lease has a term of ten years with options to extend the term of the lease for successive one-year periods not to exceed ten additional years. Building operating expenses totaled \$25,539 and \$26,086 in 2013 and 2012, respectively.

Future estimated minimum rental expenses consist of \$25,735 for the year ending December 31, 2014.

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (5) Net Assets

Temporarily restricted net assets as of December 31, 2013 and 2012 consist of interest earned on permanently restricted net assets and two new grants in 2013 that were not fully expanded.

Permanently restricted net assets include donor-restricted endowment funds and consist of the Paulo Fransozini Endowment Fund totaling \$5,659, the CHEMRAWN VII Fund totaling \$48,698, and the Samsung General Chemicals Endowment Fund totaling \$138,000, as of December 31, 2013 and 2012. Income earned by the Paulo Fransozini Endowment Fund is restricted for awards to science students to attend particular IUPAC meetings. Income earned by the CHEMRAWN VII Fund is restricted for awards to support the work of the CHEMRAWN VII Future Actions Committee. Income earned by the Samsung General Chemicals Endowment Fund is restricted for awards to students and researchers in the field of polymer science and support of educational projects of the IUPAC Macromolecular Division. Such income is recorded as temporarily restricted when earned.

The following represents changes in endowment net assets (all donor-restricted endowment funds) for 2013 and 2012 (does not include temporarily restricted net assets of \$16,000 related to two grants as of December 31, 2013):

	,	Temporarily restricted	Permanently restricted	Total
Endowment net assets, December 31, 2011	\$	51,714	192,357	244,071
Investment interest income		12,436	-	12,436
Appropriation of endowment assets for expenditure		(13,292)	<del>-</del>	(13,292)
Endowment net assets, December 31, 2012		50,858	192,357	243,215
Investment interest income		9,717	-	9,717
Appropriation of endowment assets for expenditure		(558)		(558)
Endowment net assets, December 31, 2013	\$	60,017	192,357	252,374

Notes to Financial Statements, Continued

December 31, 2013 and 2012

## (6) Concentrations of Credit and Market Risk

Financial instruments that potentially expose IUPAC to concentrations of credit and market risk consist primarily of cash equivalents, investments, and subscriptions receivable. Cash equivalents and investments are held by Wells Fargo Advisors, and no single investment exceeds ten percent of net assets. Subscriptions receivable are amounts due from national adhering organizations. Management provides for probable uncollectible amounts through a provision for bad debt expense and an adjustment to a valuation allowance based on its assessment of the current status of individual accounts.

National adhering organizations are billed their annual national subscriptions in their national foreign currency. As a result, IUPAC assumes the risk of changes in the foreign currency rates in relation to the United States dollar on these billings. IUPAC has made purchases of certain foreign currency-denominated investments in an effort to reduce the risk of foreign currency exchange losses on these billings when collected.

## (7) Retirement Plans

IUPAC has established a defined contribution retirement plan. The plan covers all employees and offers 100% vesting after one year of service. IUPAC made no contributions to the plan in 2013 or 2012.

### (8) Subsequent Events

The date to which events occurring after December 31, 2013, the date of the most recent statement of financial position, have been evaluated for possible adjustment to the financial statements or disclosure is May 9, 2014, the date the financial statements were available to be issued.