

Item 8.1: Biennial Report of Treasurer

Treasurer's Review

Finance is an area of concern in most not-for-profit societies as well as companies in these worldwide weak economic conditions. I would like to stress that the financial situation of IUPAC is still in line with our plans and at the present time well in balance with the Budget the Bureau and Council voted on in Brisbane in July 2001. As you will see from the Finance Committee report, the reserves are adequate and our losses due to the turmoil in the finance markets have been held to a minimum.

That is the good news.

If we look to the future and anticipate the changes in the next years, some concerns have to be outlined. The worldwide economy is in a recession, some of our member companies are facing financial bottlenecks, and governments are actually overspending to accelerate the economy, consequently creating large debt. Practically all our direct and indirect sources for funds have seriously decreased spending and have cost cutting actions in place. Not-for-profit organizations like ours are competing in this increasingly tougher market for financial support. Talking to industry and industry-related organizations, we have had to face tough questions about validating our spending and our returns. Our Strategic Plan is to some extent an answer to the changed economic and political environment. A good part is dedicated to a better understanding of our future with our internal and external constituents. After an in-depth analysis and an extensive dialogue, we will have to make the right choices for our future. We may not have the means to finance all our ideas but will need to concentrate and focus on topics we feel are our strengths.

This process has started with the project approach and will have to continue. On the other hand, the country organizations and the outside world would like to see concrete results and timely actions in the area of cost- benefit ratio.

The Table that follows this report summarizes the financial results for IUPAC for 2001 and 2002 as contained in the audited Financial Statements. The discussion below reviews and comments on some significant aspects of the Union's finances.

Income

Membership Dues from National Adhering Organization

From the Brisbane Council meeting discussions and as a consequence of the proposal from the Czech Republic, a Working Party met and discussed the important issue of National Subscriptions and related questions. Included in this working party were members from large and small countries. The result is a good compromise. The Executive Committee and the Bureau have already approved some of the recommendations from this Working Party.

The proposal recommended by the Czech Republic would have had serious consequences on the National Subscriptions of the larger countries although it would have provided relief to the smaller countries. One Working Party recommendation provides relief to small countries and encourages participation by all member countries in the General Assembly of IUPAC. This was accomplished by entitling each member country to support for the transportation and subsistence expenses of one delegate (paid by IUPAC) up to USD 2000 or 70 % of the NAO's National Subscription for the current biennium, whichever is less. The financial benefit for the smaller countries can be a very substantial fraction of National Subscription, but for the larger countries is less significant.

The other two proposals address the calculations of the National Subscriptions – smoothing over five years to avoid large changes – and a safety device against rapid changes in currency exchange rates. The impact of all those changes on our expenses is in the range of less than 5 %. It will certainly help stabilize fluctuations in the paid National Subscriptions and

Item 8.1: Biennial Report of Treasurer

maintain an equitable balance between large and small countries in the financial support of IUPAC. All those measures are sustainable for the foreseeable future.

Publications and other income sources

Pure and Applied Chemistry: Due to an increase in institutional subscribers in China in 2001 and a modestly higher subscription rate for 2003, IUPAC could maintain the net income at the current level. However, the long-term trend of slowly declining subscriptions is likely to continue, so an increase in the subscription rate for 2004 will be necessary to maintain the revenue.

Interest from Investments: Our long-term accounts are yielding lower income due to the depressed financial markets.

Grants: IUPAC organized a workshop on Chemical Weapons in Bergen, Norway, this past year and received substantial grants from foundations, government agencies and industry. Such project-related funds are not part of our regular income. We believe that other expensive projects can use such a mixture of IUPAC seed money and major outside funding.

Donations: It is unfortunately rare that IUPAC receives generous donations from industry. It is therefore a great pleasure to recognize that IUPAC has received from Samsung General Chemical Corporation a fund of USD 125 000 to support awards to excellent researchers and students in polymer science and support of the educational programs of the IUPAC Macromolecular Division. The fund will be an endowment type fund that will assure annual awards for the future in this field.

