BIOPOLITICS - THE BIO-ENVIRONMENT BIO-CULTURE AND BUSINESS OPPORTUNITIES

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The anthropocentric behavior of present day society has led to severe environmental deterioration, jeopardizing the continuity of life and threatening the very existence of future generations. Presumptuous attitudes and oversight have compromised, in less than a century, the gift of bios (life), the most precious possession on our planet. Bios has existed for hundreds of millions of years. If we consider the evolutionary chain as a twenty-four-hour-day, the appearance of human beings has occurred merely during the last few seconds.

This evolutionary perspective reveals that human history can be traced back to a few thousand years only. Life has been tested in unlimited varieties and the most viable species have survived through the power and mastery of natural selection. With the threat of extinction increasingly valid, we need to seriously contemplate whether the current environmental crisis is a manifestation of humanity's suicidal tendencies, or just a low point in its trajectory demonstrating the need for a new societal structure.

Social systems undergo continuous changes through the process of dynamic equilibrium. A new bios-supporting structure for society, based on a framework of global bio-education, bio-legislation, bio-diplomacy and bio-economics, can help guide humanity towards greater maturity and the commitment to respect bio-diversity and preserve the bio-environment for the future. Since society is flexible and dynamic, new models and new concepts have to continuously emerge. The prevention of environmental deterioration calls for the creation of ethical, as opposed to merely pragmatical, incentives. Changes in business mentality can accompany general trends towards an environmentally-friendly lifestyle. It is essential to realize that new alternatives lead to new opportunities in business, as profitable production and respect for the bio-environment are completely compatible goals. Environmental protection offers limitless new business opportunities. Applying these opportunities can ultimately contribute to an improvement in the quality of life itself.

The bio-environment can provide the necessary unifying dimensions to transcend boundaries and attain international cooperation. Furthermore, the bio-environment can become the interdisciplinary link between culture, diplomacy, business and trade, leading to a new era of bio-culture, where every endeavor will be oriented towards a common goal: the appreciation and preservation of bios on our planet.

The Biopolitics International Organisation (B.I.O.) would like to stress the importance of bio-culture for the corporate world. It is indisputable that the economic driving force is a major policy-setter, capable of influencing societal structure to a very large extent. However, this implies an increased level of responsibility, as business decisions often shape the future of society. It is thus imperative that the corporate world recognizes and acknowledges this respon-sibility, and applies it to the benefit of all concerned. This responsibility is an urgent priority and is primarily connected to the issue of quality of life. Bio-culture also promotes a redefinition of the concept of profit, whereby profit will be evaluated in conjunction with a new system of economic values and environmental preservation will play a key role in this effort.

Bios-Supporting Economic Strategies and a New Dimension of Profit

The world economy has currently reached the point of fundamentally revising its attitude towards the environment. This entails significant changes in the prevalent system of economic values as the key to economic prosperity in the future. The B.I.O. regards promotion of an environmental economy as an essential way to create a new deontology, leading to a revised code of ethics. As a result, the B.I.O. has been promoting the introduction of bios-oriented values into economic decision-making, and has been encouraging corporate leaders to channel their business activities in a way that respects the environment and benefits the continuity of bios.

In order to pursue environmentally compatible economic strategies, long-range policies, where the issue of quality of life will become a measurable item and not merely an abstract concept, are essential. Over-consumerism is not the answer, nor is sustainable development a sufficient solution. Safeguarding the environment needs to become a concrete asset of every nation's prosperity. Within this framework, financial success needs to be reassessed, on the basis of improving living conditions on the entire planet and contributing to the most challenging task of reversing destructive trends. Moreover, the concept of profit has to be redefined, in order to include dimensions of inner wealth, preservation of natural resources as a measurable part of a nation's prosperity, better health and the protection of biodiversity, which constitute a "genuine" profit for society.

