

Bio News



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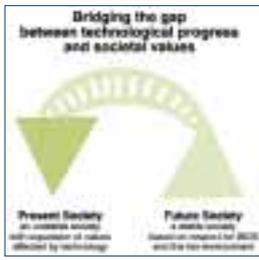
Bios may serve as a lever to lift the spirit of the world

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Biopolicy - A Vision for the Millennium 20 Years of B.I.O. – The Race to Save Bios on our Planet



The deterioration of the global environment is threatening the very continuation of life on our planet. Poverty, hunger, disease, environmental degradation, a declining resource base, the loss of species and habitats, climate change, inadequate water supplies, desertification - all these are global problems. They do not respect national boundaries and they are all related. Addressing them will require an unprecedented level of international cooperation. If we are to solve the problems of our world, nations must redirect their efforts away from conflict toward environmental restoration and the eradication of poverty, hunger and disease. This is the goal and vision of biopolicy.



Today's society may be illustrated as an inverted and therefore highly unstable pyramid in which societal values are heavily influenced by developments in the realm of technology. It is vital that we correct this imbalance and move to a stable society, which is characterised by respect for bios and the environment. B.I.O.'s educational and awareness-raising programmes are directed at restoring the stability of our human and natural environments.

To alleviate regional conflicts and reconcile economic growth with environmental harmony, a new vision is needed in every aspect of human affairs - industry, energy, transport, agriculture and regional development. In order to be successful, however, these

Bio-diplomacy

policies have to be based on a framework of environmental ethics. Biopolicy provides these ethical guidelines and urges a reassessment of current assumptions with a view to a global appreciation of bios.

Society needs to mobilise every one of its elements and strive for a better future. **Working to sustain what already exists is not enough.** With new

challenges constantly arising and with an increased awareness of the urgent need to take action against destructive trends, the time is ripe to find more comprehensive, long-term solutions to protect our planet and guarantee a balanced society for the future.

A new vision, beyond sustainable development, can help place the situation in perspective, and provide the necessary incentives to move ahead and explore possibilities leading to more just and safe global management.

Biopolicy can become a unifying vision for attaining the UN Millennium

Development Goals and lead to the future harmonious co-existence of all forms of life.

Biopolicy is the theoretical core of the B.I.O.'s philosophy, which encompasses all aspects of human endeavour. It is based on a framework of environmental ethics that is intended to promote a reassessment of current assumptions and lead to a new global appreciation for the protection of life on our planet.

Biopolicy provides the incentives that are necessary for every endeavour to be governed by biocentric values and to be oriented toward the better understanding and preservation of the environment and all forms of life.

In the spirit of biopolicy, every individual on the planet is encouraged to actively engage in the search for **new paradigms** and to join environmentally committed legislators, scholars, educators and business leaders in influencing governmental protection of environmental issues around the world.

the time is ripe to find more comprehensive, long-term solutions to protect our planet

Defence for life

B.I.O. believes that the greatest challenge for the 21st century is the permanent conversion of existing defence infrastructure into programmes for the defence of the planet. The nations of the world should stop investing in instruments of destruction and begin investing in instruments of peace for the protection of our common environment. Competition to find better methods to destroy should be replaced with cooperation to find ways to save life. Existing defence manpower and equipment can be adapted for peaceful tasks such as reforestation, habitat restoration, water resource clean up, soil erosion recovery, protection of the ozone layer and de-contamination of areas affected by nuclear radiation. These problems represent real threats to the continuation of life on our planet, and no human resource should be spared in the effort to contain them.

Bio-diplomacy - international cooperation in environmental protection - is a concept that was pioneered by B.I.O. twenty years ago, at a time when

civic leaders, international organisations and the world community as a whole had not yet fully realised the urgency of adopting common environmental policy. **Bio-diplomacy focuses on the interdependence of all forms of life, and calls upon diplomats and other people of influence to engage in a collective endeavour in defence of the environment.**

Joint efforts to protect the environment can boost international relations and act as a bridge between global communities at the national and local levels. Bio-diplomacy actively supports efforts to maintain biological and cultural diversity and seeks to improve human relations and to attain the goal of world peace by replacing current diplomatic attitudes with a complete international and intercultural perspective. War is the opposite of bio-diplomacy; indeed, it represents the ultimate failure of diplomacy. Whereas the purpose of bio-diplomacy is to protect life in all its forms, the purpose of war is to destroy life and human cultures in order to gain control and power.

Defence for life must become a priority in every facet of our lives. The

conversion of war regimes to programmes for the preservation of the environment would guarantee a better future. Military aircraft, instead of dropping bombs, could be used to survey the state of the environment and



to drop seeds for trees, restoring devastated areas and benefiting the entire planet. Naval destroyers could be used to clean the oceans and shorelines of pollution. Hospital ships could be deployed off the coasts of Africa and South Asia, treating the sick and hungry. Such steps would be the best response to poverty and deprivation.

The environment, as a common point of reference, can bring all peoples of the world together, in harmony and coexistence. Such a programme would not have negative economic effects.

On the contrary, it would stimulate the global economy and provide jobs, since existing **defence industries would be re-tooled into defence-for-life industries.**

The degradation of the environment emphasises the urgency and the need for coherent long-term international strategy and cooperation. The increased mobility of goods, services, labour, technology and capital throughout the world, facilitated by technological advancements in communications and transportation that has been called globalisation,

demonstrates the urgency for rigorous inquiry into the opportunities and challenges ahead. Increasingly, with information and communication technologies empowering individuals everywhere, **humanity's future rests with new models of thought** that has been called globalisation, action and participation. **A new millennium vision in policy, biopolicy, is needed to guarantee the continuity of bios on our planet and to lead society to a harmonious future.**

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Millennium Development Goals

The UN Millennium Development Goals set clear targets for reducing poverty and other sources of human deprivation, and for promoting sustainable development (p.1, 8-9,10).



Africa

Biodiversity, water, bio-education, equity and poverty are just some of the issues that urgently need to be addressed in Africa (p.8-9).



The most beautiful state

The race of human greed prevails in today's society. It is important to draw joy and inspiration from the miracle of bios (p.16)



World Referendum

The B.I.O. World Referendum urges every citizen on the planet to cast a vote in defence of bios (life) and the environment (p.15)



e-learning – e-library

Representatives from 66 countries subscribe to the 14 online B.I.O. sustainability courses (p.4-5) Cross-references are provided on topics linking to B.I.O. publications (p.4-5)

BIO Goals

INTERNATIONAL CO-OPERATION FOR BETTER UNDERSTANDING AND APPRECIATION OF BIOS (LIFE) AND THE BIO-ENVIRONMENT

The environment recognises no ideological or geographical boundaries, no East-West, North-South or developed-developing countries. Bios provides the unifying force for the harmonious co-existence of all forms of life, leading to a new era of bio-diplomacy.

BIO-CULTURE - BIO-ENVIRONMENT

Two essential dimensions for building new societal values for the millennium.

PROMOTION OF BIO-EDUCATION

The International University for the Bio-Environment (I.U.B.E.) was launched to reform education worldwide by promoting biocentric curricula and satellite education.

BIO-ASSESSMENT OF TECHNOLOGY

A diachronic search for new societal values will channel technological progress in a direction that leads to a better quality of life through environmental appreciation.

INTERNATIONAL LEGISLATION ON BIOS RIGHTS

It is important to protect all forms of life by enacting rules that prevent the deterioration of bios and ensure the fundamental right to a clean environment and to a better quality of life.

A WORLD REFERENDUM

This would allow people throughout the world to express their commitment to preserve bios on our planet.

RAISING AWARENESS OF THE RAMIFICATIONS OF THE BIOLOGICAL SCIENCES

More people would realise that progress in the biological sciences relates to their own field of interest. This acknowledgement may lead to new fields of human endeavour, such as bio-legislation, bio-medicine, bio-ethics, bio-arts, bio-linguistics, bio-economics, bio-athletics, bio-communication, bio-history, bio-education and bio-diplomacy.

ENVIRONMENTAL OLYMPICS - BIOS PRIZES

Bios Prizes for every discipline with the participation of every member of society to reward excellence in environmental protection.

CEASE-FIRE DURING THE OLYMPIC GAMES

Since the 1980's, B.I.O. has promoted the introduction of a cease-fire during the Olympic Games, a proposal which has been adopted as a Resolution by the UN General Assembly.

PROPOSED ACTION

a **Bio-Syllabus** and new curricula for every level of education, as well as electronic and audio-visual materials on issues related to bios and the environment

a **Green Salary** in place of benefits for the unemployed, with the commitment to contribute to the protection of the environment

Environmental Action Groups drawing both on the enthusiasm of the young and the experience of senior citizens to tackle local issues

Local Genetic Banks to save the biodiversity of endemic plant and animal species and to promote a world-wide interdisciplinary exchange of information on the appreciation of the environment

an electronic **Bank of Ideas** to create a rich repository of information and reflections on bios.

SPONSORS 2005

Hellenic Ministry of Foreign Affairs
Hellenic Aid Department – YDAS

Kitty P. Kyriacopoulos

European Commission
Leonardo da Vinci Programme

Ministry of Culture

Alpha Bank

A.G. Leventis Foundation

OTE

OTEnet

DHL International

Hotel Herodion

Irene Vassilopoulou

Hellas-on-Line

Xerox Hellas S.A.

Hewlett-Packard Hellas

BIO in 131 countries

Africa

Algeria, Angola, Benin, Botswana, Burkina Faso, Cameroon, Chad, Congo, Egypt, Ethiopia, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Nigeria, Senegal, Seychelles, South Africa, Sudan, Tanzania, Togo, Uganda, Zimbabwe

The Americas

Argentina, Bahamas, Barbados, Bermuda, Bolivia, Brazil, Canada, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Guyana, Honduras, Jamaica, Mexico, Panama, Peru, Trinidad and Tobago, USA, Uruguay, Venezuela

Asia

Armenia, Bahrain, Bangladesh, Cambodia, China, Dubai, Georgia, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Korea, Kuwait, Lebanon, Malaysia, Nepal, Pakistan, The Philippines, Saudi Arabia, Singapore, Sri Lanka, Syria, Tajikistan, Thailand, United Arab Emirates, Uzbekistan

Europe

Albania, Austria, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, FYROM, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Monaco, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, UK, Vatican

Oceania

Australia, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Vanuatu

Editorial

Humanity has been given a final opportunity to respect the close relationship that exists between its actions and the environment. The UN Millennium Development Goals have set an international agenda for correcting the inequities of the past. Protecting and managing the global environment rationally will be the most challenging task for the new millennium.

The current crisis in values is a great threat, not only to the environment but also to peace.

The UN Millennium Development Goals call for cutting by one half, the number of people who suffer from hunger by 2015. To meet the challenge of feeding the world's hungry, society must focus upon reforming political institutions, creating appropriate technologies, promoting cultural capital and enabling institutional frameworks that favour policy for environmental protection. Key to these goals is the increased use of participatory research methods, proper agrarian policies and local capacity building.

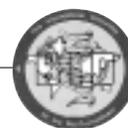
Poverty and food security are social and economic issues, but are also at the root of many environmental problems in developing countries. As world population expands in these regions, the ability to provide basic necessities is threatened. In the 21st century, agricultural policy will have to complement development policies and programmes with the aim of increasing food production and personal incomes without further degrading local environments.

Food security - providing all the people with sufficient food at all times to meet their daily dietary needs for a healthy and productive life - is an essential precondition for economic and social development in every country. Achieving food security is more than just an issue of food production, nutrition, and food aid.

Hunger is a severe manifestation of poverty, and alleviating it depends in the long run on sustainable and broad-based economic growth and income generation. To achieve these conditions, underdeveloped countries must invest in rural areas to strengthen agriculture, the food system, and infrastructure, and to restore and conserve critical natural resources for agricultural production. This requires both public and private investment, and the political will to implement the necessary changes.



Dr. Agni Vlavianos-Arvanitis
B.I.O. President and Founder



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Protection of Nature, Way of Peace Greenaccord Media Forum - Rome

The environment was the main topic of this year's Third International Forum organised by Greenaccord held in Rome from October 12 through 15. The purpose of the forum was to link the protection of nature with the path of peace. Greenaccord addresses the national and international media community and aims to provide a setting for reflecting, training and the exchange of ideas for international journalists interested in the protection of the environment.



ner and President of the Green Belt Movement, gave her lecture via a videoconference presentation. Dr. Maathai emphasised the importance of making peace with the environment in order to build peace between peoples.

The beautiful Villa Mondragone in Monte Porzio, where the Gregorian calendar was adopted in the sixteenth century, was the location of the forum. The forum convened distinguished participants including: **Arundhati Roy**, author; **Tenzin Gyatso**, 1989 laureate of the Nobel Peace Prize; and Professor **Michael Renner**, of the Worldwatch Institute. Professor **Julia Marton-Lefevre**, Rector of the University for Peace in Costa Rica stressed that peace should be achieved through the most valuable and effective resource that man possesses: education. Following his presentation Dr. **Caleb Fundanga**, the Governor of the Bank of Zambia, proposed that the Greenaccord Forum take place in Zambia next year. The event inspired vital debate and discussion around environmental issues and journalistic responsibility.

On the first day, **Loic Fauchon**, President of the World Water Council, gave a speech on 'International cooperation and the right to water'. Dr. **Agni Vliavianos Arvanitis** addressed the 'Protection of Nature as an Instrument for Peace - the Role of the Media'. Particular emphasis was placed on the power of the media to raise awareness, provide correct information, empower citizens, encourage action, emphasise the urgency of a situation and affect decision-making in environmental issues. From Nairobi, Dr. **Wangari Maathai**, 2004 Nobel Peace Prize win-

Major Issues of the 21st Century - London

The Fourth City of London Biennial Meeting is to be held on the 6th and 7th of December at the International Maritime Organization in London. The B.I.O. president has been invited to attend the event alongside leading businessmen, politicians, diplomats and senior academics from the UK and overseas.

Chaired by Professor **Costas Grammenos**, Pro Vice-Chancellor of the University, the event will feature a number of talks on 'World Economy and Business' and 'Financial Markets'.

Speakers include: The Rt. Hon. **Lord Mayor of the City of London**, Professor **David Rhind**, CBE; Dr. **Supachai Panitchpakdi**, Secretary General, UNCTAD; Mr. **Andrew Gowers**, Editor of the Financial Times; The Hon. **Apurv Bagri**, Director, Metdist Ltd; Dr. **Robert Ting-Jieh Chu**, President, Taiwan An Feng Steel Group; **Lord Griffiths** of Fforestfach, Vice-Chairman, Goldman Sachs Ltd; Dr. **Stelios Haji-Ioannou**, Chairman, easyGroup; and Professor **David Blake** of the Cass Business School.

Aurelio Peccei Lecture Club of Rome meeting at the Royal Academy of Belgium

The President of B.I.O. will be delivering the twenty-fifth Aurelio Peccei lecture at the Royal Academy of Belgium in Brussels on the 14th of December, 2005. The Aurelio Peccei lectures are organised by the EU Brussels Chapter of the Club of Rome and have been delivered in the past by distinguished scholars including **Ernst von Weizsacker**, Founding President of the Wuppertal Institute for Climate, Environment and Energy; **Augusto Lopez-**



Claros, Chief Economist and Director of the Global Competitiveness Programme of the World Economic Forum; **Vandana Shiva**, and



many others. The theme of the lecture will be *Biopolitics - Building New Values for the Millennium*. The speech will emphasise the fact that winning the battle against world-wide poverty requires a renaissance of val-

ues. To embark on a millennium of hope, we need to avoid the mistakes of the past and create a society that respects and promotes bios - all living beings on the planet.

Hammarskjold Memorial Ceremony Backakra, Sweden



This year marks the centenary of the birth of Dag Hammarskjold, Swedish peace-maker and second Secretary General of the United Nations (1953 to 1961). In celebration of the birth and memory of this important leader in international diplomacy, an official ceremony was held on the 29th of July at Dag Hammarskjold's countryside home in the village of Backakra in Southern Sweden. This special event was held under the auspices of their majesties the King and Queen of Sweden, and was attended by many prominent international figures.

The President of B.I.O., attended this ceremony and concert at their invitation of the Foreign Ministry of Sweden.