Expenses

The past period was in many ways an experimental one. For the first time IUPAC asked the Divisions to work solely with the project driven system. They were asked to dedicate 75 % of the total Divisional expenses to project work. As we had foreseen, this was a difficult change. Overall, the actual expenses of the Divisions have been smaller than budgeted thus far. In our plans, we are providing for the expenditures to return to higher levels as the project system is established.

Summary and Conclusions

Due to the global economic situations and as a result of the discussions in the Finance Committee, the Executive Committee and the Bureau, there is a strong desire to balance the cost-benefit ratio in much clearer form for the different constituencies both in and outside of the IUPAC organization. The allocations of funds among Divisions and Standing Committees should move from the historical to the actual needs as reflected by the needs of the global chemical enterprise. The future of our organization will be highly dependent on our good reputation, useful accomplishments and our goodwill that should lead us to financial sustainability.

Acknowledgements

The work of the Treasurer was only possible thanks to the great cooperation and help of the Executive Director and the Finance Committee.

Audited Financial Statements
2001-2002

	2001	2002
Support		
Grants and contributions	17,000	130,575
National Subscriptions	698,623	690,161
Affiliate Membership Program	72,767	74,731
Total Support	<u>788,390</u>	<u>895,467</u>
Other Revenues		
Publications, net	406,174	415,739
Investment income	(95,809)	(118,833)
Other	42,313	18,346
Total Other Revenues	<u>352,678</u>	<u>315,252</u>
Total Support and Other Revenue	<u>1,141,068</u>	<u>1,210,719</u>
Expenses		
Program	829,347	438,704
Management and general	693,319	697,043
Total expenses	<u>1,522,666</u>	<u>1,135,747</u>
Increase (Decrease) in net assets	(381,598)	74,972
Net assets, beginning of year	<u>4,604,066</u>	<u>4,222,468</u>
Net assets , end of year	<u>4,222,468</u>	<u>4,297,440</u>

8.2 Report from the Finance Committee

The responsibility of the Finance Committee is to concern itself with the long term investments of IUPAC in order to support the various programs of the organization as well as to insure the financial stability of the organization, especially during uncertain economic conditions. This report is an accounting of the performance against this goal. What follows is a summary of the performance of the IUPAC long-term investment portfolio and the two policy statements that govern those investments and their use.

Long-Term Investment Performance Over the Biennium

The investment market during the last biennium continued its downward trend from the preceding two years when it started down after a number of years of high growth. The trend is seen in the regional market indices over the past 5 years in Figure 1. This figure has not been updated for the recent recovery in the markets. For example, World Index is up about 8% from January to June 2003.

During the biennium 2001-2002, the World Index lost 35% of its value; the North American Index lost 34%; the European Index lost 37% and the Pacific Index lost 44%. It was not a biennium favorable for long term investments with all of the indices dropping severely.

This downward trend in the investment markets during the past two years had its way with the IUPAC portfolio. Figure 2 shows the total market value of the IUPAC long-term portfolio in dollars. The solid line is the actual market value of the portfolio, the dashed line shows the performance of the investment portfolio without those additions. Figure 3 shows the percentage change in the portfolio over the biennium against some of the equity indices.

As of the January, 2003 our total portfolio had a value of slightly over 4.2 M USD which is about 3% lower than the value at the beginning of this the biennium, January 2001. Due to additions of some funds during this period from operations, the “performance” of our investments over this period was -4.5%. While directionally this is not good, in the face of markets that lost over 30% during this period, the IUPAC portfolio survived very well.

