



Highlights
75th Bureau – 41st Council – 76th Bureau
5-8 July 2001, Brisbane, Australia

Election Results

1. Prof. L. K. Sydnes was elected Vice President and President Elect. The election results were as follows:
Ohtaki: 59
Sydnes: 79.
2. Prof. C. Bai, Prof. S. Chandrasekaran, Prof. R. G. Gilbert, and Dr. A. Smith were elected to the Bureau. Dr. E. P. Przybylowicz and Prof. G. Somsen were reelected. The election results were as follows:
Bai: 106
Chandrasekharan: 96
Gilbert: 90
Gültekin: 27
Horvai: 48
Jönsson: 60
Moo-Young: 77
Przybylowicz: 112
Smith: 80
Somsen: 114
3. Prof. O. Nefedov was elected to the Executive Committee by the Bureau.

Council Actions

1. Approved the change of Bylaw 4.103 (See Attachment 1).
2. Did not approve the change of Bylaw-B4.1064.
3. Approved the appointment of Batchelor, Tillery and Roberts as the Union's Auditors for 2001-2002.
4. Approved an amended version of the proposal from the Czech National Committee, establishing a Working Party to study the issues described in the Bureau Position Paper on National Subscriptions (See Attachments 2 and 3).
5. Approved creation of a new Division of Systematic Nomenclature and Structure Representation. (See Attachment 4)
6. Approved continuation of the Joint Commission on Biochemical Terminology
7. Approved creation of a new Commission on Physicochemical Symbols, Terminology and Units.
8. Approved creation of a new Commission on Isotopic Abundances and Atomic Weights.
9. Approved the elimination of the Medicinal Chemistry and Clinical Chemistry Sections of the Division of Chemistry and Human Health.
10. Approved the Budget and National Subscriptions as proposed by the Treasurer (See Attachment 5).



Highlights
75th Bureau – 41st Council – 76th Bureau
5-8 July 2001, Brisbane, Australia

11. Approved the continuation of Associated Organization status for the current AOs, contingent on payment of fees.
12. Approved the continued use of English as the official language of IUPAC.
13. Approved a resolution of the UK National Adhering Organization encouraging NAOs to promote the submission of projects.
14. Approved the dates and location of the 43rd General Assembly and 40th Congress: August 2005 (dates to be determined), Beijing, China.
15. Noted the withdrawal of the National Adhering Organization of Saudi Arabia.
16. Asked the Executive Director to inform the National Adhering Organization of Pakistan that it will cease to be a member of the Union if its arrears are not paid in full by 31 December 2001, as provided in Statute 9.2.
17. Approved the recommendations on nomenclature and symbols approved by IDCNS in the previous biennium.
18. Approved the Division Officers elected at the General Assembly. (See Attachment 6).

Bureau Actions

1. Issued a Position Paper on National Subscriptions (See Attachment 3).
2. Approved the recommendations of the Working Party on Education Proposals regarding the reorganization of the Committee on Teaching Chemistry, including the name change to Committee on Chemistry Education. The new Terms of Reference are in Attachment 7.
3. Approved the recommendations of the *Chemistry International* Strategy Development Committee to change the appearance and focus of *Chemistry International* and the plan of the Executive Director to implement the recommendations of the CISDC.
4. Approved the new Division Committees elected at the General Assembly.
5. Approved the Investment Policy Statement proposed by the Finance Committee (See Attachment 8).
6. Approved the Fund Policy Statement proposed by the Finance Committee (See Attachment 9).
7. Approved the continuation of the current fees for the Affiliate Membership Program, USD 16 for chemical societies and USD 35 for individual members.



Highlights
75th Bureau – 41st Council – 76th Bureau
5-8 July 2001, Brisbane, Australia

8. Approved the following subscription rates for *Pure and Applied Chemistry* and *Chemistry International* proposed by the Committee on Printed and Electronic Publications:

PAC

Institutional	USD 1 200
Institutional (three year subscription)	USD 999 per year (unchanged)
Institutional, electronic only	USD 892
Individual	USD 99 (unchanged)

CI

Institutional	USD 99 (unchanged)
Personal	USD 45 (unchanged)



Attachment 1

Council Agenda Item 12.1: Council approved the following change in Bylaw 4.103:

The Titular Members of each Division Committee shall be chosen by an electorate comprising the Titular Members, Associate Members and National Representatives on the Division Committee, together with the members or officers of such other bodies within the Division that the Bureau may specify. The number of Titular Members shall not exceed ten unless otherwise determined by the Bureau. [*Continue unchanged to end of current text.*]

New paragraph following current text: Additionally, a Division Committee may elect no more than six National Representatives on the nomination of Adhering Organizations, with no more than one representative from a given Adhering Organization. The term of a National Representative shall be two years, with the possibility of renomination and reelection consecutively for only two more years. Exceptional circumstances must be established and special permission obtained from the Bureau for the election of a National Representative from a country already represented on the Committee by a Titular or Associate Member.