THE CONFERENCE BOARD

The Biopolitics International Organisation and the European Council on Environment and Product Stewardship jointly organised a

conference on corporate social responsibility on October 19 and 20 in Athens, in the headquarters of Alpha Bank and IBM. The purpose of the conference was to promote environmental management and corporate social responsibility as a priority in business strategy. The event was attended by distinguished senior corporate executives from multinational companies including Akzo Nobel Chemicals, IBM, ExxonMobil, L'Oreal, Abbott Laboratories, Procter & Gamble and Borealis.

Dr. Vliavianos-Arvanitis, President and Founder of B.I.O. addressed the immediacy of the need to take action in her keynote speech. "The UN Millennium Development Goals have set an international agenda for correcting the inequities of the past. Protecting and managing the global environment rationally will be the most challenging task for

the new millennium. The advance of technology must be tempered with a solid base of fundamental values in order to

lead to a better future. We must rethink the concept of profit to include the environment and ways of protecting and maintaining this gift of life. We must move away from destruction into new patterns of international cooperation; and we need to act today, not tomorrow."

The European Council on Environment and Product Stewardship, existing since 1991, responds to public, government and corporate concern about the environment and sustainability as well as product stewardship issues.

The council offers a forum to senior executives from multinational companies, who are responsible for managing environmental and sustainability affairs at the strategic level and allows them to network and share experiences on issues related to environment and human health in order to help them improve their businesses.



St. Petersburg Scientific Center of the Russian Academy of Science

Biopolitics International Organisation

Interregional Ecological Club of Post-Graduates, Students & Schoolchildren of the Baltic-Ladoga Region

XIth Youth Bios Olympiad 2006
and
International Youth Conference
on the Bio-Environment

September 15-18, 2006
St. Petersburg, Russia

Xth Youth Bios Olympiad - St. Petersburg

The Annual Youth Bios Olympiad celebrated its tenth anniversary with great success in St. Petersburg on September 20 through 24. The events were attended by 800 children from cities throughout Russia and eastern Europe.

To mark this special occasion, the Biopolitics International Organisation honoured Professor **Alexander Shishkin**, head of the Laboratory of Ecological Standardisation at St. Petersburg State University for Plant Polymers, with an Award recognising his commitment to youth and his outstanding contribution in promoting bios values. Thanks to the inspired efforts of Professor Shishkin, 36 bios school projects have been held.

The Youth Bios Olympiad brings together children of all ages in a spirit of creativity and environmental awareness with a view to emphasise the importance of cooperation between technology and the arts in the race to save the environment. Through scientific projects, oral presentations, poster sessions, theatre, dance

and music competitions, the participants develop their skills and are encouraged to think creatively about all aspects of the environment. During the event, participants present a multitude of creative projects on environmental research in eight areas: assessment of the environment; problems of flora protection; problems of fauna protection; hydrobiological and hydrochemical research; medical and social aspects of the environment; research on the state of ecosystems; solid and industrial wastes; international cooperation in

bio-environment. Diplomas are awarded to environmental research projects and creative environmental works.

Youth Bios-Schools

Once again, Biopolitics International Organisation and the



Interregional Ecological Club of Post-Graduates, Students and Schoolchildren of the Baltic-Ladoga Region is inviting young people

between the ages of 15 and 22 to participate in the Bios-Schools (ecological camps) to be held three times this school year in the suburbs of Saint Petersburg. This year's schools will take place within the framework of the international projects "Youth for the environment and sustainable development" and "Bio-culture and bio-environment in the XXI century". Using B.I.O. textbooks, the ecological camp programme provides participants with an introduction to bio-politics and bio-legislation, approaches to environmental observations, practical experiences, international programmes on a variety

of topics, different aspects of environmental problems in the Baltic-Ladoga region and an historical review of interactions between the

bio-environment and humanity. The wide-range of scientific and cultural activities include lectures, field practice, laboratory work and discussions, as well as visits to museums, theatres and the many historical places of Saint Petersburg. In addition, extra-curricular activities, such as sports competitions, environmental games, amateur performances and dance parties, are also organised.

During the camps participants are given the opportunity to prepare material for next year's Xth International Youth Bios Olympiad, which will be held on September 15-18, 2006 in St. Petersburg.





INTERNATIONAL UNIVERSITY FOR THE



B.I.O. e-library an electronic cross reference library on the bio-environment

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| Bio-Theology | Bio-Tourism | Waste Management | Water Resource Management | World Referendum | Youth Bios Olympiads |

The purpose and responsibility of bio-education is to uplift the spirit of humankind in order to reverse the crisis in values that has led to serious environmental deterioration and its related problems. The advent of globalisation has brought major changes in economic, social and educational priorities. E-learning can provide new opportunities for the participation of every individual on the globe.

Bio-education

To meet the challenges of education for the new millennium, a radical shift is needed away from the intra-disciplinary entrenchment that has prevailed in the past into more creative patterns of thought for the development of the highest potential of each individual and for the benefit of future generations. By providing interdisciplinary models with concern for bios and the environment at the core of every speciality, bio-education seeks to apply environmental protection to every human endeavour.

Why is bio-education essential?

Concern over environmental issues is an international task, particularly for highly developed, industrialised countries. We must acknowledge our individual and social responsibilities and the fact that environmental protection involves confronting conflicting interests.

The understanding of changing environmental circumstances and of the fluidity of the concept of environmental protection requires the development of a critical appreciation of the numerous influences affecting the interactions between humanity and the environment. Bio-education would ensure that future leaders in government, business, academia, and the professions respect the environment and not take actions that degrade it.

Bio-education is an interdisciplinary subject of relevance to many fields of teaching. Given the complexity and the various levels of relationships with society as a whole, a wide range of subjects can contribute to bio-education. Educational institutions should be encour-

aged to devise their own bio-education profiles, based on their strengths and the overall focus of their activities. The non-exclusive approach of bio-education is an opportunity to lift the barriers separating different disciplines and to offer a well-rounded education, which is not hampered by overspecialisation. New programmes and curricula should be designed with this in mind.

The promotion of bio-education in business, public administration and government should also be emphasised. Programmes for vocational training and seminars for decision-makers are absolutely necessary if environmental awareness is ever intended to produce action.

Bio-education should be disseminated as widely as possible by educational institutions, businesses, municipal authorities, governments, NGOs and other stakeholders. By promoting joint action in all sectors of society and the economy, a broad consensus about the development of an environmentally-responsible citizenry can be built.

Progress 2005

Honours and distinctions

- ▶ The B.I.O. President is nominated for the Nobel Peace Prize by a Swedish Member of Parliament
- ▶ The B.I.O. President is appointed Fellow of the World Academy of Art and Science
- ▶ The B.I.O. President is appointed Visiting Professor of Bioethics at the Department of International and European Studies, Panteion University, Athens
- ▶ The B.I.O. President is unanimously elected by the mayor and council of the city of Drama as an Honorary Citizen, Drama, Greece
- ▶ The B.I.O. President receives 'Peace and Environment' Award from the Euro-Arab Centre of Cooperation, Alexandria, Egypt
- ▶ The B.I.O. President is appointed Deputy of the South East Europe Division (SEED) of the World Academy of Art and Science

B.I.O. international conferences

- ▶ Symposium on "Hellenic-Turkish Cooperation in Biopolitics" held in Athens, Greece
- ▶ Symposium on "Hellenic-Turkish Cooperation in Biopolitics" held at Ankara University, Turkey
- ▶ "To speak for the world - a selection of speeches and statements by Dag Hammarskjöld, Secretary-General of the United Nations 1953-1961," book presentation in commemoration of Dag Hammarskjöld's centenary, attended by Ambassadors, official representatives and academics from 26 countries, Athens
- ▶ 10th Annual Youth Bios Olympiad, St. Petersburg, Russia
- ▶ Co-organisation of the annual conference of the European Council on Managing the Environment, Athens
- ▶ Profit and the Bio-Environment: Building a New Society of Hope, Athens Money Show. Roundtable discussions with the participation of government representatives, Ambassadors, environmental experts and business executives

Programmes in bio-education

- ▶ Implementation of 14 tutor-supported, e-learning courses in agriculture, architecture, diplo-

- macy, economics, energy, ethics, health, history, legislation, technology, tourism, waste management, the EU's common agricultural policy, and people with a disability in modern society; with participants in 66 countries
- ▶ Launching of e-learning programme for government officials, public servants as well as individuals in Nigeria, Cameroon and other Sub-Saharan African countries
- ▶ Participation in "Youth Farm" Leonardo da Vinci educational programme for young farmers, coordinated by Intercollege Cyprus
- ▶ Participation in the World Bank's Research Alliance for Development

Seminars/conferences/special events

- ▶ The B.I.O. President delivers keynote speech, 12th International Conference of the World Society for Hellenism and Orthodoxy Athens
- ▶ As Corresponding Member of the Pontifical Academy for Life, the B.I.O. President participated in the eleventh Annual General Assembly of the Academy, The Vatican
- ▶ Participation in the "Symposium on the World-watch Institute Report, State of the World: Redefining Global Security" EU Parliament, Brussels
- ▶ Participation at the conference on "Deconstructing Democracy - The Limits of Privatisation," hosted by the Club of Rome, Brussels - EU Chapter at the Royal Academy of Belgium
- ▶ The B.I.O. President participates as Official Delegate of the Hellenic National Commission for UNESCO at the "First intergovernmental meeting of experts aimed at finalising a draft of a declaration on universal norms on bioethics," Paris
- ▶ The B.I.O. President delivers keynote address and participation in Scientific Committee, International Congress on Energy Efficiency and Renewable Energy Sources in Industry and Construction, Plovdiv, Bulgaria
- ▶ B.I.O. establishes cooperation with the Global Marshall Plan initiative, based in Germany
- ▶ B.I.O. establishes cooperation with the Bor-

- neo Tropical Rainforest Foundation and submits joint proposal for the implementation of e-learning courses in environmental education to the Government of Malaysia
- ▶ The B.I.O. President delivers keynote speech, 15th Conference on "Environmental protection is a Must," Alexandria, Egypt
- ▶ Participation in 'Economist' conference, Athens, Greece
- ▶ The B.I.O. President as member of the Euro-Arab Council participated in ceremony to award Sheikh Maktoum Bin Rashid Al Maktoum with the 'Peace and Environment', Dubai
- ▶ Participation in the Annual Bank Conference on Development Economics, sponsored by the World Bank, Amsterdam, The Netherlands
- ▶ The B.I.O. President is keynote speaker at the conference on "Accessibility to Life" organised by the Paraplegic Society of the City of Drama, Greece
- ▶ The B.I.O. President chairs the Olympia Forum on "The Cultural Role of Greece following the Olympic Games", Athens
- ▶ The B.I.O. President delivers keynote speech at the Environment and Social Corporate Responsibility Conference, sponsored by Clarus Advisory Services, American School of Archaeology in Athens
- ▶ Participation in the Global Marshall Plan Initiative's organisational meeting, Ulm, Germany
- ▶ Participation in the EU Leonardo da Vinci Youth Farm project's training meeting, Nicosia, Cyprus
- ▶ Participation in the Tallberg Forum, and the Dag Hammarskjöld commemoration in Backakra, Sweden
- ▶ Keynote speech in the conference on "Imagining a sustainable future", in cooperation with the Huxley College of Environmental Studies, Western Washington University, USA
- ▶ Keynote speech at the "Greenaccord 3rd International Media Forum on the Protection of Nature," Rome
- ▶ B.I.O. President chair with Academician Carl-Göran Heden, at the General Assembly of the World Academy of Art and Science on "The

future of knowledge - evolutionary challenges of the 21st century," Zagreb, Croatia

- ▶ Keynote speech and participation in the Scientific Committee at the IVth World Conference on Bioethics, organised by the International Bioethics Society, under the auspices of the UNESCO and the Council of Europe, Gijon, Spain
- ▶ Participation in the Scientific Committee of the International Conference on Agriculture Development and European Union Policy, Sofia, Bulgaria
- ▶ Keynote speech at the Graduation Ceremony of the Alpine Center for Hospitality & Tourism Education, Athens, Greece
- ▶ Participation in the Fourth City of London Biennial Meeting 'Major Issues of the 21st Century', England.
- ▶ The B.I.O. President delivers keynote speech at the Price Waterhouse Cooper meeting in Cyprus
- ▶ The B.I.O. President will deliver the twenty-fifth Aurelio Peccei lecture, hosted by the Club of Rome, Brussels - EU Chapter at the Royal Academy of Belgium

B.I.O. publications

- ▶ "Mythos and the Bio-Environment. A Contribution to Bio-Culture" CD-Rom, English volume, Greek volume (in press)
- ▶ Quarterly publication of "BioNews," the official B.I.O. newspaper

Awareness raising

- ▶ Extensive B.I.O. campaign to improve accessibility to beaches for people with a disability
- ▶ World Referendum to invite every individual on the planet to vote for the protection of the environment

Media coverage

- ▶ International television interviews and extensive press coverage and contributions to international publications
- ▶ B.I.O. website www.biopolitics.gr features news and information on all B.I.O. activities and projects.

THE BIO-ENVIRONMENT



B.I.O. launched the International University for the Bio-Environment (I.U.B.E.) in 1990. Bearing in mind that universities should be, by definition, universal, the I.U.B.E. acts as a catalyst to accelerate environmental awareness and impart a bio-centric message to opinion formers, students and training professionals around the world. The I.U.B.E. urges scholars, decision-makers, diplomats, business and civic leaders to actively contribute to the development of a biocentric society.

Rather than focusing on the award of degrees, the I.U.B.E. functions as an open and distance learning initiative - using modern teaching tools such as e-learning, as well as extensive electronic and published material - whereby leading educators and decision-makers infuse existing educational institutions with bios-enhancing values.



B.I.O. e-learning courses Education to enrich sustainability

B.I.O. has launched the second cycle of its e-learning programme; to date, 14 online environmental courses have attracted the participation of representatives from 66 countries. The courses are available free of charge and participants receive a B.I.O. certificate upon successful completion.

Currently being offered

| | | |
|--------------------|-----------------------------------|----------------------------|
| Bio-Architecture | EU Common Agricultural Policy | Renewable Energy Sources |
| Food & Agriculture | Disabled People in Modern Society | Health and the Environment |

To be offered in February 2006

| | | |
|------------------|------------------------------|---------------|
| Bio-Tourism | Bio-Economics | Bio-Diplomacy |
| Waste Management | Bio-Assessment of Technology | |

To be offered in May 2006

| | | |
|------------|-------------|-----------------|
| Bio-Ethics | Bio-History | Bio-Legislation |
|------------|-------------|-----------------|

Participants from the following 66 countries are currently registered

| | | | | | |
|--------------------|----------|-------------|-----------------------|---------------------|--------------------------|
| Albania | Angola | Austria | Bahamas | Bangladesh | Belgium |
| Bosnia-Herzegovina | Botswana | Brazil | Bulgaria | Burkina Faso | Central African Republic |
| Cameroon | Chile | China | Colombia | Croatia | Czech Republic |
| Dominican Republic | Egypt | Ethiopia | France | Germany | Greece |
| Guatemala | Guyana | India | Indonesia | Iran | Iraq |
| Israel | Italy | Japan | Jordan | Kenya | Kuwait |
| Lithuania | Mali | Mexico | Moldova | Nepal | The Netherlands |
| New Zealand | Nigeria | Pakistan | The Philippines | Poland | Portugal |
| Romania | Russia | Samoa | Serbia and Montenegro | South Africa | Spain |
| Sri Lanka | Sweden | Switzerland | Tanzania | Trinidad and Tobago | Turkey |
| Uganda | U.K. | Uruguay | USA | Vanuatu | Zambia |

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- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME I**, A. Vlavianos-Arvanitis, Ed. First BIO International Conference, May 1987 (English, 400 pp.) 1988
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME II**, A. Vlavianos-Arvanitis, Ed. Second BIO International Conference, Oct. 1988 (English, 543pp.) 1989
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME III**, A. Vlavianos-Arvanitis, Ed. Fourth BIO International Conference, Jan. 1991 (English, 683 pp.) 1991
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME IV**, A. Vlavianos-Arvanitis, R. Keles, Eds. Fifth BIO International Conference, Istanbul, May 1992 (English, 303 pp.) 1993
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME V**, A. Vlavianos-Arvanitis, Ed. Sixth BIO International Conference - International Sakharov Festival, Athens, July 1994 (English, 671 pp.) 1996
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME VI**, A. Vlavianos-Arvanitis, J. Morovic, Eds. Seventh BIO International Conference, Bratislava, June 1997 (English, 527 pp.) 1998
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME VII**, A. Vlavianos-Arvanitis, L. Kapolyi, Eds. Eighth BIO International Conference, Budapest, September 1998 (English, 271 pp.) 1999
- ▶ **BIOPOLITICS - BIO-CULTURE - BIOS OLYMPIAD**, A. Vlavianos-Arvanitis, Ed. BIO International Conference, Ancient Olympia, August 1999 (Greek, 299 pp.) 2001
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT - VOLUME VIII**, A. Vlavianos-Arvanitis, Ed. BIO International Conferences, 2000-2001 (English, 335 pp.) 2001