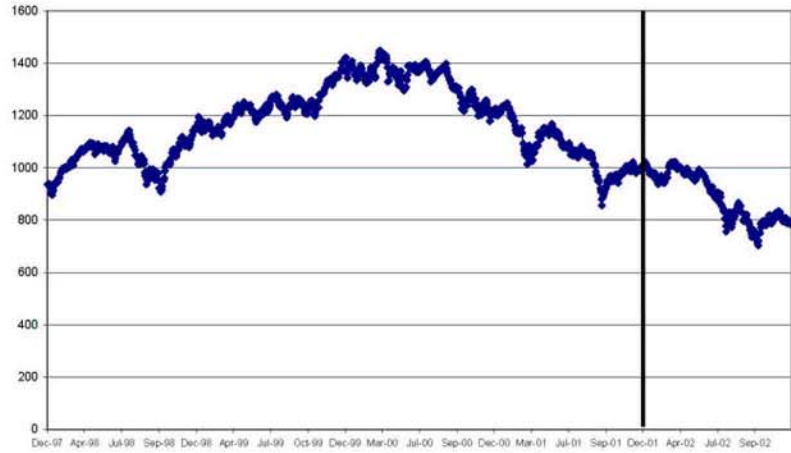
It should be pointed out that in the approved annual budget, the Executive Director includes interest and dividend income (in 2002, for example, it was 240,000 USD) along with income from other sources such as publications and national subscriptions, to present a balanced budget. (There were transfers out of the long-term account to support the cost of the General Assembly in Brisbane and for some of the special projects such as the IUPAC Prize.) In recent years, this has not been used completely and the Executive Director has transferred unused money from operations to the long-term account. In this past biennium it was 154,000 USD. So the long-term account is being augmented from the under-spending in the operations accounts.

The roughly 50% of our portfolio which is in fixed income instruments such as bonds provided us with an excellent cushion during this “bear market”. The FC decision to move in this direction several years ago helped our performance during this biennium.

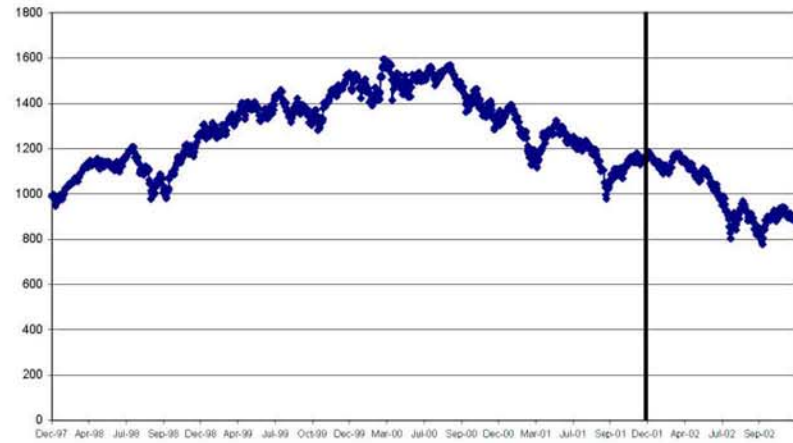
The markets seem to be improving in 2003. From January until June 2003 our portfolio performance has increased by 9% and due to additional transfers from operations, our total portfolio value has increased by 13% to 4.7 M USD. So we may finally be coming out of the investment doldrums of the past biennium. Let’s hope this trend continues!