**Amendment (Substitute Motion)
to the Motion from the Czech Republic**

Council recognizes the severe financial problems encountered by many NAOs in meeting National Subscriptions, as described in the Bureau Position Paper, but does not believe that drastic changes should be made at present in current procedures. Therefore,

1. Council directs that the present basis of calculation of National Subscriptions continue in lieu of the change proposed by the Czech Republic.
2. Council directs the President to appoint an *ad hoc* working group, as described in the Bureau Position Paper, to consider the relevant issues and make recommendations to the Bureau for its meeting in 2002 and for final action by Council in 2003 (Ottawa).



Bureau Position Paper on National Subscriptions

The Bureau is aware of the difficulties that many NAOs are encountering in meeting the National Subscriptions in light of:

1. Variations in exchange rates;
2. Reductions in funds available from governments and other supporting organizations;
3. The cost of sending delegates to Council meetings.

In addition, there are other concerns about the perceived fairness of the size of dues paid by small versus large countries and the method by which the National Subscriptions are calculated.

The Bureau proposes that a small *ad hoc* working group be set up (including representatives from countries of varying economic circumstances) to consider these issues and make recommendations to the 2002 Bureau meeting and for final action at the Council Meeting in 2003 (Ottawa).

This group will be working in parallel with the Strategic Plan Update Committee that will help define the nature and extent of the future activities of the Union and thus its financial needs.

In the meantime, the Bureau recommends to Council that in order to secure operations for the coming biennium, the present basis of calculation of National Subscriptions remain in place.



**Council Item 14.1: Division of Systematic Nomenclature and
Structure Representation**

Terms of Reference

The Division of Systematic Nomenclature and Structure Representation is responsible for maintaining and developing standard systems for designating chemical structures, including both conventional nomenclature and computer-based systems. This responsibility is to be fulfilled by:

1. Identifying the needs of the user community.
2. Generating projects arising from those needs.
3. Identifying project leaders and task groups to carry out the work.
4. Administering approved projects financially, monitoring their progress, and approving resulting recommendations for review by established IUPAC procedures.
5. Identifying new sources of expertise and enabling their involvement in projects.

Ensuring that nomenclature systems projects and the resulting recommendations are compatible with each other, with established IUPAC recommendations, and with computer-based systems for manipulating chemical names and structures.



Council Item 15: Budget and National Subscription 2002-2003

2002-3 Budget (Sources and Uses)

	Budget 2002-3	Est. Actual 2000-1	Change Increase/ (Decrease)
National Subscriptions	\$1,387.6	\$1,355.9	\$31.7
Dividends & Interest	\$240.0	\$248.7	(\$8.7)
Other Income	\$48.0	\$41.5	\$6.5
Publications	\$869.6	\$868.7	\$0.9
AMP and <i>CI</i>	(\$22.0)	(\$8.4)	\$13.6
Administrative	(\$870.0)	(\$813.9)	\$56.1
General	(\$271.0)	(\$256.6)	\$14.4
General Assembly	(\$228.5)	(\$503.2)	(\$274.7)
Advisory Standing Committees	(\$139.7)	(\$165.0)	(\$25.3)
<i>Ad Hoc</i> Committees		(\$102.7)	
Operating Standing Committees	(\$67.6)	(\$45.0)	\$22.6
Division Operations	(\$119.6)	(\$220.0)	(\$100.4)
Division Projects	(\$826.8)	(\$386.8)	\$440.0
Net	<u>\$0.0</u>	<u>\$13.1</u>	(\$13.1)

Amounts in thousands of USD

**Council Item 15: Budget and National Subscription 2002-2003****Budget Allocations 2002-2003****Divisions**

I	Physical and Biophysical	65.3
II	Inorganic	51.2
III	Organic and Biomolecular	52.9
IV	Macromolecular	47.5
V	Analytical	56.6
VI	Chemistry & the Environment	68.0
VII	Chemistry & Human Health	69.8
VIII	Systematic Nomenclature & Structure Representation	67.0
	Divisional Reserve	207.6
	Total Divisions	<u>685.9</u>