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- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT I** (Greek), A. Vlavianos-Arvanitis, Editor. First Conference on Business Strategy for the Bio-Environment, Athens, Nov. 1992, 132 pp., 1994
- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT II** (Greek), A. Vlavianos-Arvanitis, Editor. Second Conference on Business Strategy for the Bio-Environment, Athens, Dec. 1993, 180 pp., 1994
- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT III** (Greek), A. Vlavianos-Arvanitis, Editor. International Conference on Profit and the Bio-Environment, Athens Chamber of Commerce and Industry, Oct. 1995, 271 pp., 1996
- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT I** (English), A. Vlavianos-Arvanitis, Editor. Proceedings from the Second Symposium on Business Strategy for the Bio-Environment, Athens, Dec. 1993, 168 pp., 1995
- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT II** (English), A. Vlavianos-Arvanitis, Editor. Proceedings from a Corporate Symposium, Harvard Club of New York City, Feb. 1995, 105 pp., 1996
- ▶ **BUSINESS STRATEGY FOR THE BIO-ENVIRONMENT III** (English), A. Vlavianos-Arvanitis, Editor. International Conference on Profit and the Bio-Environment, Athens Chamber of Commerce and Industry, Oct. 1995, 239 pp., 1996

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- ▶ **BIO IN THE NEXT MILLENNIUM**, A. Vlavianos-Arvanitis, Editor. Proceedings from a Francophone Symposium, October 1987
- ▶ **BIO IN THE NEXT MILLENNIUM**, Lecture by the Right Honourable Lord Ennals sponsored by the British Council and BIO, May 1988
- ▶ **BIOPOLITICS - PROTECTING THE BIO-ENVIRONMENT**, Lecture by His Excellency The Ambassador of Israel, Mr. Moshe Gilboa, at the Third BIO International Conference, June 1989
- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT**, Presentation at the General Assembly of the Academy of Athens by Academician Professor C. Bonis (Greek), March 1990
- ▶ **THE BIO-ENVIRONMENT AND INTERNATIONAL CO-OPERATION**, A. Vlavianos-Arvanitis, Editor. A Hellenic-Turkish Symposium, Athens City Hall, May 1990 (English, 79 pp.) 1990
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- ▶ **BIOPOLITICS - DIMENSIONS OF BIOLOGY**, A. Vlavianos-Arvanitis (Greek, English, French) 1985
- ▶ **BIOPOLITICS - METHODS OF IMPLEMENTATION**, A. Vlavianos-Arvanitis (Greek, English) 1985
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- ▶ **BIOPOLITICS - BIOS OLYMPIAD**, A. Vlavianos-Arvanitis (Greek, 111 pp.) 2000
- ▶ **BIO-SYLLABUS FOR EUROPEAN ENVIRONMENTAL EDUCATION** (English, 880 pp.) 2003
- ▶ **PEOPLE WITH A DISABILITY IN MODERN SOCIETY** (English, Greek) 2004
- ▶ **MYTHOS - RIVERS AND MOUNTAINS OF GREECE** (English, Greek) in press

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- ▶ **BIONEWS** Newspaper, English and Greek (1987, 1994-2005)

CD-ROMS

- ▶ **BIOPOLITICS - THE BIO-ENVIRONMENT** (English) 1999
- ▶ **BIO-SYLLABUS FOR EUROPEAN ENVIRONMENTAL EDUCATION** (English) 2002
- ▶ **PATMOS - BIO-ENVIRONMENT - BIO-CULTURE** (2002)
- ▶ **MYTHOS - RIVERS AND MOUNTAINS OF GREECE** (2005)

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- ▶ **ENVIRONMENTAL OLYMPICS - BIOS PRIZES**, St. Petersburg, Russia, September 1999 (English, Greek) 1999
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Bio-History - Water Dimension

"As for the waters which come from Zeus, and flow down off the high places to collect in the floors of the steep valleys, so that they do not damage the land but do it good, the country wardens (agronomoi) should close off the outlets with dams

and dikes which will hold back and absorb the rainwater and create streams and springs for the agricultural land which lies below and in every locality, so rendering the driest places rich in good water. Groundwater, on the other hand,

either in the form of a river or a fountain, they should adorn with cultivated plants and buildings of the comeliest kind, collecting the separate rivulets in underground catchments so that they form an abundant and unfailling whole.

Then, if there should be a sacred grove or precinct there, they can embellish it at all times with the gushing water, letting it flow right into the temples of the Gods."

(Plato, Laws, 6.8, 761 a-b)

Bio-history in perspective

The starting point for bio-history on this planet is the origin of bios - life. Bio-history retraces the historical development of both the biosphere and humankind. Humanity's emergence on earth is envisaged as the outcome of biological evolution. Humanity possesses a number of distinctive features among which is the aptitude for culture. Under the influence of the developing human culture, the environment - and in particular, bios - have been drastically changed. These changes have given rise to a new milieu to which human beings - the cause of these changes - have not adapted. However, in order to survive and to protect bios, humanity must now find a way not only to adjust to the culture-induced changes in the environment, but also to compensate for the deleterious effects of its activities on bios.

In this spirit, bio-history is primarily concerned with the historical interactions between the bio-environment and humankind and with the evolution of environmental consciousness through the ages. As a vital natural resource, water has always occupied centre stage in the development of human civilisation, influencing society and culture and creating numerous environmental concerns and issues.

Water in bio-history

The human need for water is universal, independent from the geo-



graphical region or the chronological period in cause. Myths concerned with this basic need are widespread in various cultures, testifying this major reality of human life. One of the easiest methods to obtain this precious resource was to build dams and other artificial barrages. Such installations are abundant in all the arid region of the world, having contributed to the control of floods, the increase of fertile land through silting and the independence of agriculture from rainwater - a dependence on rainwater would have obliged entire populations to adopt a nomadic way of life.

Rivers

Rivers are indispensable, life-ensuring natural elements. On riverbanks human settlements experienced the slow development from Palaeolithic to Neolithic agrarian societies. The river provides food, essential quantities of water and the possibility to travel. In the Balkan region, some of the oldest human settlements are systematically identified near rivers, in Epirus or in Thessaly. The oldest Neolithic settlement ever excavated and the oldest conserved wooden boat are dated back to the 4th millennium B.C. and have been transformed into one of the first eco-museums in Greece by the Uni-

versity of Thessaloniki. In Central Europe, the Danube has always been a cultural liaison between distant nations, and the wealth produced by the river is not negligible. One of the most ancient Stone Age figurines representing an obese woman, the so-called Venus from Willendorf in Austria, has been found on the northern banks of the Danube, in the environs of Vienna. This is only one example of the fertility cults developed near the life-giving rivers. Similar evidence comes from the east, showing how widespread between the Middle East and Europe this Stone-Age fertility cult was.

Bio-history retraces the historical development of both the biosphere and humankind

Rivers have been deified, connected with myths, stories about mermaids or ghosts. The river is something man has to traverse; it is a passage of some kind. The very ancient feeling of respect man experiences for this vital natural element has led to the development of superstitions and beliefs. One of the most famous is the Homeric description of Odysseus' visit to the underworld, where he navigated the underworld Acheron River in Epirus. The ancient Greeks believed that the passage to the world of the dead leads through this river, controlled by the boat pilot. The dead had to be equipped with the so-called "danake," often put in the mouth of the dead, in order to pay for the transition across the river.

Homer and water

Homer's epic poems provide an important number of references concerning water. They present descriptions of everyday life scenes, but also express the belief that water is a divine, sacred element. Women fetch water from the source, wash clothes in the river, rinse the floors of the house, sponge down dirt from the table. Hands are cleaned and purified before sacrifices and meals, water is heated for the bath or for the cleansing of the warrior's wounds and the dead man's body. Water is also used by the ironsmith to harden metal products, and conducted garden irrigation is mentioned in the Odyssey, when the palace of King Alcinoos is described (Od. VII, 130). The custom of bathing is constantly mentioned in the Odyssey - the oldest of the two Homeric poems - whereas in the somehow younger Iliad the cleaning of the body is rarely evoked. But for the most part, water is mentioned in relation to divine forces or intervention. Poseidon dominates the sea; sources and rivers are inhabited by nymphs or fluvial divinities.

Water and pollution in ancient Greece

When the famous ancient traveller and geographer Pausanias tries to define a city, he mentions the basic prerequisites which are absolutely necessary to call one settlement as such. Sources with running water are one of these prerequisites. We have already mentioned the Hippocratic oeuvre entitled on Airs, Waters and Places, which is attributed either to Hippocrates himself, or to the circle of his influ-

ence. Primordial importance was adornoed to quality and purity of water, which was considered a prerequisite for good health and quality of life. From the moment that humans began living in organised settlements, hydraulic works and networks were supervised by central administration, notoriously protecting the vital sources by law. Central hydraulic networks for drinking water and waste removal have been identified in many very ancient, Neolithic settlements. In Bronze Age Greece, Cycladic, Minoan or Mycenaean civilisations have furnished numerous important examples.

From the historical period, the Greek literary heritage has conserved texts of major importance in this matter. We know that prominent governors or public personalities never omitted to embellish their cities with sources, aqueducts or canals. The central nine-spouted source of the city of Athens, the Enneakrounos, had been constructed in the political centre of the city, the Agora, by the tyrant Peisistratos or his sons. It was part of a huge central hydraulic network, leading water to the city from a spring on Mount Hymettos in Athens. The Euplaineion, the unique water tunnel of the city of Samos, which is the most famous hydraulic construction of archaic Greece, conducted drinking water to the city over a distance of 1,036 m. It was built under the initiative of tyrant Polycrates, about 550 BCE. In classical Athens, Kimon - the son of the famous Miltiades - embellished the Agora by planting trees and renovating the irrigation system. Traces of Hellenistic and roman interventions, such as flowerpots surrounding the temple of Athena and Hephaistos, have been identified.

In Roman times, the millionaire Herod Atticus financed the restoration and embellishment of the major water source in Corinth, the Peirene, and offered a monumental "Nymphaion" (a sanctuary of the nymphs) to the sanctuary of Olympia. The emperor Hadrian constructed an important network of aqueducts bringing drinking water to the city of Athens and Corinth.

In the beginning of the 6th century B.C., before the tyrant Peisistratos took over power in Athens, the famous lawgiver Solon had worked out a renowned legislation system; it would become the base upon which the evolution towards democracy could be realised. As at the time Athens did not yet dispose of any centralised irrigation system, people depended mostly on sources and wells. These wells are thoroughly known to archaeological science, as hundreds of them have been excavated in the centre of Athens, contributing decisively to the establishment of Athenian chronology based on pottery typology and coins.

A recent study on ancient Greek laws has assembled a series of examples where water pollution is expressly prohibited. Often, water sources belonging to sanctuaries are mentioned, in which any deposition of waste is forbidden. Even pollution through blood sacrifice is mentioned. Apparently, this occurred quite often, if we judge from the following mythological example. The Macedonian city Dion, placed at the northern slopes of Mount Olympus, was constructed along the riverbed of

a secondary river stream of the Peneios, called the Vaphyras. The local myth explained the name of the river - the stained, the coloured one - by the blood of Orpheus, who had been assassinated in the river by the maddened women



of Pieria (the "mainades," followers of Dionysus).

The city of Athens has also furnished a number of similar laws. We know from excavations and topographical studies that cemeteries were installed outside the city-walls and that industrial activities also had

to be executed far from the centre of town. Excavations at the Athenian Kerameikos - the artisan region of the city - confirm the written sources. Of course, a constant danger for the rivers was the proximity of industrial workshops.

Waters were especially in danger of pollution during wartime. The cutting off from vital sources was a constant fear, and it is no coincidence that most of the Mycenaean fortresses on continental Greece dispose of a fortified access towards running water. Pausanias reports such an incident of deliberate river pollution, which happened during the Sacred War in Delphi, in the 6th century BC. The cities controlling the sanctuary and the sacred grove of Apollo decided to punish the inhabitants of the city-port of Cirrha for trespassing into the sacred plain. The intervention and manipulation of drinking waters is attributed to Solon, the law-maker of Athens, who invented a trick to outwit the Cirrhaeans. The water of the Pleistus river, which supplied the Cirrha with drinking

water, ran along a channel by the city, and Solon diverted its waters in another direction. When the Cirrhaeans still held out against the besiegers, drinking well-water and rain-water instead, Solon threw into the Pleistus roots of the poisonous herb hellebore, and when he perceived that the water held enough of the drug he diverted it back again into its channel. The Cirrhaeans drank from the water, and those guarding the city walls, seized with obstinate diarrhoea, deserted their posts, and the city was captured.

The question of lead poisoning in Roman cities

Amidst the environmental problems of which the ancient people have been definitely aware, was the matter of lead poisoning of drinking water. Some such references by authors as Frontinus and Vitruvius have provoked a vivid scientific dialogue and speculation up to modern times.

Lead pipes have been extensively

used for the supply and removal of water. The oldest use of lead pipes has been attested in the Artemision of Ephesos. After a long gap, lead will be extensively used for Hellenistic and roman pressure lines, for extra-urban provision lines, intra-urban distribution networks and the joints to houses. Lead was also widely used as a complementary joining material for ceramic lines, or even luxurious bronze pipes. As lead was used in profusion for carrying drinking water, it was generally believed that the Romans must therefore have suffered from lead poisoning.

It has even been concluded that lead caused infertility and was largely responsible for the decline and the fall of Rome. However, recent scientific research points to two factors that make

As a vital natural resource, water has always occupied centre stage in the development of human civilisation

this attractive hypothesis impossible: The calcium carbonate deposit that formed so thickly inside the aqueduct channels also formed inside the pipes, effectively insulating the water from the lead, so that the two never touched. Also, because the Romans had so few taps and the water was constantly running, it was never actually inside the pipes for more than a few minutes, and certainly not long enough to be contaminated. Therefore the hypothesis that the Romans contracted lead poisoning from the lead pipes in their water systems is probably completely unfounded.

Warm water, baths, and the cost of heating

The tradition of warm baths existed already in the Greek world, but was developed at its utmost in the form of the public or private baths - Thermae - of the Roman Empire. Archaeology has furnished ample examples of conserved bath buildings, where the system of the hypocausts - subterranean furnaces distributing warm air and vapours through the rooms and the pipelines - has been thoroughly studied.

Vitruvius mentions the system of heating by "hanging floors" raised upon small pilasters of brick (the hypocausts). In the space so formed hot air circulated from a furnace. This device is said to have been invented by L. Sergius Orata, c. 100 B.C. It was first applied to baths and then to private villas. This system would permit the endurance of heavy European winters within the roman limes, the frontiers, and therefore contribute to the health of roman citizens.

This widely expanded tradition of warm baths constitutes, in fact, one of the biggest environmental problems of the end of antiquity, having contributed strongly towards deforestation. The ancient writers seem to have been conscious of this fatal side effect. A recent study on Roman baths furnishes some thrilling statistics on this matter.

The Bio-Syllabus publication includes a volume on Bio-History. This material is also available as an e-learning course (see p.5).



Bio-Tourism - Expanding our Vision

Tourism is one of the most rapidly developing industries world-wide and offers a clear illustration of why the integration of the environment and development makes sense. Nevertheless, it exerts dramatic pressures on natural and cultural resources and

therefore needs to be managed in a way that can substantially relieve some of these pressures. Bio-tourism, as promoted by the Biopolitics International Organisation (B.I.O.) since 1985, encourages environmental and cultural appreciation in tourism,

as well as an international exchange of experiences on the basis of environmental preservation. Within this framework, "bio-ethics" in tourism is of particular interest to B.I.O. The tourism industry and the products constructed and promoted affect both the nat-

ural and cultural environment in irreversible ways. It is therefore essential that effective ethical guidelines in tourism are developed in order to prevent harmful activities to the environment and to ensure the future viability of the industry.