FIGURE 1 5-YEAR HISTORY OF MSCI

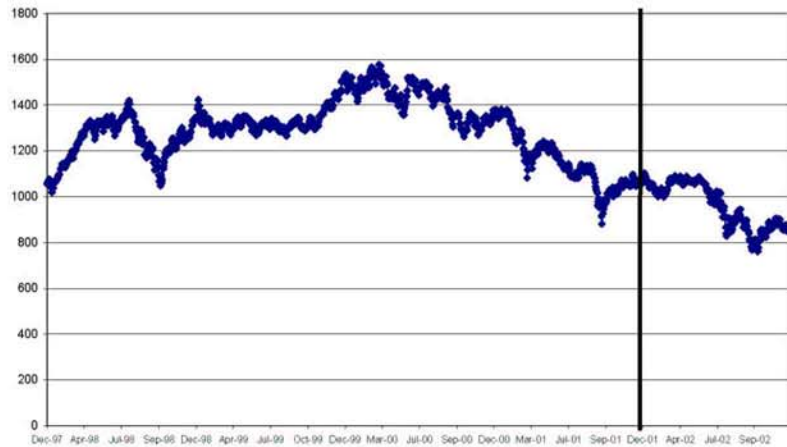
MSCI - WORLD



MSCI - NORTH AMERICA



MSCI - EUROPE



MSCI - PACIFIC