Standing Committees

	Executive	35.3
	Bureau	40.5
	CHEMRAWN	29.3
	CPEP	16.4
	CCE	18.3
	COCI	20.0
	FC	13.3
	Evaluation Committee	4.0
	IDCNS	17.1
	JCBN	13.0
	Total Standing Committees	<u>207.3</u>

Amounts in thousands of USD



Council Item 15: Budget and National Subscription 2002-2003

NAO	2002	2003
USA	113.0	114.1
Japan	69.4	70.1
Germany	47.2	47.6
China/Beijing	39.3	39.7
France	38.1	38.5
UK	28.9	29.2
Italy	28.3	28.5
India	20.9	21.1
Korea, Republic of	20.6	20.8
Belgium	20.1	20.3
Spain	19.8	20.0
Netherlands	19.3	19.5
Brazil	17.4	17.5
Switzerland	17.1	17.2
Canada	15.9	16.1
China/Taipei	15.5	15.6
Puerto Rico	15.4	15.5
Ireland	12.4	12.5
Russia	12.1	12.2
Australia	11.0	11.1
Turkey	9.4	9.5
Sweden	9.0	9.0
South Africa	7.7	7.7
Poland	6.9	7.0
Denmark	6.3	6.4
Israel	6.3	6.3
Finland	6.1	6.2
Austria	5.9	5.9
Portugal	5.2	5.2
Chile	5.1	5.2
Norway	5.1	5.1
New Zealand	5.1	5.1
Argentina	4.8	4.8
Czech Republic	4.3	4.3
Egypt	4.3	4.3
Greece	4.0	4.1
Hungary	3.7	3.7
Slovenia	3.4	3.5
Slovakia	2.2	2.2
Bulgaria	1.7	1.7
Yugoslavia	1.0	1.0
Croatia	1.0	1.0



Council Item 15: Budget and National Subscription 2002-2003

Kuwait	1.0	1.0
Total	<u>691.2</u>	<u>697.3</u>

Amounts in thousands of USD



Attachment 6

Division Officers 2002-3

Division	President	Vice-President	Secretary	Past President
Physical & Biophysical Chemistry	J. Ralston Australia	A. D. Buckingham UK	M. Rossi Switzerland	G. S. Wilson US
Inorganic Chemistry	G. M. Rosenblatt US	A. West UK	D. Meyerstein Israel	J. Corish Ireland
Organic and Biomolecular Chemistry	T. T. Tidwell Canada	D. StC. Black Australia	G. M. Blackburn UK	T. Norin Sweden
Macromolecular	R. F. T. Stepto UK	J. Jin Korea	W. J. Work US	R. G. Gilbert Australia
Analytical Chemistry	D. S. Moore US	H. K. J. Powell New Zealand	R. Lobinski France	F. Ingman Sweden
Chemistry & the Environment	W. Klein Germany	K. Racke US	P. Holland New Zealand	
Chemistry & Human Health	A. Kallner Sweden		B. Heinzow Germany	C. R. Ganellin UK
Systematic Nomenclature & Structure Representation	A. D. McNaught UK		W. Powell US	



Committee on Chemistry Education (CCE)

Terms of Reference

- (1) To advise the President and the Executive Committee on matters relating to chemistry education, including the public appreciation of chemistry.
- (2) To maintain a portfolio of educational projects and to coordinate the educational activities of IUPAC.
- (3) To monitor chemistry education activities throughout the world and to disseminate information relating to chemical education, including the public appreciation of chemistry.
- (4) To develop liaisons with international organizations such as UNESCO, national and regional chemical societies, chemical education committees, and organizations concerned with the public appreciation of science.

Membership

- 8 Titular Members, including a Chairman and a Secretary
- One Associate Member from each Division, with the proviso that the AM be a Titular Member of the Division Committee who is interested in and able to contribute to educational matters
- An unlimited number of National Representatives, appointed in accordance with the requirements of Bylaw 4.305

The Terms of Reference and composition of CCE will be established formally by the Executive Committee through Standing Orders.