Growth of tourism

Those working in the world tourist industry have an important role - that of protecting the world's rich cultural and biological diversity. Tourism can become the diplomacy of the future uniting all peoples of the world, and its workers are invited to serve as diplomats of the third millennium. Tourism has turned into one of the most dynamic industries of the developed world, creating and sustaining worldwide a vast chain of professions and work places - more than 260 million employees worldwide. Like any phenomenon that acquires massive proportions, tourism has grown to become a threatening integer, hiding many dangers for the societies and the environments that it touches.



intended to be sustainable tourism; it is tourism that does not harm the environment being visited or the indigenous population. It provides a learning experience for the tourist, while at the same time benefiting the local population. To meet these criteria, bio-tourism must be small in scale. At this point, it becomes necessary to ask: is bio-tourism - or sustainable tourism - truly achievable?, is it a lofty ideal that we must work toward but never quite attain?, or is it merely another marketing ploy by the tourism industry to generate profits by appealing to the environmental sensitivity of prospective travellers? To analyse this issue, we must first look at the structure of the tourism industry.

How Bio-tourism works

The producers of bio-tourism should be genuinely interested in meeting the sustainability objectives of bio-tourism. The tour should be planned to minimize impacts on the natural and cultural environments. Accommodation that practices conservation should receive preference. Tour operators should prepare educational materials for the tourists about the area's natural and cultural environments and should provide informed local speakers and guides, where appropriate. For example, they should provide information to the tourists about endangered species, ille-



gally traded products in the area, local customs, dress and patterns of behaviour, and basic rules of conservation. Tour operators should also adopt a code of ethics for tourism. Several options are available, as noted earlier. Further, the operators should ensure that the code of ethics are distributed to all professionals and staff employed in their operations, as well as to prospective tourists. Awareness should be raised concerning the fact that "natural" activities, driven by a genuine interest in the environment and biodiversity, can, in fact, greatly harm natural systems.

The receiving infrastructure can, and gradually must, adopt various environmentally friendly strategies in order to achieve the minimization of energy waste and pollution. Hotels and other facilities should not be constructed in environmentally sensitive areas such as beachfronts, wetlands or mountain tops. An important part of environmental politics can be realised in the domain of housekeeping and cleaning. Responsible managers can use environmentally friendly products. For huge hotels with hundreds of clients, this type of saving programme can have important results and contributes towards the environmental consciousness of the clientele.

Consumers of bio-tourism should carefully look into prospective tours to evaluate whether the producers have indeed incorporated principles of bio-tourism and sustainability into the tour planning. At the destination, the traveller should put into practice the principles of bio-tourism which he has read about.

Government support

The role of national and regional governments is extremely important in providing strategic planning, supporting research, establishing emission levels, outlining requirements and ensuring that these are respected. Governments can also place limits on receiving capacity, which should be strictly adhered to if the quality of tourism is to be improved or maintained. Governments can also assure that the local populations in the areas of tourism are intimately involved in the planning and operation of local tourism activities. They should be the principle economic beneficiaries of the tourism trade rather than large corporations. Local people should be employed as guides and interpreters, in local hotels and facilities and as providers of transportation. In addition to governments, international organisations, tour operators and individuals can also contribute towards the development of ideal conditions, which will prevent tourism in the future from destroying natural environments.

Environmental management

One of the main reasons for travelling is the wish to visit regions of natural beauty that have remained unspoilt. For some decades now, the tourism industry has been aware of its responsibility to preserve this "Natural Capital," as it creates possibilities for millions of people to discover this vulnerable richness. The only way for the tourism industry to develop and survive over the demanding years to follow is to become effective in this direction. Environmental management presents the challenge of achieving the goal of bio-tourism, which is to develop tourism while simultaneously protecting the environment. When all the actors in the tourism industry become fully informed about the principles of bio-tourism and committed to practicing them, then we may feel that bio-tourism and sustainability have been achieved in the tourism industry. Today, we are far from having achieved this.



Bio-tourism provides a learning experience for the tourist, while at the same time benefiting the local population

Impact on the environment

Inevitably, tourism impacts the environment in various ways. Steadily increasing numbers of people travel to ever more distant destinations. As a direct consequence, large amounts of energy are consumed for transport, heating, air-conditioning and water consumption, and the atmosphere is polluted as a result. Bio-tourism is

Tourism has become a threatening integer, hiding many dangers for the societies and environments that it touches

Alpine Center - Graduation Ceremony



The Swiss Business School for Hospitality and Tourism Education in Greece (Alpine Center) has invited B.I.O.'s President to be the keynote speaker at the graduation ceremony. The class of 2005 will be graduating on the 21st of November at the Athenaeum Intercontinental Hotel, Athens. The potential in understanding tourism as more than just a con-

ventional travel plan is encompassed by the term bio-tourism. B.I.O. promotes bio-



tourism as a way for all peoples of the world to explore humanity's natural and cul-



tural heritage, and to achieve cooperation and mutual understanding. At this month's event, the President of B.I.O. will speak on 'Bio-Tourism - Expanding our Vision', in the hope that this view of bio-tourism will provide inspiration in the future lives and careers of the students who have completed their studies.

Sustainable Development – Kefalonia, Greece

The beautiful Ionian Sea island of Kefalonia, which some scholars believe to be the home of Odysseus, was the setting for this year's AW.I.S.H. (A World Institute for a Sustainable Humanity) Conference, Imagining a Sustainable Future: The Rebirth of the Blue Village, in early October of this year. The aim of the conference was to provide a forum for discussing current themes in sustainable development such as organic farming, sustainable energy, sustainable tourism and environmental education for endangered species.

Keynote speakers were Dr. Bradley Smith, Dean of Huxley College of the Environment, and Dr. Vlavianios

Arvaniti, President of B.I.O. Dr. Smith gave a talk on 'Bridging the Theoretical and the Practical in Sustainable Development through University-community Partnerships'.

The B.I.O. President addressed the young crowd at the beautiful Venetian castle of St. George, emphasising that 'to embark on a millennium of hope, we need to avoid the mistakes of the past and create a society which respects and promotes bios - all living beings on the planet. New education and a millennium vision in policy can bring about the necessary awareness and action to promote development with a view to the future'. The discussion of the principles of B.I.O. were

received with great enthusiasm and a standing ovation.

During the five day event, participants were also invited to visit the Farsa village project in Kefalonia - a project of interdisciplinary community reconstruction. The conference marked the start of a university programme in sustainable community development in Kefalonia, beginning in Fall 2005.



Accessibility to better quality of life Drama, Greece

The conference 'Accessibility to Life', organised by the Paraplegic Society of Drama took place with great success on May 25, 2005. The event was organised upon the initiative of the President of the society, Ms Aglaia Katsigianni and the Mayor of the city of Drama, Mr Thomas Margaritis. The Paraplegic Society of Drama was motivated by B.I.O.'s publication 'People with Disabilities in Modern Society', and as a result of following the e-learning course on the same topic. In honour of her contribution to the promotion of accessibility and the improvement of the quality of life of people with disabilities, the President of B.I.O. was declared Honorary Citizen of the City of Drama, following a unanimous vote by the City Council.



towards people with disabilities who wish to visit or live in the city.

The evolution of our society can be judged by the respect we show our disabled fellow citizens and the state provision and care for people with disabilities. People with disabilities are citizens with equal rights. They are workers, consumers, taxpayers, politicians, students, neighbors, relatives and friends and yet too often they are not treated with care.



People with disabilities have the right to participate fully in work and society. Since the population of people with disabilities in the European Union is estimated at 37 million, a number seven times the population of Denmark and four times that of Belgium, it is necessary to provide an environment where people with disabilities can live and work as equals. Moreover, accessibility and improved living conditions for people with disabilities should be a priority for every civilised society.

B.I.O. has suggested that Drama should be named a 'role model' city at a global level for its treatment of the issue of accessibility. This would be done within the framework of bio-tourism. The transport system, accessible shops and restaurants, and the special measures taken against illegal parking that blocks disabled access, render Drama a very friendly place



B.I.O. Representatives

Poverty in Africa

- ▶ 315 million people - one in two of people in sub-Saharan Africa survive on less than one dollar a day
- ▶ 184 million people - 33% of the African population - suffer from malnutrition
- ▶ less than 50% of Africa's population has access to hospitals or doctors
- ▶ the average life expectancy in Africa is 41 years
- ▶ 42% of Africa's population do not have access to safe drinking water
- ▶ aid agencies warn that nearly half Malawi's 12 million population could starve in the next six months without massive and immediate food donations.
- ▶ one in six children in sub-Saharan Africa die before the age of 5. This number is 25 times higher than in the OECD countries
- ▶ Africa loses 20,000 skilled workers every year to developed countries
- ▶ 30 African countries are democracies, up from three in 1973
- ▶ the average cost of government procurement is 25% higher due to corruption
- ▶ 70% of Africa's food is produced by women
- ▶ during the 1990s the average income per capita decreased in 20 countries
- ▶ in 2000, 300 million Africans did not have access to safe water
- ▶ only 57% of African children are enrolled in primary education
- ▶ children account for half of all civilian casualties in wars in Africa
- ▶ the African continent lost more than 5.3 million hectares of forest during the 1990s
- ▶ less than one person in five has electricity. Of 1,000 inhabitants, 15 have a telephone line and only 8 out of every 1,000 people use the internet
- ▶ of the 100 million children not in school, it is estimated that 40 million have disabilities of some kind.
- ▶ an estimated 25.4 million people in sub-Saharan Africa are living with HIV
- ▶ approximately 3.1 million new HIV infections occurred in 2004
- ▶ in the past year the HIV/AIDS epidemic has claimed the lives of an estimated 2.3 million people in sub-Saharan Africa
- ▶ if a low-cost cure is not found soon, countries with adult HIV infection rates over 20%, such as Botswana, South Africa, and Zimbabwe, will lose one fifth or more of their adult population to AIDS within the next decade
- ▶ around 2 million children under 15 are living with HIV
- ▶ more than twelve million children have been orphaned by AIDS
- ▶ in Namibia, South Africa and Zimbabwe more than 60% of orphaned children live in grandparent-headed households

Data on Africa cited in this column is from the following sources: UNDP, Worldwatch, the World Bank, Help the Aged International, Guardian Unlimited, Avert.org.

Africa - Reaching the

Over the past 50 years humans have affected global ecosystems more rapidly and extensively than in any other comparable period in history.

In 2000, all 189 member states of the United Nations adopted the Millennium Declaration, acknowledging the massive problems that face humanity. The Millennium Declaration sets goals for achieving specific targets by certain dates.

The eight UN Millennium Development Goals (MDGs) call for action from donor countries and International Development Institutions towards achieving such far-reaching goals as ending hunger and eradicating poverty by the year 2015. For Africa, where 315 million people live in extreme poverty surviving on less than one dollar a day, and where 33% of the population suffer from malnutrition, these targets urgently need to be met. These issues are

Poverty and Equity

Gender

More women are living in poverty in the world today than men. Some statistics show that women are 70% of the world's poor, others that they are 55-60%, but all agree that women's poverty is worsening.

The annual UN Population Fund report published in October of this year states that the war on poverty cannot be won without greater government efforts to tackle gender inequality. The key weapon, according to the report, is education.

Studies have shown that educating and empowering women delivers quick benefits. Educated women tend to have fewer children, are more able to educate them and are more likely to earn money. More women than men are affected by HIV in Africa - against which educated women tend to be better able to protect themselves. At pre-



sent, however, it is estimated that approximately 600 million women in Africa are illiterate, compared with 320 million men.

Men and women experience poverty, in all its dimensions, differently. As long as women face power imbalances within the household, discrimination in the market place, and gross under-representation in government and local decision-making bodies, these inequalities will continue to cut across society, ultimately hindering development and poverty reduction.

Despite discrimination, women in Africa are important contributors to the economic, social and political lives of their communities. It is not uncommon for women to spend more hours per day than men in both productive and reproductive activities, carrying the major responsibility for subsistence agriculture as well as domestic work (including food preparation, fetching water and gathering firewood). And yet most women do not have legal or traditional rights to land or other assets held by men. Many women are unable to get loans or credit because they have no collateral and are less likely to have other resources needed for success in business- such as skills training, time, and information on markets. As a result, many women, lacking alternatives, are trapped, unable to leave abusive men because they are entirely dependent on

them for their survival.

Goal three of the UN Millennium Development Goals (MDGs) pledges to promote gender equality and women's empowerment. Though this may appear to reaffirm an international commitment to gender equality, concerns have been raised to suggest that the targets and indicators linked to this goal are narrowly defined. Gender equality applies to all areas of development, and therefore to all the MDGs. Progress towards gender equality, empowerment of women and recognition that women are key actors in effective development is critical to achieving all the MDGs. Ultimately, gender equality must be seen as important not only as a goal in itself, but as a way to facilitate attaining other goals.



school or being forced into child labour, and it is the main underlying cause of millions of preventable child deaths each year.

Poverty causes lifelong damage to children's minds and bodies, perpetuating the cycle of poverty across generations. Poverty reduction must, therefore, include the protection and realization of the human rights of children. Without invest-

ments in children there can be no guarantee for achieving equitable and sustainable human development.

Older People

The majority of older people in developing countries have been consistently excluded from participating in schemes to improve their status and well-being. In this, the UN Millennium Development Goals are no exception. Silent on the age issue, the MDGs have left doubts as to how much older people will benefit from global efforts to eradicate poverty.

With one hundred million older men and women living on less than \$1 a day, 80% with no regular income, and more than 10% of people living on less than a dollar a day over 60, older people are among the world's poorest.

According to Help the Aged International, older people remain less likely to benefit from aid programmes. This is because they are often the most difficult to reach, living in rural areas, facing literacy and language difficulties as well as experiencing physical constraints to participation. Older people may also face other forms of discrimination, such as those based along the lines of gender or, deemed economically invalid, they may be denied the right to services.

Ending neglect and discrimination against older people must become a high priority, both for the sake of their own well-being and for the over-all aim of eradicating absolute poverty and improving people's lives.

People with Disabilities

People with disabilities are more vulnerable to poverty, not only as a result of their handicap, but also because they are marginalized and discriminated against. In turn, poverty makes people more vulnerable to the risks of becoming disabled because of the conditions they are forced to live in.

The United Nations estimates that at

Children

In Africa, where in many countries children make up half the population, children experience routine violation of their basic human rights. Tens of millions of children do not get adequate healthcare or education, and many none at all, more than 1 in 6 children don't reach 5 years old, and 1 in 10 children under 5 are acutely undernourished.

Since the World Summit for Children and the adoption of the UN Convention on the Rights of a Child in 1990, significant advances have been made with regards to children's rights to survival, health, education, and to a protective environment free from abuse, exploitation and violence.

However, despite the progress made, and despite unprecedented global pros-



perity, a staggering 40% of all children in developing countries (over half a billion) are struggling to survive on less than \$1 per day. It is estimated that in the world today over a billion children are denied the right to 1 or more of the basic services needed for them to survive, grow, and develop.

Poverty is the cause of tens of millions of children going hungry, missing out on



The Millennium Goals

of course economic, but they are also cultural, social and environmental. The complexity of poverty, and the related hardships, must be recognized if alleviation of these problems is to be achieved.

The bitter truth for many in Africa is that globalisation has meant marginalization. The worsening economic inequalities in many countries have exacerbated social and cultural inequalities that are undermining societies, not

only in Africa, but all over the world. Discrimination along the lines of gender, class, ethnicity, race, age and disability have subjected countless people to a cycle of poverty and hardship that is hard to break. Ending discrimination is essential if initiatives such as the MDGs are to be successful and reach those most in need. The poorest of the poor, however, remain amongst those most frequently neglected; they include: children, the elderly, and the disabled.



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least 25% of any population are directly or indirectly affected by some type of disability. World Bank data shows that **over 600 million people are estimated to live with a disability in the world today** (as much as 1 in 10 people), more than 400 million of them live in developing countries. Why is it, therefore, that people with disabilities not only remain among the most deprived in the world, but are also often the most neglected? A relatively recent addition to the poverty debate, it is clear that many questions need to be asked and urgent solutions sought with regards to people with disabilities.

The stigma which often accompanies having a disability has a tendency to render people with disabilities invisible and isolated. This not only makes it harder for them to act as members of their community, to work and to access services, but it has also frequently meant that they have been excluded from poverty alleviation programmes. If the vicious poverty-disability cycle is to be broken, concerted efforts on the part of development organisations and governments need to be made to include the needs of people with disabilities in all aspects of development policy and programmes.