Fig. 2: 2-Year Market Value of IUPAC LT Account

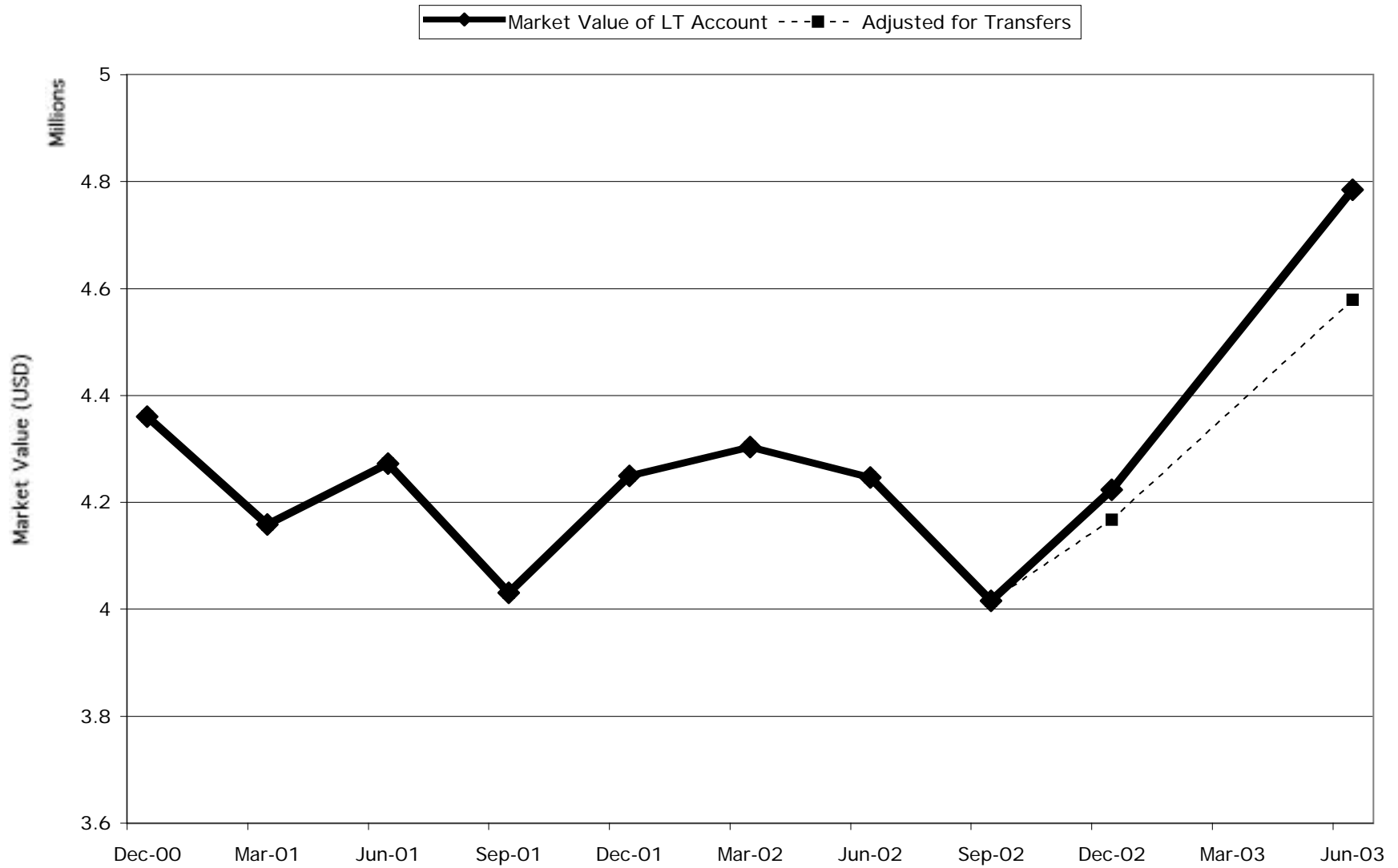
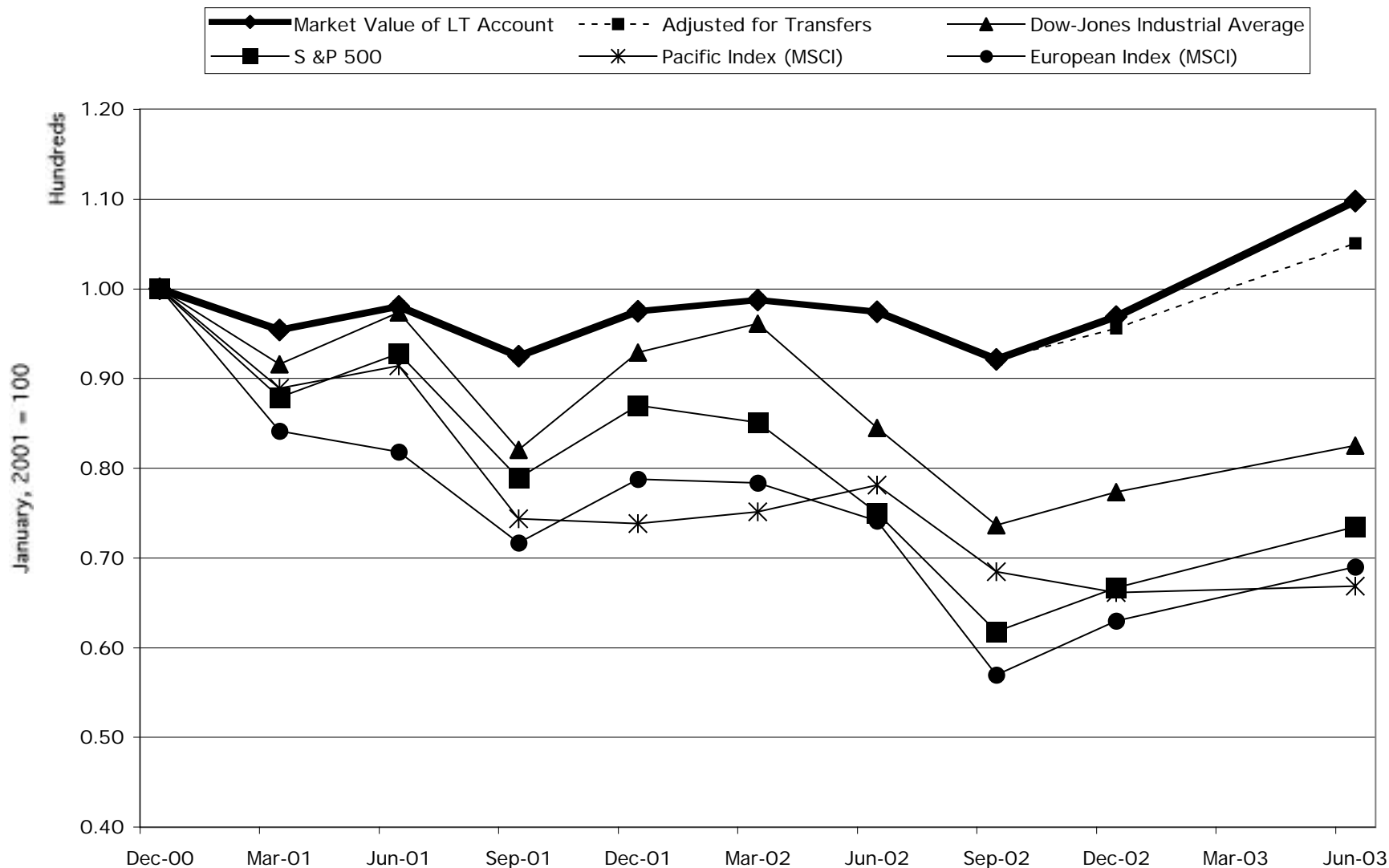