International Union of Pure and Applied Chemistry

INVESTMENT POLICY STATEMENT

1.0 PURPOSE

The purpose of this document is to identify a set of investment objectives and constraints, asset allocation parameters, performance measurement benchmarks, and guidelines for the International Union of Pure and Applied Chemistry (IUPAC) long term investments. The investment policy statement is intended to assure the Officers, Executive Committee and Bureau of IUPAC that reserve assets are being invested in accordance with the best long-term interests of IUPAC, given the following considerations:

- IUPAC's risk tolerance, or its willingness to withstand substantial losses due to adverse market conditions.
- IUPAC's need to obtain real, or inflation-adjusted, growth in its asset base.
- IUPAC's requirement for current income to support IUPAC programs and activities.
- IUPAC's liquidity requirements, or its need to maintain adequate cash balances to accommodate withdrawals from the long term portfolio when needed.

2.0 INVESTMENT OBJECTIVES AND CONSTRAINTS

2.1 Objectives

The primary objective of having reserve funds is provide continuity in the programs set out in the IUPAC Strategic Plan regardless of short term financial discontinuities and disruptions. With this objective, the reserve funds must (1) provide protection for biennial operating expenses, (2) provide for periodic, planned extraordinary expenses (such as moving the Secretariat), (3) provide for extraordinary expenses in connection with General Assembly and Congress meetings held in regions of the world which would increase the normal expenses, and (4) support endowed programs of the organization. It is expected that under normal circumstances, the National Subscriptions plus other annual sources of operating income will cover normal operating expenses.

To meet these objectives the reserve funds of IUPAC must earn an annual real, or inflation adjusted (OECD), total return of 4.5%. It is recognized that the real return objective may not be achieved during each year, however, the fund will be structured to enhance the probability of earning an annualized real return of 4.5% over the long term.

The risk tolerance of the organization should be viewed as moderate. Volatility in the fund's returns can be tolerated provided that there are reasonable expectations that the fund will achieve its desired return over the long term. The reserve portfolio will not be structured to incur unnecessary risk. On an overall portfolio basis, risk shall be controlled through the use of more than one asset class as well as a regional distribution of investments throughout the world, consistent with the investment objectives.

2.2 Constraints

The liquidity requirements of the reserve funds are minimal. At least 2% of the fund shall be available on short notice (30 days) for conversion into liquid assets without significant penalty.

Since IUPAC's 501 (c)(3) tax-exempt status extends to the reserve funds, tax considerations are not a constraint in the management of this fund.



3.0 ASSET CLASSES AND ALLOCATION

In order to minimize the total risk of the reserve funds, three asset classes will be utilized in order to derive the benefits of diversification. Accordingly, the investment portfolio will be managed as a balanced fund consisting of mutual funds, bonds, and cash equivalents.

Asset allocation will be structured to achieve the primary objective of an inflation-adjusted annualized return of 4.5% over a full market cycle. The following are the annual total returns, in real terms, and standard deviations for stocks, bonds and Treasury Bills for the twenty five-year period from 1975-1999 inclusive:

<u>Asset Class</u>	<u>Annual Real Return</u>	<u>Standard Deviation of Real Return</u>
Equities (Large Companies)	13.2%	14.4%
Bonds (Long-term Corporate)	5.4%	13.8%
Cash Equivalents	2.0%	2.6%

SOURCE: Stocks, Bonds, Bills, and Inflation: 2000 Yearbook, Chicago, Ibbotson Associates, 2000.

Given these historic returns, it is apparent that some percentage of the reserve fund assets must be invested in equities in order to achieve a real return of 4.5%. The remainder of the portfolio will be invested in bonds and cash equivalents in order to meet the stated return objective and accomplish an appropriate level of diversification. The proposed asset allocation for the reserve funds is:

<u>Asset Class</u>	<u>Percent of Total Assets</u>	<u>Annual Real Return</u>	<u>Weighted Real Return</u>
Equities	50%	13.2%	6.60%
Bonds	48%	5.4%	2.59%
Cash Equivalents	2%	2.0%	0.04%
Total	100%		9.23%

The Weighted Real Return of the reserve fund portfolio based on historical performance is somewhat higher than the target of 4.5%, however, the weighted standard deviation of the historical return is 14.0%.

The balance between stocks and bonds will be determined by prevailing capital market conditions and the relative valuations between asset classes.