HIV/AIDS

The vulnerable - children, adolescents and women - are disproportionately affected by the HIV/AIDS crisis. Living in societies already weakened by poverty, a lack of development and in some cases also conflict also, millions of children are losing their parents each year. Those affected are routinely denied their rights to education, economic opportunity, health care, and to protection from exploitation and harm. In sub-Saharan Africa, AIDS has led to increases in child mortality rates, a dramatic fall in child life expectancy, and nearly 12.5 million children have been orphaned. These children suffer immeasurable, and largely unmitigated, loss. They face grief at the loss of their parents and relatives, stigmatisation through the association with AIDS and economic crisis because, more often than not, they live in communities with poor services and support systems.

A major threat to stability, exacerbating inequalities within and between countries, and undermining previous gains in development and harming children, **the HIV/AIDS pandemic poses a major global development challenge.**

Sources used in this article include the Millennium Ecosystem Assessment, World Bank, Oxfam, UNICEF, Save the Children, Help the Aged International, and the UK Department for International Development.

Biodiversity and Resources

Biodiversity

The most ostensible manifestations of the current global environmental crisis are the destruction of natural habitats, desertification, deforestation and extinction of species, all of which are related to the loss of biodiversity. Unless these trends are reversed, the earth's ability to sustain life will be severely damaged.

An encouraging sign is that governments and international agencies are addressing the problem. If they do indeed prove ready to confront the challenges, they will need guidance from conservation biology, which has made significant strides recently. Much of the information provided by research in this multidisciplinary field is already applied in the design and management of natural areas such as captive breeding programmes, genetic management, disease control and the restoration and rehabilitation of degraded habitats.

The role of **genetic banks** in wildlife conservation efforts has long been considered of great importance. Preserving the genetic material of endangered plant and animal species can help restore genetic diversity in these species and significantly contribute towards protecting biodiversity on our planet. Along the same lines, B.I.O. has been promoting the establishment of "local" genetic banks, as a means of protecting the enormous wealth and diversity of endemic wildlife. The information stored in these Genetic Banks would become available on computer databases and be distributed world-wide. As a result, conservation efforts could be better co-ordinated and the urgent task



of preserving biodiversity would be accelerated. Furthermore, genetic banks could easily exchange information on newly available technology and improved methods of collecting and storing data, thus leading to an efficient and easily accessible means of retrieving the information and applying it to the benefit of biodiversity. This would result in conservation efforts that no longer took place in isolation but, belonged to a global attempt to save bios

on our planet. The conservation of biodiversity and the protection of the continuation of life on our planet define the B.I.O. scope and mission. All B.I.O. activities, projects, international conferences and educational initiatives are aimed at the protection of the environment and the preservation of the beauty and diversity of bios, the true wealth of humanity. It is hoped that society will accept the urgency of saving biodiversity and will engage in a collective appreciation and protection of bios.

Water

Water is vital for human life and welfare and the maintenance of the earth's biodiversity.

Human activity has had a heavy negative impact on both water quantity and quality. The danger of depleting water resources is a serious global threat. Countries that share common water resources should attempt to balance demand with supply, ensure self-sufficiency in meeting the needs for safe drinking water, irrigation, and agricultural and industrial activity, while not causing irreparable harm to the natural environment and biodiversity and not adversely impacting another nation's

use of the resource. When conflicts over water resources arise, water policy arbitration can be called upon to reconcile economic development objectives with water resource conservation.

International collaboration in water resource management affects all citizens, irrespective of nation, culture and global location. To strengthen our response to the critical challenge of managing our limited global water resources, a unifying vision is essential. Bio-diplomacy is a means to overcome conflict and to encourage governments and every citizen to actively engage in the protection and wise use of their nation's water resources. Governments, the public sector, civil society, business, and the academic world must unite their efforts in a global appreciation of bios. As environmental solutions are long-term goals, it is important to build public awareness with staying power. The purpose is not only to change attitudes and influence policy, but also to motivate and empower people to act in defence of the environment.

Bio-Education

Environmental pollution is an international problem of vital importance for all and a fundamental cause of the conditions which the UN Millennium Development Goals seek to overcome. Environmental quality and quality of life are inextricably linked. Human rights violations, disease, hunger, lack of safe water resources and poverty are more common in areas of severe environmental abuse.

Health problems linked to the environment, food subsistence and access to culture and general welfare, including security and peace, are some of the challenges to be faced. In meeting these, and other, challenges, bio-education has a vital role to play in consolidating awareness of the importance of incorporating the environment in every human endeavour thus enabling



the realisation of the interdisciplinary nature of environmental protection.

In order to expedite the implementation of the UN Millennium Development Goals, and in the belief that education is a crucial tool in the efforts to protect the environment, B.I.O. has been continuing efforts to expand its e-learning educational programme, 'Education to enrich sustainability' (see pages 4-5). Free and easily accessible education is an important step towards improving both quality of life and the condition of the environment. B.I.O. has friends in many African countries, both as participants in the e-learning programme and as representatives of the Organisation and its vision.

Recently, B.I.O. has received a proposal for cooperation from Youth, Health & Social Reforms (YOHESOR) in Nigeria whereby B.I.O. will be their official representative in Europe and will work with the organisation in promoting the educational programme in Nige-



ria and other Sub-Saharan African countries.

In addition, YOHESOR members, as well as government officials and members of educational organisations, will join the International University for the Bio-Environment and enrol in the e-learning programme.



Profit and the Bio-environment - Building



Managing the environmental programme in an industrial or commercial facility has become an increasingly complex and challenging assignment owing to the expanding maze of environmental laws and regulations and the growing public expectations regarding environmental protection. To be effective, programmes and policies promoting greener products, the use of fewer natural resources,

and lower impacts and risks to the environment, must be based on an overall framework of biopolitics, which will help to focus every activity on the consequential task of saving the environment and life on our planet. Businesses recognise that a good profile within the community can be strengthened by displaying a strong environmental ethic, with responsible policies playing a major part in this.

B.I.O. has been working for twenty years to raise awareness of the urgent need to place corporate social responsibility at the heart of economic and development policies. Through numerous international conferences, publications and educational projects, we have urged business leaders and decision-makers to adopt initiatives for environmental appreciation and protection.

Climate change, corporate social responsibility and the challenges of water management in the Middle East are among the topics that will be discussed at a roundtable discussion themed 'Profit and the Bio-environment - Building a Society of Hope' that B.I.O. is organising within the framework of the Athens Money Show.

The event will be held at the Hilton Hotel on December 3, 2005. The purpose

of this meeting is to mobilise new strategies on the protection of the environment and the improvement of the quality of life as the real profit for our society.

Among the distinguished speakers expected to attend are Professor Christos Zerefos, President, National Observatory of Athens; H.E. Ram Aviram, Ambassador of Israel to Greece; H.E. Marwan Abdelhamid, Ambassador of Palestine to Greece;

Rodi Kratsas, New Democracy representative for the European Parliament; H.E. Lourdes Morales, Ambassador of the Philippines to Greece; Evangelia Tzampazi, PASOK representative for the European Parliament; Valery Glazkov, First Secretary of the Embassy of the Russian Federation to Greece and Yannis Methodios, Vice President, KEMEL (Center of Volunteer Managers of Greece).

Corporate Social Responsibility

Around the world, corporate environments are changing. Businesses are realising that it is essential to achieve a developmental framework that places people and the planet before profits.

Corporate policy is being influenced by deeper social changes that make it necessary for companies to espouse environmental standards. Many responsible public and private investors are refusing to endow companies that cause pollution and place the health of the world's population at risk. Instead, investments are increasingly being directed towards businesses that meet the basic standards of environmental responsibility. Indexes of social and environmental performance are becoming significant market factors in screening for good citizenship and corporate social responsibility. These indexes exclude companies that fail to meet social responsibility standards. With more pro-environmental shareholders entering into dialogue with decision makers, corporate behaviour on the environment can be steered in a direction that can meet the needs and demands of the global public and civil society. Corporate social responsibility would represent a genuine profit for both business and society.



negative environmental effects of intensive energy and raw material utilisation cannot be resolved within the present framework

Evangelia Tzampazi, Member of EU Parliament, believes that corporate social responsibility is a balancing act between the needs of public relations, the desire to increase sales, and the necessary harmonising of corporate interests with public opinion and its demands.

This must take place within a specific legal framework, whether it concerns production structures that have social dimen-

sions, such legislation is not a mere aspiration but indeed a necessity. The integration of the environment into all aspects of global policy and the issue of environmental liability are therefore priorities.

Accessibility

Improving accessibility for citizens whose mobility has been impaired is another area for corporate social responsibility. The disabled have the same rights as other citizens and are entitled to the benefits which modern society provides. This includes access to housing, education, employment, transport, social services, entertainment, etc. Society must be better educated about the needs of the disabled, which includes people with visual, hearing, and speech impairments, people with restricted mobility, and people with medical disabilities. Some disabilities are temporary while others are permanent, and the needs of each type differ. While progress has been made in improving access for the disabled in some areas, other areas have lagged behind. The business community shares responsibility for helping our disabled citizens achieve their full potential.

Employment

The creation of new jobs, particularly for the young, is an imperative for regenerating the world's economies and providing a hopeful future. Rather than offering conventional benefit payments to the unemployed, they could be given the opportunity to work in some area related to the protection or restoration of the environment and earn a "green salary" for their contribution. The opportunities abound, as many environmental problems exist today that can be ameliorated by human intervention. Such actions would be in everyone's long-term interest and would help build a society that enhances the potential of every citizen, based on initiatives for environmental appreciation and protection.

Millennium Development Goals

The UN Millennium Development Goals include the reduction by one half of the proportion of people in the world whose

income is less than one dollar per day, and the proportion of people who suffer from hunger. Other goals call for the achievement of universal primary education, the promotion of gender equality, the reduction of child mortality, improvement of maternal health, halting the spread of HIV/AIDS, malaria and other major diseases, ensuring environmental sustainability, and developing a global partnership for development. The UN Millennium Development Goals are an admirable effort to solve the world's great problems. Achieving them will require a great commit-

ment by the developed nations and a fundamental realignment of their priorities. The participation of economic leaders is vital to the attainment of the Millennium Development Goals. The world is experiencing a range of hurdles with regard to seeking a compromise between the legitimate needs of development and fragile environments. Poor countries tend to overuse their resource base, degrading their natural environment. Water development projects often do not consider the downstream ecology. Appeals to protect the environment are ignored or often met with derision. The conflict between the industrial countries' ongoing economic growth and the developing countries need for economic growth, on the one hand and,

the negative environmental effects of intensive energy and raw material utilisation on the other, cannot be resolved within the present framework. An approach that combines the consensus and consent of the people, as well as that of governments and international institutions, is essential in order to prevent economies from expanding without due concern for the environmental repercussions of uncontrolled growth. Corporations and entrepreneurs can work together to tackle these challenges and tread lightly on the planet in their business endeavours. At the same time, a grassroots mobilisation and public participation, on both the local and international levels, can enhance the establishment of bios-supporting economic strategies and initiatives worldwide.

corporate social responsibility would represent a genuine profit for both business and society

the defence of human rights should not be regarded as an issue unrelated to the protection of other forms of life on our planet

Athens Money Show



Athens Hilton
Saturday, 3rd December 2005

Profit and the Environment Building a Society of Hope

Chair: **Agni Vlavianos-Arvanitis**
President and Founder
Biopolitics International Organisation (B.I.O.)

Roundtable A Profit and the realisation of the United Nations Millennium Goals

Discussion will focus on international cooperation for the eradication of poverty; the protection and sharing of water resources as a pathway for the Middle East peace process; global climate change and proposed action

Professor **Christos Zerefos**
President, National Observatory of Athens

H.E. **Ram Aviram**
Ambassador of Israel

H.E. **Marwan Abed Elhameed**
Ambassador of Palestine

H.E. **Lourdes Morales**
Ambassador of the Philippines

Roundtable B European policy and social responsibility

Management strategies for environmental protection; accessibility; participation of every citizen

Rodi Kratsa-Tsagaropoulou
Member of European Parliament

Evangelia Tsambazi
Member of European Parliament

Valery Glazkov
First Secretary
Embassy of the Russian Federation

Yannis Methodios
Vice President, KEMEL
Center of Volunteer Managers of Greece

ng a Society of Hope Athens Money Show

It is clear that there is an intimate relationship between the environment and development. In the past, industries were the greatest polluters. Economic actors are therefore key players in the drive to tie business to environmental protection. Preserving the wealth and beauty of the natural world, securing the health of the earth's population, providing fair rules

of trade, and guaranteeing equal educational opportunities for every country in the world can be a source of genuine profit, both monetary and social.

The quality of life issue needs to assume top priority, along with biopolicy and education. Moreover, the concept of "profit" has to be redefined to encompass elements which constitute a genuine profit for

society: culture, internal wealth, preservation of natural resources, better health and the protection of biodiversity, as a measurable part of a nation's prosperity. Over the last 20 years B.I.O. has addressed the topic of economics in several publications and books.

To view these and other sources click on www.biopolitics.gr/HTML/creference.htm



Water management as reason for cooperation

We, the people of the Middle East, have worked hard and have seen that regional cooperation is an attainable goal for difficult issues such as water management

Ambassador of Israel **Ram Aviram** will present his view on water management as a reason for cooperation.

Water, a source of life, is a vital component for our existence. Water in the Middle East in particular, is anything but abundant. It has been repeatedly argued that the next war in the Middle East will be due to water shortage. Water runs through different countries, recognizes no borders, conflicts or political interests. Arguing over how much water each country should consume, or how its availability should be handled will without question lead us to a dead-end. However, we found out that the same reason that can be a cause for war, can become a reason for cooperation.

Adopting a more positive outlook on things and looking into ways that the resources available will cater for the needs of all people living in the region, can be a conducive step to resolving one of the issues that stands between us and bring peace a little closer in the horizon.

The countries of the Middle East are facing a set of common problems

that tie us together. Sharing the same goal, we need efficient solutions that will distance the casus belli. In addition, cooperation on such a vital issue will operate as excellent Confidence Building Measure among people that do not necessarily share the same political interests.

Palestinians, Jordanians and Israelis along with partners from other Arab countries held series of bilateral and multilateral negotiations on the water issue with the participation and support of the international community. The fact is that we managed to come up with tangible solutions.

Our experience can be a good working example of how a certain problem, water shortage in this case, can be handled provided there is good will among all parties involved. What we did was raise regional awareness with specific projects. A research conducted on the supply and demand figures as well as predictions about the future based on data available at present led us to the conclusion that the balance between them will increase dramatically over the next forty years and although each core

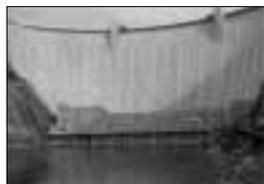
party has some limited potential of unexploited local water resources and can improve the efficiency of water use, the future gap can only be covered through the provision of new and additional water in the region.

So, instead of arguing over our misfortunes and the lack of water resources, we set up the following projects. First, we set up data banks that would enable the exchange of consistent, compatible and reliable water data and information to support decision making at both local and regional scales, we made a comparative study of laws that let us to a declaration on cooperation on new resources. We also set up "the waternet", involving the Jordanian Ministry of Water and Irrigation, the Palestinian Water Authority and the Israeli Technion Water Research Institute. In addition, we established the Middle East Desalination Research Center.

We, the people of the Middle East, have worked hard and saw that regional cooperation is an attainable goal for difficult issues such as water management.

International water resources management

Although three quarters of the earth is covered by water, the availability of clean, fresh water for human consumption, industrial use and irrigation is becoming increasingly scarce. A billion people in the world lack safe drinking water. The UN Millennium Development Goals call for the reduction by one half, of this number of people



by the year 2015. As global water demand grows, nations sharing common water resources will increasingly come into competition and potential conflict with each other. In this emerging situation, international cooperation and better management of water resources, both within countries and at the regional level, are urgently needed.

Water diplomacy

Very often, river basins and groundwater reservoirs do not conform to national boundaries. In Africa, two or more countries share segments of about 50 rivers. The vast Nile River system flows through seven countries. In Asia, five countries surrounding the Aral Sea compete over common and diminishing water resources. The Ganges River flows through four countries. In the Middle East, water policy has been subject to significant pressures in recent years due to environmental and political forces. Many actors are competing for a limited resource. Middle East

water diplomacy provides an example of the difficulties of managing water in a multi-actor policy environment.