Fig. 3: 2-Year Performance of IUPAC Portfolio - Indexed



Investment Policy Updates

Each year at its annual meeting, the Finance Committee reviews the policy statements governing its investments and fund allocations. The Finance Committee action is either approval or modification of the attached policies.

The Investment Policy statement that follows has been updated with last year's performance data to show how the investments are performing relative to the established guidelines. This review can result in either an endorsement of the present policy, or a revision of the guidelines. Once the policy is approved by the Finance Committee, it is then reviewed at the spring meeting of the Executive Committee meeting and later in the year with the Bureau for information and input.

The Fund Policy is a statement of how the total long-range portfolio is segmented relative to its intended purposes. This statement has evolved over the past three years to its present definitions and guidelines. It is presented here as a statement that has been reviewed and approved by the Executive Committee and the Bureau. Again, if there are reasons to modify this policy it is up to the Finance Committee to proposed any changes along with appropriate rationale.



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 share 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. Based on historic performance over the twenty-five year period from 1975-1999, a low-risk portfolio providing this level of return would be comprised of 25% large-company equities (average annual real return of 13.2%) and 75% fixed income instruments having an average annual real return of 5.4%. This assumes an historic average inflation rate of 3%.

As a guideline, the Finance Committee will review and adjust the ratio of equity-to-fixed income on an annual basis or more frequently if necessary, to provide the expected return. The equity percentage in the portfolio is expected to vary from 20 to 40% of the portfolio.

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 2002 Performance

For the year 2002, the long-term portfolio showed the following performance in comparison with the relevant indices.

<u>Asset Class</u>	<u>Percent of Total Assets</u> (Ave. during Yr.)	<u>Annual Total Return</u>	<u>Annual Weighted Return</u>
Equities	44%	-18.3%	-8.1%
Bonds	55%	11.2%	6.2%
Cash Equivalents	1%	2.0%	0.1%
Total	100%		-1.8%
MSCI-North America	27%	-23.6%	-6.4%
MSCI-Europe	17%	-20.1%	-3.4%
LBCB Index	56%	11.0%	6.2%
Total	100%		-3.6%

- 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 somewhat better than the portfolio predicted by the indices (-1.8 vs. -3.6%). The equity portion of the IUPAC portfolio performed better than the combined indices for Europe and North America whereas the IUPAC bonds performed only slightly better than the Lehman Bond Index.

Special Funds

IUPAC encourages individuals and organizations to participate in its mission. While in most cases this takes the form of collaboration and participation in IUPAC projects, it can also be financial aid to various IUPAC activities. Such financial aid can directly support specific IUPAC projects, or it can be set up as a special fund that is used to accomplish certain goals over a period of time or in perpetuity.

For such special funds, IUPAC has the following guidelines.

1. The goals for which such a special fund is established must be consistent with and support the IUPAC mission and goals.
2. The purposes of the fund should be defined and the body or group within IUPAC that is responsible for administering the funds should be specifically identified (i.e. is it a Division Committee, the President of IUPAC etc.).
3. The fund should be categorized as either an endowment (i.e. only the interest on the money will be used to fund projects) or a consumable fund (i.e. a fund in which both the interest and some principal will be used until the fund is exhausted).
4. The money in the fund shall be invested in the long-term IUPAC investment portfolio and shall earn the prevailing interest based on the portfolio of fixed income instruments in the IUPAC portfolio such as bonds and fixed income funds. In recent years this has provided an annual return in the range of 5 to 6%.
5. The disbursement from these special funds will be under the control of the responsible group subject to all the guidelines contained in this policy and the accepted IUPAC practices for reimbursed expenditures such as travel and subsistence.