4.0 PERFORMANCE MEASUREMENT

4.1 Total Return

The primary objective of the fund is to achieve an annualized total return, in real terms, of 4.5% over the long term. In terms of relative performance, the objective will be to outperform a benchmark portfolio. The return on each asset class will be that of its respective market index (i.e. – MSCI-North America, MSCI-Europe, Lehman Brothers Aggregate Index, etc.). Analysis of the actual return of the reserve fund as compared to the benchmark portfolio will determine if adjustments need to be made to the portfolio. While this analysis will be done on a quarterly basis, adjustments to the portfolio shall be made on an annual basis after review and discussion of the portfolio performance at the Finance Committee meeting early in the year.



5.0 REPORTING

The Chairman of the Finance Committee and the Treasurer will report on the performance of the reserve funds at each meeting of the Executive Committee and as appropriate at the Bureau and Council meetings.

• **Year 2000 Performance**

For the year 2000, the long-term portfolio showed the following performance in comparison with the relevant indices.

<u>Asset Class</u>	<u>Percent of Total Assets</u> <u>(Ave. during Yr.)</u>	<u>Annual Total Return</u>	<u>Annual Weighted Return</u>
Equities	62%	- 4.1%	-2.5%
Bonds	37%	4.7%	1.7%
Cash Equivalents	1%	4.5%	0.1%
Total	100%	- 0.7%	-0.7%
MSCI-North America	37%	-12.79%	-4.73%
MSCI-Europe	25%	-9.66%	-2.42%
LBCB Index	37%	9.07%	6.35%
Total			-0.8%

Key:

MSCI is the Morgan Stanley Capital Index that is reported country by country as well as by region.
The LBCB Index is the Lehman Brothers Corporate Bond Index, which is reported annually.

Annual Weighted Return is the Percent of Total Assets (Average during the Year) in a given Asset Class multiplied by the Annual Total Return

It is interesting to note that the IUPAC Total portfolio performed close to the weighted total portfolio predicted by the indices (0.7% vs. 0.8%). However, the equity portion of the IUPAC portfolio performed better than the indices for Europe and North America whereas the IUPAC bonds under-performed the Lehman Bond Index.



International Union of Pure and Applied Chemistry
Fund Policy Statements

1.0 PURPOSE

Biennium Operating Reserve Fund This fund shall contain an amount of money equal to the currently approved biennium budget minus the operating funds for the publications. It is the prime financial protection for the Union in the event of a severe worldwide economic downturn.

Southern Hemisphere Sinking Fund This fund shall be reviewed by the Finance Committee Meeting at its annual meeting and additions made as appropriate with the fund total never exceeding USD 250,000.

Young Scientists Awards Fund This will be an endowment fund which is set at an amount such that a 5% yield on the principal will result in sufficient funds to cover the cost the IUPAC Prize and the biennial subsidy to young observers in the host country for attendance of the General Assembly and Congress.

Endowment Reserve This fund will be the “residual” of the total long term investment account and will provide a 5% yield on this amount of funds for special projects including matching funds contributed from organizations outside IUPAC.

2.0 Investment of Funds

The aggregate of the four funds are managed as a single long term portfolio according the IUPAC Investment Policy and the guidelines contained therein.

3.0 Allocations to Funds

Biennium Operating Reserve Fund This fund shall contain an amount equal to the actual operating expenses for the previous biennium, less publication expenses.

Southern Hemisphere Sinking Fund This will be set at a maximum of USD 250,000. This fund is intended to provide money for General Assemblies in particularly expensive locations and will be replenished as necessary by the Finance Committee.

Young Scientists Awards Fund The level of this fund is currently set at USD 530,000. The will be used to fund the IUPAC Young Scientists Prize and the Young Scientists travel grants to the IUPAC Congress.

Endowment Fund Reserve Fund This is equal to the balance of the amount in the reserve and the income will be used to fund special projects as decided by the Bureau.

4.0 Disbursement Guidelines from Funds

Disbursement of funds from these accounts must be approved by the Finance Committee, or the Treasurer and Chairman acting on behalf of the Finance Committee.

As needed funds from the Biennium Operating Reserve Fund and Southern Hemisphere Sinking Fund may be approved for disbursement, decreasing these funds until new levels are established at the annual Finance Committee meeting.

The Young Scientists Awards Fund will maintain its principal and the funds available for disbursement will not exceed the 5% yield on this.

The Endowment Reserve Fund will maintain its principal and the funds available for disbursement will not exceed the annual yield on this fund at 5%.