Water resources

International collaboration can yield substantial benefits for collaborating partners in the area of integrated basin water management when these stretch across multinational territory. Easy access to water is not an end to itself for any society, but a means to other ends: health, industrial and agricultural production, economic development, to name a few. The competition for freshwater is exacerbated by worldwide pressures related to population growth, greater demands for irrigation and greater water needs for industry. Nowhere in the world is that competition more intense than in the arid and semi-arid parts of the world, where water scarcity has been, and still is, a chronic phenomenon which has played a major role in forming the political, social and economic relations in these regions for thousands of years. While water scarcity can increase because of rapid population growth, over utilisation of water resources - both surface and underground - and the pollution of water systems can also cause much concern.

Water scarcity

According to hydrologists, countries with annual water supplies of 1000-2000 cubic metres (cm) per person are regarded as water stressed, while countries with annual supplies of 500cm per person are included under the category of absolute scarcity, which means that lack of water has economic and social effects on those countries, such as less food production, social

and economic underdevelopment, ineffective protection of the natural environment and employment of expensive methods in order to augment water supply. While basin-wide cooperation regarding international water resources is the best possible development and the greatest challenge for policy makers, control of water resources in an environment of water scarcity will always be a means by which a state can exert political pressure on others. Despite efforts for resolution of water disputes based on confidence-building measures, water cannot be separated from broader political contexts.

Environmental protection

The needs of the natural environment should receive full consideration when the allocation of water resources is planned. The protection of natural resources and biodiversity requires effective integration of environmental protection strategies in water management. The development and management of international rivers should be pursued within the perspective of international water laws, which state that the river itself needs the use of its water for maintaining its own ecosystem and biodiversity. Existing national legislation and international agreements must be fully applied and augmented where needed.

International cooperation

Individual countries often agree to share water resources based on terms established in treaties that are signed by both parties. Treaties can consist of general agreements providing basic rules for water resource development or contain legal and technical arrangements with detailed operational plans.

Climate change

A major issue of our day, climate change will be one of the main themes of the event. Professor **Christos Zerefos**, President of the Board of Directors of the National Observatory of Athens and a leading world expert in this field will discuss the variability of climate including long-term changes in air temperature and precipitation over the Mediterranean. Emphasis shall be given to changes observed over the last 50 years. The past half century has experienced significant changes in various parameters in the atmosphere and hydrosphere in the Mediterranean. Air temperatures have risen, precipitation totals have been slowly decreasing, and there is evidence of a serious distraction of the hydrological cycle and a slight increase in the number of extreme weather events. These changes will be put in the perspective of the estimated variability of our environment in the past 500 years.

The following material is part of a current B.I.O. study on global warming. The warming of the earth's climate is attributed to the release of "greenhouse gases," or emissions of carbon dioxide and other pollutants from motor vehicles and factories. The accumulation of these gases in the upper atmosphere traps hot air and keeps it close to the earth. According to the National Academy of Sciences (USA), the levels of carbon dioxide in the atmosphere have risen from the range of 190 to 280 parts per million by volume (ppmv) before the industrial revolution to about 370 ppmv today, and continue to rise at the rate of 1.5 ppmv per year. Overall, temperatures have risen from 0.4-0.8 degrees centigrade during the past century. The anticipated effects of global warming include melting of the polar icecaps, warming of the oceans, impacts on marine life, rising of sea levels, and inundation of coastal areas. Melting of the permafrost and a receding coastline has been observed in recent years by residents in Arctic regions.

Climate change is expected to alter the frequency, timing, intensity and duration of extreme weather events such as tornadoes, hurricanes and extremely heavy rainfall, a trend that we may already be witnessing. Floods and droughts will become more intense and frequent and swings in the weather more intense. These events will promote the spread of infectious diseases such as malaria, dengue fever, yellow fever and encephalitis. Mosquitoes are the principle transmitting agent for

these diseases. The incidence of malaria has begun spreading to areas north and south of the tropics, and outbreaks have recently occurred in the USA, Korea and southern Europe. Likewise, dengue fever, a severe flu-like illness that may cause fatal internal bleeding, has spread to nontropical areas such as Argentina and northern Australia. No vaccines are presently available for either malaria or dengue fever.

Changes in the global climate system and in stratospheric ozone present additional risks to human health. The most direct risks are those resulting from the hotter climates themselves. Death rates rise on days with extremely hot temperatures. The elderly and the sick are most susceptible, and people with heart problems are vulnerable because the cardiovascular system must work harder to keep the body cool during hot weather. Higher temperatures increase the production of smog and the concentration of pollutants and allergens at ground level, through temperature inversions, and cause chest pains, nausea, pulmonary congestion, and death. Warmer tem-



peratures are even more deadly when cooling does not occur in the evenings, a recent trend that has been observed in many parts of the world. In some areas, the number of heat-related deaths is expected to double by 2020.

Hurricane Mitch in October 1998 illustrated the delayed effects of climate change. The hurricane stalled in the Caribbean and brought torrents of rainfall that killed 11,000 people. Later, thousands of cases of malaria, dengue fever, and cholera were reported in Central America. Another example was an episode of intense rainfall in the Horn of Africa in 1997 and 1998 which brought flooding, followed by outbreaks of cholera, malaria and Rift Valley fever. Some scientists believe that events such as these indicate that the health effects of global warming have already arrived.

Regional cooperation agreements often include more specific sets of regulations. One of the most important documents of international water law is the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, more commonly referred to as the Helsinki Agreement. The Helsinki Agreement provides a model for the regional regulation of transboundary waters. Its principal aims are the protection, management and equitable use of transboundary waters along with the conservation and restoration of ecosystems. It deals with the prevention, con-

trol and reduction of transboundary impacts relating to international watercourses and lakes, with a strong emphasis on pollution-prevention. A number of international agreements have been based on this convention, including the Protocol on Water and Health, signed in London in June 1999. A recent agreement between Spain and Portugal is also based on the principles of this agreement.

The above article is part of a recent study on water resource management carried out by B.I.O. For further extensive material on this topic see: www.biopolitics.gr/HTML/BIOlibrary/water_manag/water.htm



BIOPOLITICS INTERNATIONAL ORGANISATION

Dag Hammarskjöld 100 years since the birth of the



PROGRAMME

Under the auspices of the
President of the Hellenic Republic
Mr. Karolos Papoulias

Athens, 16 June 2005

Greeting by Dr. **Agni Vlavianos-Arvanitis**
B.I.O. President and Founder

Greeting by **Professor Ioannis Tsoukalas**,
General Secretary of Research and
Technology, representing the Prime Minister

Greeting by **Kitty P. Kyriacopoulos**,
Honorary Chairman of the Board of Directors
of S&B Industrial Minerals S.A.

Greeting by **Professor Carl-Goran Heden**
Member, Royal Swedish Academy of Sciences
Founder, Biofocus Foundation

Book presentation by
Ambassador **Kai Falkman**
*To speak for the world - a selection of speeches
and statements by Dag Hammarskjöld, Secre-
tary-General of the United Nations 1953-1961*



*"To Speak for the World -
A Selection of Speeches
and Statements by Dag
Hammarskjöld, General
Secretary of the United
Nations 1953-1961"* by
Ambassador Kai Falkman

The presentation of the book of the life and works of Dag Hammarskjöld, Secretary General of the UN, took place in Zappeion on the 16th of June with great success. It was the first official international presentation of the work.

Ambassador Kai Falkman's book is based on the archives of the Swedish Ministry of Foreign Affairs and on the speeches of Dag Hammarskjöld.

These speeches reveal an educated personality that was profoundly informed and knowledgeable, not only in international politics but also in history, literature, art and culture. A leader of global prestige with sensitivity and vision.



This year bears witness to the centennial of the birth of the second Secretary General of the United Nations, Dag Hammarskjöld. The **Biopolitics International Organisation (B.I.O.)** added to the worldwide observances an event commemorating the pioneering leadership of **Dag Hammarskjöld**, whose contribution to the United Nations largely shaped the organisation, as we know it today. A new volume of **Dag Hammarskjöld's** speeches and statements, edited by the distinguished Swedish diplomat and poet, **Kai Falkman** was published at the same time. *To Speak for the World* (Atlantis: Stockholm 2005)

Professor Carl-Goran Heden
Royal Swedish Academy of Sciences

It is an honour and a great privilege to participate in this Centenary to commemorate a truly great World Citizen. I only met Hammarskjöld once, and then only for a brief talk, because he of course moved in the highest orbits of inter-governmental affairs. On the other hand, my circles were closer to the ground, at the interface between many non-governmental networks and the specialised agencies. However, I have read a great many of Hammarskjöld's addresses, and I don't hesitate to name him my great role model.

Also, I have had the good fortune to work closely with some of his highly dedicated staff, like Sture Linner, who for instance helped him in the Congo. Those contacts have made me realize that Hammarskjöld's ideas about fusing social responsibility with Albert Schweitzer's ethic, must have been very infectious.

His authenticity clearly reflected the Delphi inscription "Know Yourself," and it was of course continually strengthened by contacts, often at a personal level, with people from the UN's 60 member states. With a UN now more than three times as large, I think that there is a great need to spread the infection once more. For that purpose I think that Ambassador Falkman's book can be an excellent vector. This is because it is not the type of ambitious and expensive dust-collector, which tends to end up on the shelves of economists and social scientists who "know all the answers."

It is just a little pocket book, where each of the carefully selected extracts from Hammarskjöld's speeches can for instance speak directly to teenagers in search of their true identity. But then there are of course also the ministers and members of parliament, who, today, battle over the essence of sovereignty and the EC constitution - I think that this little book ought to be compulsory reading for them.

But as Hammarskjöld reminds us, very concretely in the symbolism of the meditation room at the UN headquarters in New York, even the most eloquent combination of words is not enough for strong leadership. This needs undisturbed moments of silence - perhaps, as Hammarskjöld knew so well - close to nature during the sadly short Swedish summer. After all, that is when the faint whispers of heredity and history can be heard. I think that this is why Hammarskjöld never permitted differences of opinion to prevent a dialogue. It may take a lot of time for the whispers of reason to be heard, but that is a small price to pay when it paves the way for rapid and often unexpected action.

The power of this approach, and particularly avoiding situations when one of the opponents might lose face, was one

offers a brilliant remembrance of the man whose words and actions encouraged nations to peace and hope.

The presentation of the volume took place under the auspices of the **President of the Hellenic Republic**, Mr. Karolos Papoulias, at Zappeion Hall, on June 16, 2005. The event, which marked the first official presentation of the book to an international audience, was a tribute to the ideals and contribution of a unique leader who combined moral force with subtlety in meeting international challenges.

Ambassador **Kai Falkman**, B.I.O. Trustee and author of several publications,

of the two things I learnt myself in the course of many talks in Moscow and Washington during the cold war. The other thing came from a dose of humility which I, and many other Swedes, have had to swallow. I had to realize that the position that I had gained was not in recognition of my abilities as a microbiologist, it was because I happened to come from a small and neutral country.

The UN now braces for its 60th anniversary and also faces the implementation of a range of very far-reaching recommendations about development, security and human rights; I was not particularly astonished when I learnt, just before leaving Stockholm, that ambassador Jan Eliasson, another Swedish "operational idealist" seeped in Dag Hammarskjöld's spirit, will serve as chairman of the UN General Assembly for a year.

Talking about "operational idealists" I will now, for a moment, turn to Dr. Agni Vlavianos-Arvanitis. She is one of the most remarkable examples of that sort of operational idealist that the world now needs as a champion for the biological sciences as a peace tool. Anybody who knows her track record, or who has the time to read the June issue of "Bio News," will understand what I mean.

In conclusion, I will underline this urgency by repeating a story that President Kennedy told at the centenary of the National Academy of Science a month before his death. It goes like this: One day, when the great French Marshal Lyautay saw his gardener, he asked him to plant a tree the following day. The gardener didn't understand the rush and said: but it will not bear fruit in a hundred years. If that is the case, said Lyautay, plant it today.

*Hammarskjöld's vision of world
peace can urge everyone to
reconsider their ethical stance*

*it is very important to learn
about the life and words of Dag
Hammarskjöld; had he lived
longer, the world would have
been better off*

was joined in the presentation of his book by Professor **Carl-Goran Heden**, Member of the Royal Swedish Academy of Sciences, leading scholar at the Karolinska Institute, including Sweden's first Chair in Biotechnology, and Founder of the Biofocus Foundation, an initiative promoting entrepreneurship in harmony with local resources, needs, and markets. The session was opened by Dr. **Agni Vlavianos-Arvanitis**, President and Founder of B.I.O. and chair of the event, with the participation of Professor **Ioannis Tsoukalas**, General Secretary of Research and Technology and official representative of Prime Min-

Professor Ioannis Tsoukalas
General Secretary of Research
and Technology

Professor **Ioannis Tsoukalas**, attended as the official representative of Prime Minister Costas Karamanlis and stated that **"the Prime Minister has the highest esteem for the work of Biopolitics**, and I, as a scientist, have a high esteem for all things related to the application of science and technology, that are, of course, important tools for development and should be carefully studied. We have a large and new understanding of our global home that has been exploited, and scientists should be careful to ensure that they protect and not harm the environment. It is very important to learn about the life and the words of the former Secretary General of the United Nations, **Dag Hammarskjöld**. He was an instrumental figure, and, if he had lived longer, the world would have been better off."

Kitty P. Kyriacopoulos
Honorary Chairman of the Board of Directors of S&B Industrial Minerals S.A.

Ms. **Kitty P. Kyriacopoulos**, stated that it is always a pleasure to participate in events organised by the Biopolitics International Organisation, not only because of their high calibre but also because of the continuous search of new values for humanity. "This is a particularly significant meeting, since people from many countries and from many different fields have gathered to honour the ideals of Dag Hammarskjöld, so timely conveyed by Ambassador Falkman's book. It is a small book with a highly significant message. In these troubled times, Hammarskjöld's vision for world peace can urge everyone to reconsider our ethical stance. Ethics should become the number one objective of all governments throughout the world. However, the big responsibility lies with those countries which have achieved progress, not only at their own expense but, often, at the expense of less developed regions of our world. Action should be taken immediately; time will not wait."

*from a young age, Dag
Hammarskjöld believed pro-
foundly in the pan-human values
represented by the Biopolitics
International Organisation*



old - A visionary of peace the creative leader of the United Nations



Dag Hammarskjöld

In April of 1953, Dag Hammarskjöld was unanimously elected Secretary General of an only eight-year-old United Nations. A relatively quiet presence from his neutral, native Sweden, Hammarskjöld was, for the often conflicting members of the Security Council during the Cold War, an appropriate choice. While he assumed his post at a time when the UN was relatively young, Hammarskjöld possessed an innate understanding of the complexities of international cooperation and diplomacy, cementing early on a series of very public successes.

In his handling of the Suez crisis in 1956, when he condemned the British and French invasion of Egypt and set up the first peacekeeping troops, and in all his efforts to help the troubled regions of the world, he exercised his own personal diplomacy with the nations involved and, under the UN's mandate, commissioned the United Nations Emergency Force (UNEF), the first ever to be mobilised by an international organisation. After easily winning re-election in 1957, Hammarskjöld's second term, cut short by his untimely death, the details of which remain strangely elusive to this day, presented greater, perhaps even fatal, challenges. He crisis developing in the newly independent Congo both tested and reinforced Hammarskjöld's skills as a mediator, and some feared that Hammarskjöld and the UN's growing role in world affairs would interfere with their own national interests.

Hammarskjöld's most valuable contribution remains the way in which he viewed the roles of both the United Nations and the position of Secretary General. He maintained that the organisation's effectiveness relied on independence from the often invasive interests of individual member states, making resoundingly clear that the UN's role will be one of an impartial interpreter of the needs and aims of those it represents. As for the post of Secretary General, Hammarskjöld declared that "the private man should disappear and the international public servant take his place," for there is "no life more satisfactory than one of selfless service to your country or humanity."

Dag Hammarskjöld's tireless pursuit of international cooperation and peace is still an inspiration for many while his ideas remain highly relevant. Together with the Hammarskjöld centenary, B.I.O. too celebrates a milestone, although quieter of course and less observed. For twenty years we have pursued similar ideals in international cooperation, advancing a worldwide understanding and appreciation of bios (life) and the environment. We greatly admire in Hammarskjöld what he calls a "fighting optimism" that is renewed "again and again."



ister Costas Karamanlis, and Mrs. Kitty P. Kyriacopoulos, Honorary Chairman of the Board of Directors of S&B Industrial Minerals S.A. The event was attended by Ambassadors and delegates from the following countries: Algeria, Austria, Chile, Colombia, Denmark, Finland, France, FYROM, India, Indonesia, Iran, Israel, Jordan, Korea, Lithuania, Norway, Panama, Poland, Romania, Slovakia, Slovenia, Sweden, the Philippines, Ukraine and Venezuela.