The above statement has been agreed to by the Finance Committee and I have incorporated its wording into the appropriate places in our Fund Policy statement which is on the next pages. The other parts of the fund policy statement remain the same as the Executive Committee and the Bureau reviewed in September, 2002 in Paris.



International Union of Pure and Applied Chemistry

Fund Policy Statements

1. 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.

General Assembly Special Fund This fund is to be used to supplement the expense of holding General Assembly meetings in locations where the costs are considerably more expensive than the norm. General Assembly meetings such as the recently held one in Brisbane, Australia and the upcoming 2005 General Assembly in Beijing, China will draw on this fund.

IUPAC Endowment Fund This will be treated as an “endowment fund”, that is, only the interest earned on the principal in this fund will be used for special projects of a broad nature that enhance the stature of the Union. For example, the recently established IUPAC Prize for Young Chemists will be supported by the proceeds from this fund. Other projects approved by the Executive Committee and the Finance Committee may be supported by this fund..

Special Funds IUPAC encourages individuals and organizations to participate in its mission. While in most cases this takes the form of collaboration and participation in IUPAC projects, it can also be financial aid to various IUPAC activities. Such financial aid can directly support specific IUPAC projects, or it can be set up as a special fund that is used to accomplish certain goals over a period of time or in perpetuity.

2. Investment of Funds

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

3. Allocations to Funds

Biennium Operating Reserve Fund This fund shall contain an amount equal to the total approved budget for the next biennium.

General Assembly Special Fund The level of this fund shall be set by the Finance Committee at its annual meeting. The maximum held in this fund is \$250,000 USD. (At the present time, 1 March 2002, it totals \$150,000 since \$100,000 was approved to be used to support the higher expenses of the 2001 General Assembly in Brisbane, Australia)

Special Funds Any funds which are set up as Special Funds shall have the principal amounts designated according to agreements with the Division controlling these funds.



The principle contained in these funds will appear as separate line items in the accounting documents of the organization.

IUPAC Endowment Fund The level of this fund shall be the residual long-term portfolio after allocations for the Biennium Operating Reserve Fund, General Assembly Special Fund and any Special Funds are subtracted.

4. 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 General Assembly Special Fund may be approved for disbursement, decreasing these funds until new levels are established at the annual Finance Committee meeting.

Disbursement of Special Funds shall follow the following guidelines:

1. The goals for which such a special fund is established must be consistent with and support the IUPAC mission and goals.
2. The purposes of the fund should be defined and the body or group within IUPAC that is responsible for administering the funds should be specifically identified (i.e. is it a Division Committee, the President of IUPAC etc.).
3. The fund should be categorized as either an endowment (i.e. only the interest on the money will be used to fund projects) or a consumable fund (i.e. a fund in which both the interest and some principal will be used until the fund is exhausted).
4. The money in the fund shall be invested in the long-term IUPAC investment portfolio and shall earn the prevailing interest based on the portfolio of fixed income instruments in the IUPAC portfolio such as bonds and fixed income funds. In recent years this has provided an annual return in the range of 5 to 6%.

The disbursement from these special funds will be under the control of the responsible group subject to all the guidelines contained in this policy and the accepted IUPAC practices for reimbursed expenditures such as travel and subsistence.

The IUPAC Endowment Fund will maintain its principal and the funds available for disbursement will not exceed the annual yield on this fund at the fixed interest rate (bonds and fixed funds). Currently that is 6.0%.

Item 8.4: Appointment of Auditors for 2003 and 2004

Council is asked to approve the appointment of Batchelor, Tillery & Roberts, LLP, of Raleigh, North Carolina, USA as IUPAC Auditors for 2003 and 2004.