In her introductory statement, Dr. Agni Vlavianos-Arvanitis declared that "a beacon of hope and peace, Dag Hammarskjöld's noble legacy is a praise to international cooperation, human rights, and a better quality of life for all citizens. Since 1985,

B.I.O. has been promoting a vision for peace based on these very ideals and on the unifying spirit of respect and appreciation for life. With humanity facing a serious crisis in values, Hammarskjöld's time-spanning personality can inspire the present and pave the way to a harmonious future. We are seeing great threats to the environment, and, unfortunately, we do not have enough enlightened leaders to join forces to build a new society. There could not have been a better occasion to come together in this spirit of hope than to honour Hammarskjöld, such a visionary of peace and responsibility, who was willing to sacrifice his own life to pursue these goals. This is a very important day for us and for everyone present."

To speak for the world - Dag Hammarskjöld's legacy

Ambassador Kai Falkman

If Dag Hammarskjöld had survived, if he had not died in the plane crash in Africa in 1961, he would have served for another two years as UN Secretary General, then he would have retired, and I think that, probably, he would have become a Trustee of the Biopolitics International Organisation, because he shared, very much, the vision and ideas that are now represented in Biopol-



I asked the head of the Political Department, "Why is Dag Hammarskjöld on the wall?" And he said: "It is very simple. Because Dag Hammarskjöld defined the United Nations and brought ethics into the Organisation." This is how I found out that they were so interested in a new selection of his speeches and statements. As you all understand, there is a great need for ethics in the United Nations today, and, therefore the timing is excellent, because now we have more than a few questions at the United Nations on how to build a lasting world Organisation.

The aim of this book was to collect some of Dag Hammarskjöld's speeches and statements, and also some of his essays, in order to make his ideas known to those who were not around in his lifetime or who do not know him from the literature. Therefore, we decided to create a new pocket book, which costs only as much as two bus tickets in Sweden.

We did not wish to publish another big book such as the one released two years after his death in New York, which features all of his speeches in chronological order. We decided to follow a schematic order instead; to arrange the material by theme so as to make it easy to find the ideas presented in the book.

When I first started writing, I thought that I should arrange the chapters by conventional subject: the role of the position of Secretary General, security issues, and so on. Little by little I realised that, to get to know this man and his many interests and wide knowledge in so many subjects, we had to stop somewhere. One such point could be his interest in art or music. He spoke at every musical event hosted by the UN, and gave

marvelous speeches about music. Sir Brian Urquhart, a very good biographer of Dag Hammarskjöld whose book was published in 1972, says that his greatest speech is the one on Beethoven's last Symphony that I have included in the book. Another interesting speech is his speech on modern art that has been repeated very often in New York and many other places.

A gentleman at the UN told me that Dag Hammarskjöld defined the United Nations. He is correct, because when Hammarskjöld came to New York in 1953, the United Nations was only 8 years old. Dag Hammarskjöld arrived as a very well known person, who was, however, very shy and timid and did not want to make an impression on anyone. He wanted to find out how the Secretariat worked - and it did not work very well at the time, as all of you know - so he had to clean it up. I noticed from reading all of his speeches and from the thousands of pages of publications, that, in the beginning of his stay in New York, he visited universities and foreign policy associations in his effort to define what the United Nations is, how it could be, and how this could be realised.

In January 1954, he became involved in trying to release the prisoners of war who had been shot down over China during the Korean War. He took a great risk because the Americans were pressuring him and he wanted to do the best he could. He flew to Shanghai, in the People's Republic of China, and he said "I come in my own capacity, not as the Secretary of the General Assembly and of the UN, but in a personal capacity to discuss the issues with the leaders of both sides." After 6 months, the prisoners were

not yet released and everyone thought it was a failure. But shortly thereafter, the Chinese released the prisoners and Hammarskjöld became a kind of hero, because he had achieved what nobody else could.

Then he was involved in the international breakthrough in the Suez Crisis in 1956, which involved France and the United Kingdom. Hammarskjöld brought the parties together for discussions at the UN to reach a resolution. He said the worst moment in his life was when he had to stand up and defend the act of a government that he did not know anything about.

He went to Laos twice in order to set up a UN presence to protect the country's neutrality. When Kennedy became President in 1961, he had the same idea: that Laos should remain neutral and be protected by all the great powers.

Hammarskjöld said he could not speak for the world, but he could speak for the UN Charter, and so for the people. Hammarskjöld has been widely respected, as a great worker and for his philosophy. He believed that maturity of mind should be the basis for national politics. He talks about loyalty, he talks about faith, he talks about time. Few statesmen in history were also philosophers.

Hammarskjöld was also a poet; a volume of his poetry was published two years after his death, including 110 haiku poems. He was a pioneer in writing haiku in

*we are visitors in this world
we need to lower our voice
in order not to disturb*

Dag Hammarskjöld

Swedish. I would like to end by saying that even as a very young man, Hammarskjöld was very much committed to the kind of issues that Biopolitics expresses here. When he was twenty years old he wrote that "I will not ask life to give me anything but I will ask myself what I can do for life."



Bioethics and Environment - B.I.O. e-library

The absence of environmental ethics has resulted in serious environmental deterioration and is a threat to the continuation of the chain of life on earth. We are out of balance with nature and this has placed our future in jeopardy. Our survival on this planet depends on our ability to exit this crisis in values and to achieve the harmonious co-evolution of humanity and the environment. A human being is closely related to, and dependent on, all life on earth. How, then, can we reconcile our existence with the rapid deterioration of bios? To protect the environment and life on our planet, B.I.O. has proposed that bioethical guidelines be

developed and implemented in every field of human endeavour. The hope is that humanity will acknowledge the value of environmental ethics and will place respect for the environment at the core of every action and thought.

One of the most important goals of B.I.O. has been to promote the environment as a key component of bioethics. To be effective in addressing today's needs and in safeguarding life on our planet, bioethics must exit the confines of the medical sciences and encompass pivotal concerns such as the preservation of natural resources and biodiversity, the eradication of poverty, and the fundamental human right to a clean



and safe environment. Only then can life be protected.

The B.I.O. President is involved in several bioethics initiatives, including: Member and founding Vice President of the Scientific Committee of the International Society of Bioethics (SIBI); Corresponding Member of the Pontifical Academy for Life; and Mem-

ber of the Academic Committee of the Regional Interdisciplinary Programme for Bioethics in Latin America. Furthermore, in April 2005, she participated as national delegate for Greece in UNESCO's First Intergovernmental Meeting of Experts Aimed at Finalising a Draft of a Declaration on Universal Norms on Bioethics.

The subject of environmental ethics has been extensively addressed in many B.I.O. conferences and meetings since 1985. Special emphasis has been placed on ethics in business and corporate social responsibility, as well as in the ethical management of natural resources in the fight against poverty. B.I.O. has

published 21 chapters in volumes of proceedings from international conferences and 19 articles in BioNews on the subject of ethics. A comprehensive chapter on "Bio-Ethics" is published in Bio-Syllabus for European Environmental Education, an 880-page textbook available in print and electronically (CD-Rom). In addition, extensive references on bioethics and other related topics can be found in the B.I.O. e-library. Based on this pioneering material is B.I.O.'s e-learning course on "Bio-Ethics," which will soon be available online as part of our e-learning programme in environmental education.

Biodefence: the ethics of the protection of bios

The President of B.I.O. will be addressing the issues below in her speech at the SIBI Bioethics conference in Spain.

Biopolicy, the theoretical core of the Biopolitics International Organisation's (B.I.O.) philosophy, offers a guide to building a society of vision and hope and to reversing present environmental devastation and human suffering. The struggle to protect bios on our planet must involve every sector of society. The concepts promoted by B.I.O. since its inception in 1985, emphasize bioethical values in bio-education - a tool to instil the visions of biopolicy, bioethics and biodefence in our future leaders. In order to achieve the United Nations millennium goals, defence policies must become instruments of peace and diplomacy, a tool for saving bios across borders. The current crisis in values is a great threat to life, the environment and to peace. The diachronic ideals of the past can help motivate every member of society towards the preservation of the environment.

The greatest challenge of our time is to build a society with vision and hope. Every individual's bioethical responsibility should be towards future generations. Our over-riding objective should be to eradicate the poverty in

values that is threatening the very continuation of life on our planet. In order to achieve the real and enduring implementation of the UN Millennium goals, we must replace the present climate of international conflict with the concept of biodefence. Contemporary notions of profit must be reconsidered and a renaissance of values must be promoted. This renaissance would allow for life on the planet to obtain its rightful significance as the real source of wealth, which must be protected and promoted. Otherwise, nothing on earth will ultimately survive. Society is racing to gain economic wealth, political power and social advancement in a dangerously short-sighted manner in which the damage that is done greatly exceeds the gains that are achieved.

Bioethics is an integral element of biopolicy, intimately related to the principle of reverence for life. Of paramount importance is the concept that every individual is of unique value and that life in all its forms is precious and irreplaceable. This principle implies increased responsibilities for all. Biodefence, a related element of biopolicy, calls for the conversion of existing defence establishments, which are geared toward war and destruction, into instruments of peace and the protection of bios.

The world is facing an unprecedented crisis of environmental degradation and loss of biodiversity. Yet the nations of the world are too pre-occupied with economic and technological advancement, international conflict and preparations for war to mount an adequate response to the environmental crisis. Future generations should not be burdened with the results of today's negligence. The continuation of life on our planet is threatened by the depletion of the ozone layer, by hunger and disease, by the destruction of the forests and biodiversity, and other forms of environmental degradation. The convergence of the aspirations of sovereign states and civil society into a spirit of cooperation in long-term environmental policy and action can overcome the current climate of competition and unending conflict and lead to universal harmony and peace among the peoples of the world. This is the vision of bio-policy.

(Biodefence and other related topics are also addressed on p.1)

Bioethics – Gijon, Spain

The International Society of Bioethics (SIBI) will be holding its *Fourth World Conference on Bioethics* from the 21st to the 25th November in Gijon, Spain. A variety of topics will be discussed at the conference, where many distinguished professors and scholars will gather from around the world.

The opening lecture will be delivered by the Nobel prize winner, the Honourable Mr. **Wole Soyinka**. The first subject to be discussed, *privacy and genetic data*, will feature lectures from **Juan R. Lacadena** (Spain) and **Darryl Macer** (New Zealand) as well as debate chaired by **Dafna Feinholz** (Mexico), **Olof Yrr Atladottir** (Iceland) and **Alain Pempidou** (France), amongst others.

Sang-yong Song (Korea) will be lecturing on the topic of *biological weapons*, along with **Robin Coupland** of the International Red Cross and **Agni Vlavianos Arvanitis**, a member of the Scientific Committee of SIBI. The President of B.I.O. will speak on *biodefence: the ethics of the protection of bios* (for excerpts of this presentation see page 7). Round table discussion on



violence will follow, including lectures from, **Georges Kututkdjan** (Lebanon), **Carlos Castilla del Pino** (Spain), **Christine Ondo Onama** (Uganda), **Sahin Aksoy** (Turkey), **Jaime Escobar Triana** (Colombia).

The subject of access to *health systems and medicines* will also be addressed. Lecturers in this section include: **Volnei Garrafa** (Brazil), **Salvador D. Bergel** (Argentina), **Miguel Kottow** (Chile) and **Giorgio Berchicci** (Italy), and debates will be chaired by **Paula Martinho da Silva** (Portugal), **Michele Jean** (Canada) and **Francois Zioko** (Republic of Congo), amongst others.

For the final days of the conference round table discussion will address all of the above topics, as well as that of life and its development.

Global Marshall Plan – Ulm, Germany

B.I.O. has been invited to participate as an international partner in the Global Marshall Plan Initiative, helping to promote a new vision in global policy and development. The President of B.I.O. attended the organisational board meeting that took place on the 24th and 25th of June in Ulm.

The Global Marshall Plan Initiative was developed in 2003 between representatives from politics, science, media, private enterprise and non-governmental organisations across Europe.

The Global Marshall Plan aims

towards a more balanced world. To achieve this, a better design of globalisation and the global economic processes is necessary - a worldwide Eco-Social Market Economy needs to be built. This would require an improved global structural framework.

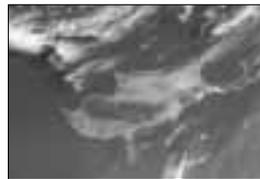
B.I.O. believes it is urgent to move in the direction of global cooperation in the effort towards peace. In this spirit of establishing a new order in societal values, economics and politics, B.I.O. looks forward to this fruitful cooperation.



The Dubai Declaration was originally formulated at the Dubai International Conference for Habitat II on Best Practices in Improving the Living Environment. The Declaration fundamentally highlights the linkages between human settlements and sustainable

development, and includes a series of recommendations and follow-up actions that are aimed towards realising a more positive vision of future development.

A result of the collaboration between the Dubai Municipality and the United Nations, the Declaration represents the vast international potential for practical mutual assistance through the sharing of transferable and replicable expertise and achievements of excellence.



The President of B.I.O. has been invited to be the main speaker at a seminar on *Business Ethics* in Cyprus on the 19th of December. Business ethics are an important aspect of the

Business Ethics – Cyprus

fight to reverse the crisis of values facing society today. As racing to gain profit, economic wealth and social advancement increasingly become priorities in modern-day life, the need for a re-evaluation of business ethics becomes ever more critical. Respect for bios and efforts to secure the continuity of life on our planet must become our top priority.

The upcoming event on these issues is organised by PricewaterhouseCoopers. Topics to be discussed at the meeting include corporate responsi-



bility and ethical dilemmas. Other speakers invited to the event include the Minister of Finance and the CEO of PricewaterhouseCoopers, Mr. **Liakos Theodorou**.

Peace and the Environment – Dubai

The Euro-Arab Cooperation Center presented **Sheik Maktoum Bin Rashid Al Maktoum**, Vice President and Prime Minister of the United Arab Emirates and Governor of Dubai, with the award for 'Peace and the Environment'. The official ceremony took place in the palace of Dubai on May 15, 2005.



The committee was also received by His Excellency Mr. **Qassim Sultan**, Director General of the Dubai Municipality, and had the opportunity to exchange views on the environment and international cooperation. Despite facing water shortage and drought, Dubai is a green city due to the active participation of all its citizens. It sets a prime example for development in tourism and creative initiatives.



The event was organised by **Samy El Gindy**, Member of the Parliament of Egypt and Vice President of the Euro-Arab Cooperation Center (VEA). As a member of the Board of the VEA, the President of B.I.O. participated in the award ceremony.

The Future of Knowledge: Evolutionary Challenges of the 21st Century World Academy of Art and Science, General Assembly - Zagreb, Croatia

The President of B.I.O., recently appointed Fellow of the World Academy of Art and Science (WAAS), will be attending the General Assembly of the WAAS taking place in Zagreb, Croatia, from the 17th to the 20th of November 2005. The World Academy is a non-official network of approximately 500 individual Fellows from diverse cultures, nationalities and intellectual disciplines, chosen for eminence in art, the natural and social sciences and the humanities.

The General Assembly will be preceded by a NATO advanced research workshop themed *Security in Knowledge-based Society: Developing Resilience in Societies at Risk and Threatened by Terrorism*. At the General Assembly, the President of B.I.O. will chair a discussion on 'Human Responsibility for Evolution: Was Huxley Right?'. The discussion will be co-chaired by Carl Goran Heden from the Biofocus Foundation, Sweden.

In addition, the World Academy will be establishing a regional division focusing on South East Europe (SEED), of which the President of B.I.O. has been appointed Deputy Coordinator. This division will be a network of individual scientists, scholars and decision-makers; a network of research institutions; a think tank; and a public-policy forum.

NATO Advanced Research Workshop

The opening session will consist of an introduction to the workshop led by Harlan Cleveland and Mladen Stancic. **Session one**, titled 'Security in a Knowledge-based Society' and chaired with introductory comments by Ivo Slaus, will be followed by discussion. The panelists will be J. Petersen, J. PopJordanov, and H. Kraljevic. **Session Two**, 'Societal Resilience against Terrorism', will be chaired by V. Cvrtila, panelists will be G. Jacobs, V. Lukov and W.T. Anderson. **Session Three** will address the importance of transatlantic cooperation and will be chaired, with introductory comments, by A. Faupin. Keynote speakers at this session will be R.W. Markus, R. Vukadonovic and L. Bloomfield. 'Unconventional Threats' is the topic of **Session Four**, chaired by S.P. Kapitzka, with I. Gyarmati, R. Benedick, G. Flego and N. Radunovic attending



as panelists. **Session Five** is titled 'Conflict prevention and post-conflict resolution - countries in transition' and will be chaired by R. Berg, with panelists: A. Goncharenko, B. Tashev, M. Elezi and S. Gligorjevic. Discussion will follow. **Session Six** will be a discussion on 'NPT, Chemical and Biological Warfare' and will be chaired with an introduction by P. Cotta Ramusino. Panelists will be J. Singh, V. Lukov, and R. Zilinskas. The **seventh** and final session is titled 'Culture of Peace and Human Rights' and will be chaired by R. Diez Hochleitner. Panelists will be Z. Puhovski, R. van Harten, B. Matic, and I. Samson and discussion will follow.

World Academy of Art and Science General Assembly

The General Assembly will be opened by President of WAAS, Walt Anderson, who will talk on 'Future of Knowledge - the Role of the WAAS, Formal establishment of SEED'. He will be followed by Janez Potocnik, EU Commissioner for R&D, with a talk on 'Knowledge Society - European Perspective'. Ivo



Slaus, Chair of the Organizing Committee will be talking on 'Knowledge Society, Globalization and the Role of SEED', and will be followed by the official opening of the General Assembly by the President of Croatia, Stjepan Mesic.

Workshops to be held will address a variety of topics, from globalization, human rights and rule of law to knowledge and certainty, to rising expectation: demography, aging and mobility. EASSG: Future of Euro-Atlantic security structure will be discussed before more workshops on the Frontiers of Genetics and Organizing knowledge for human benefit.

The **First Plenary Session** on

'The Culture of Peace and Security' will be chaired by Harlan Cleveland, Former US Ambassador to NATO (USA) and Mircea Malitza, former Ambassador to the USA U(Romania). The invited speakers are Paolo Cotta Ramusino, Pugwash Conferences (Italy), Velizar Shalamanov (G.C.Marshall Center, Bulgaria) and Jasjit Singh,



Center for Strategic Studies (India). Speakers at the public event, 'Changing Our Minds: Electronic and Chemical Modification of Cognition and Emotion', will include James Hughes (USA) World Transhumanist Association, Ivica Kostovic* (Croatia) Croatian Institute for Brain Research, Eric Racine, Stanford Center for Biomedical Ethics (Canada, USA), Anwar Waqar, Gregory Stock (Pakistan).

On Saturday 19th November workshops will be on 'Universities of the future', 'Ownership of Knowledge', and 'Science and the Public'. The invited speakers for the **Second Plenary Session** are Danuta Huebner* (EU Commissioner for Regional Policy, Poland), Hiroyuki Yoshikawa (Japan), Herwig Schopper (Germany), Pushpa Bhargava (India). The session is titled 'Knowledge, Equity and Globalization: Are We Moving Ahead or Falling Behind?' and will be chaired by Bohdan Hawrylyshyn (Ukraine, Switzerland).

The **Third Plenary Session**, 'Human Responsibility for Evolution: Was Huxley Right?' SEE ABOVE Chairperson: Carl Goran Heden (Sweden) and Agni Vlavianos-Arvanitis (Greece) Invited speakers are: Ian Pearson, Futurist BT Inc. (UK), Richard Benedick (USA), William Haseltine (USA).

The **Fourth Plenary Session**, 'Employment in the Global Society', chaired by Anamaria Sandi, World Bank (Romania) and Garry Jacobs (India/USA), will include talks from: Orio Giarini (Italy), Nadan Vidosevic (Croatia), Marc Luycck Ghisi (Belgium), and Robert Berg

(USA), M. Nandagopal (India).

The final day of the meeting will be reports from the workshops and will be chaired by W.T. Anderson (USA) and Simeon Angelov (Bulgaria). Rapporteurs will be: Ivo Josipovic, Robert Blinc, Orio Giarini, Eliora Ron, Robert Horn, James Dator, and Stane Pejovnik.

The closing talks and closing ceremony is titled 'Europe As A Knowledge Society' and will be chaired by Jose Furtado (UK) and Wouter van Dieren (The Netherlands). Keynote speakers will be: E. U. von Weizsaecker (Germany), Maria da Graca Carvalho (Portugal), Pieter Drenth (The Netherlands). The concluding session of the ARW, chaired by M. Stancic, will feature concluding talks by L. Bloomfield, V. Shalamanov and R.W. Markus.

SEED

South East Europe has a rich historical heritage. For more than 25 centuries it has been the cradle of science and democracy. Throughout history it has been a border separating civilizations. Today some of its countries are member states of the European Union, some are candidates, and some are in transition. Although the region has made great contributions to science, the humanities, and education, none of its universities is now ranked among the top 500 in the world. The area is suffering enormous brain-drain, and research and development is not a high political priority. There is much work to be done.

In response to this need, The World Academy of Art and Science (WAAS) has established a regional division focusing on South East Europe. This South East Regional Division (SEED) is now being formed, and will be inaugurated at the next General Assembly of the World Academy to be held in Zagreb, November 17-20, 2005.

This division will strive to contribute to the development of knowledge-based societies in each country and in the region as a whole. It will be a network of individual scientists, scholars, policy- and decision-makers; a network of research institutions; a think tank and a public-policy forum.

Its mode of operation will be to work in cooperation with other international, regional and national organizations with similar interests and values.

World Referendum

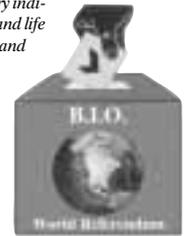
How do we engage everyone in the race to save the environment?

The B.I.O. World Referendum, first launched in 1992, urges every citizen on the planet to cast a vote in defence of bios (life) and the environment.

Hunger, poverty, disease, loss of biodiversity, and global warming are all tied to the fate of the environment, yet the natural environment is gradually being destroyed. Every individual is of unique value and life in all its forms is precious and irreplaceable. The environment must be restored and the preservation of bios must become our first priority.

Access to knowledge with modern communication technology gives momentum to environmental protection and empowers sustainable development. It also provides humanity with the unprecedented opportunity to dynamically voice its concern over environmental deterioration. A World Referendum for every citizen on the planet to simultaneously cast a vote for the environment, could result in a global mobilisation for the reversal of destructive trends and guarantee a brighter future.

In September 1998, friends of B.I.O. all over the world responded to B.I.O.'s World Referendum. It was especially significant that thousands of people in the regions of South and Southeast Asia voted. The Governor of Haryana, Shri Mahavir Prasad, inaugurated the launch, which was attended by a large number of teachers, lawyers, businesspeople, doctors, police personnel, members of the armed forces, artists, musicians, scientists, NGO members, administrators, planners, politicians, etc. It is hoped that the launch of a new World Referendum, with even greater mobilisation, will lead to the necessary awareness and action to safeguard our planet for future generations.



- ▶ **Disturbed** by the present rate of environmental deterioration
- ▶ **Affirming** the interdependence of all forms of life on our planet
- ▶ **Wishing** to save the bio-environment, preserve bio-diversity, and protect bios (life) for the future generations
- ▶ **Averse** to repeating mistakes of the past
- ▶ **Declaring** the importance of a millennium approach to decision-making
- ▶ **Desiring** to bring all cultures and nations together in a common cause
- ▶ **Noting** that humanity has never before cast a vote simultaneously

Humanity has never had the opportunity to vote simultaneously on issues of global concern. With the internet linking the world together as never before, we have the technology to enlist every citizen in a common cause - that of saving the environment and bios. Every individual can actively voice their concern over the threats to the environment and bios, and affirm their desire to ensure the continuity of life on our planet.

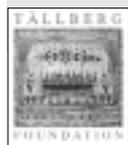
A World Referendum conducted over a 24-hour period in every corner of the world, would be a true manifestation of democracy and biopolitics, as every person will be able to express how they feel about the environment and inspire world leaders to implement new strategies for the protection of the environment. The united voice of all the people can lead to prompt action.

The current crisis in values is a real threat to life and to peace. In order to achieve the real and enduring implementation of the UN Millennium Goals and to translate concern for future generations into action, the participation of every individual is vital.

We make an urgent appeal to all World Leaders, Heads of State, Governments and every concerned citizen to join forces in a World Referendum to safeguard the environment for future generations. The time for action has come.

To vote in the Referendum click on:
www.biopolitics.gr/HTML/wref.htm

The Tallberg Forum – Sweden



The Tallberg Foundation provides an important opportunity for enlightening dialogue and conversation on global issues that urgently need to be addressed. This year, the Foundation celebrated its 25th anniversary by bringing together 500 world leaders and decision-makers at a forum that focused on ways to increase global cooperation and understanding. The participants, who brought diverse expertise and experience to the discussions, took part in workshops and conversations on matters of global significance. Poverty, globalisation, the environment, nation-building and governance, and respect for human rights are just some of the topics touched upon with many successful outcomes.

The Tallberg Foundation is a non-profit, independent organisation aimed at bringing

world representatives, decision-makers and industry leaders together in open conversation on leadership, values and institutional change. The theme of the forum engaged with the question, 'How on Earth Can We Live Together? Exploring Frameworks for Sustainable Global Interdependence'.

The event took place from the 30th of July to the 3rd of August in the Swedish village of Tallberg. In attendance were their Majesties the King and Queen of Sweden.

The B.I.O. President, Dr. Agni Vlavianos-Arvanitis, participated in the forum alongside many distinguished members of the global community, including: **Marcello Palazzi**, Founder and Chairman of Progressio Foundation, the Netherlands; **Jean-Francois Richard**, Vice President for Europe, The World Bank; **Mikheil Saakashvili**, President of Geor-

gia; and **Margot Wallstrom**, Vice President of the European Commission.

Among the many events that took place, the President of B.I.O. chaired a workshop on the Club of Rome's prediction of the depletion of many life-supporting systems on our planet. Participants in the discussion included the author of Limits to Growth, Denis Meadows and Jaap Spier of the Supreme Court of the Netherlands.

Addressing a full conference audience, the B.I.O. President presented the launching of the World Referendum proposal. The Referendum, which would allow every citizen of the world the opportunity to affirm their willingness to save the environment and life on our planet, was received with warm support.

The 21st century should be the century of reverence for life

Sayuri Furukawa

A trip to the most beautiful state

The word "biopolitics" was created out of love for biology and the belief that "bios" is a link that unites all people. Our planet is only a small part of the universe. Our galaxy contains over one hundred billion stars, and it is only one among billions of others. From what we know up to the present

"bios" is only to be found on our planet. This means that we have in our possession the most precious gift of creation.

In order to comprehend some of the dimensions of the microcosmos of biology, the following example is given: there are about 265.000.000 molecules of hemoglobin

in every cell and 650.000.000.000.000 molecules of hemoglobin are produced every second in the human body.

In addition to hemoglobin, hundreds of thousand of other proteins are produced in every cell.

This is just a small example of what is hap-

pening every second in every cell.

It is important to draw joy and strength out of the miracle of life - bios.

The blinding harmony and symmetry of the microcosmos needs to be an integral part of everyday life that should be appreciated and preserved.

*I started off on a lengthy journey
and found myself in the cell's state
I was afraid lest I feel desperate
but instead I was startled with joy*

*What an incredible world is working
day and night with so many machines
in such harmony
that cannot even be found
in the most lavishly decorated churches*



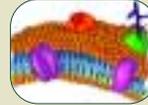
*To pass through the gate
I had to go through a terrible control
guards, lipids, proteins, receptors
all of them check*

*whether you will pass the entrance
As soon as you enter
the State of the select
you will face thousands of machines
each one working separately
but in a magic way*



*all of them contribute to the effort
which coordinates this world*

*Even the most trivial electrons
know when to pass
through the membranes
they get energy from sugar
within the mitochondria
and thus, all the parts can move*



*Even if the code is hidden
in the dark abyss of the nucleus
again wisely the secrets pass
to the cytoplasm by a mysterious trail*



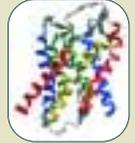
*They carry a code
secretly copied in letters
reaching
the endoplasmic reticulum network
and follow the pathway to the home
dressed in red colours
and magically we call it ribosomes*



*Quickly the code's tangled words
are assembled in order
with secrets they untangle
they synthesise the proteins for life*

*Workers come and go the hormones
in the nucleus, the cytoplasm,
the golgi, and everywhere
as though they are asking
from all the other parts
to obey only them*

*But here there is harmony
and very deep mystery
nature decorated with a magic crown
knits happily a web
which knows billions of aims every minute
and to compose the cell's
most melodic tune*



*A. Vlavianos-Arvanitis, 1982
(Collection of Poems Roots)*

Bio-Tourism - Mythos and the Environment

BIO-tourism, as promoted by the B.B.I.O. since 1985, is an ideal vehicle for peace and international co-operation. It represents the intention to explore the world's natural and cultural heritage and to facilitate a new emphasis on "bio-culture," born as it is out of a positive mutual respect that is not confined to political and national divides; it encourages environmental and cultural appreciation



in tourism, as well as an international exchange of experiences on the basis of environmental preservation. In addition, bio-tourism is an approach to travel and recreation in which the tourist comes into intimate contact with the environment and culture of the area being visited in a manner that is not destructive, but rather, constructive.

Every nation and region of the world offers its own unique cultural and historical attributes. Sites and artefacts of ancient and pre-historic civilisations can be found in many parts of the world. Each his-

torical era offers its own particular contribution in crafts, folklore, art, architecture, and all the other elements that comprise a culture. Likewise, scenic and natural beauty and wildlife can be found in many areas on every continent, all the way to Antarctica.

By protecting the natural environment and local culture, bio-tourism is mutually beneficial to both the visitor and the local population; it preserves the attractions of the area for future visitors, as well as the heritage of the past for future generations. The focus is on making informed travel choices and supporting local economies. Too often in the past, intensive tourism in an area resulted in the deterioration or destruction of the very attributes that attracted visitors in the first place. Tourism may lead to over development along coastal strips or on scenic mountaintops, for example, resulting in erosion, pollution and loss of scenic beauty.



The "bio-tourist", meets and lives among the local population, learns about its culture and experiences in

his/her time there, while assimilating the local way of life as much as possible. He/she



also encounters the natural features of the area in a direct and educational manner. Bio-tourism not only includes visits to museums and ancient temples, but may also involve walking in indigenous neighbourhoods or villages and meeting and socialising with the local population. It includes close encounters with plant, animal and insect species through carefully guided hikes in natural areas. By gaining knowledge of local natural and cultural conditions, the visitor also gains understanding and appreciation of a culture. This, in turn, leads to greater friendship and peace based on co-operation and mutual understanding. Thus, bio-tourism is not a self-centred approach to recreation, but a bios-centred interaction with the surrounding world.

The future of tourism lies in much



more than beautiful hotels, cruises and resorts. Its success lies in the celebration of the richness of natural diversity, both of the environment and of cultural life including the gems of history and myth. Bio-tourism is not just a conventional travel plan, it is a way for all peoples of the world to explore each other's natural and cultural heritage; it creates a more just balance between the exploration process and the necessary respect for the location and environment.

This approach takes into consideration the fact that the environment recognises no boundaries and can bring people together in a com-



mon cause. The infinite biodiversity of our planet can be cherished through conscious efforts to turn travel and tourism into initiatives for

a global appreciation of bios. This is the real meaning of bio-tourism, and cultural diversity, tradition, history and "mythos" are its cornerstones.

Globalisation has meant that we are increasingly moving on a horizontal basis, rushing to gain profit at any cost. Caught up in daily life, and the rush of the cosmos, the microcosmos remains poorly understood. The beauty of the microcosmos is lost and its spectacular dimensions are ignored. The gift of life has existed for hundreds of millions of years - we must not endanger it with human arrogance. If the millennium goals are to be achieved, we must draw inspiration from the past. Only a tree with deep roots can grow beautiful fruit. It is necessary to add a vertical dimension to the landscape; mythology can provide this. The nineteenth century gives us many examples of music and art inspired by mythos. In Ancient times, the Delphic oracle served as a source of wisdom and much sought after answers; today, the answers

must come from diachronic values. Nations can, and must, use the wealth of the past and open up the trails of mythical pathways.



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