Regulation is a priority, whether it comes in the form of taxation, legislation or education. Furthermore, global mobilization is crucial and public participation, on both a local and international level, can provide the necessary incentives for the establishment of world-wide, bios-

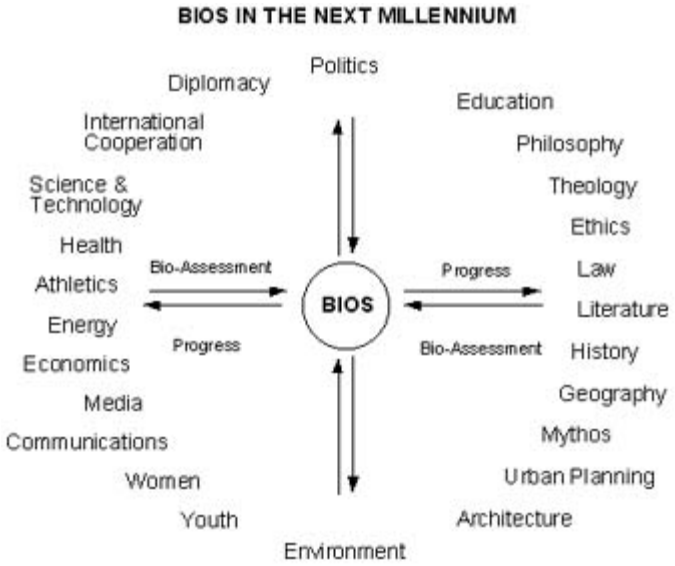
supporting policies. Modern technology and scientific breakthroughs constitute powerful tools, resulting in many opportunities for business and leading the way to a new societal structure. It is therefore essential to guide this progress towards a positive direction and apply a millennium vision to decision-making and policy-planning, in order to preserve the earth for the generations to come.

Bio-Education for a Global Responsibility

In the search for new models and a new vision for the future, an integrated biocentric education, that secures lifelong environmental literacy for every citizen in the world, is a necessary vehicle for the successful furtherance of a global appreciation of bios. The International University for the Bio-Environment (I.U.B.E.), launched by the Biopolitics International Organisation in 1990, promotes a model bio-education, by introducing interdisciplinary educational reforms, on a world-wide basis. Information technology break-throughs, such as satellite communication and the Internet, are considered among the most important tools for the timely realization of this project.

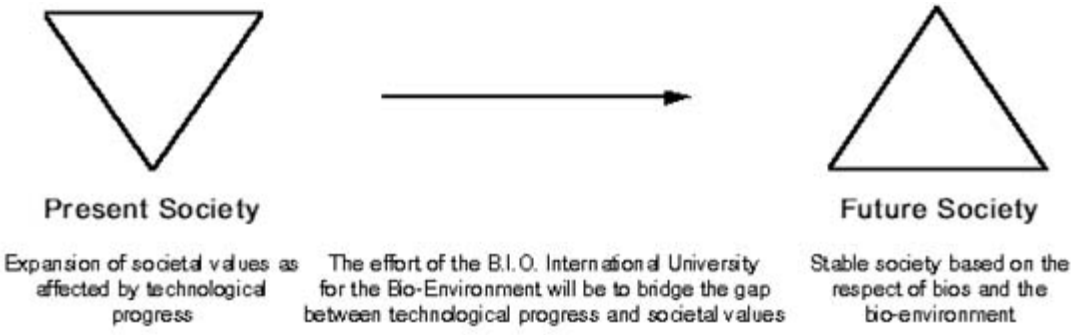
Recently, the I.U.B.E. acquired permanent headquarters in the park of Rodini, on the island of Rhodes, Greece. This offers the possibility for the dynamic implementation of I.U.B.E. goals and the acceleration of the I.U.B.E. Visiting Scholars Program, whereby leading educators and decision-makers from around the world will inseminate existing educational institutions with new bios promoting values. The aim is for the I.U.B.E. site at Rodini to become a world-caliber center for the development of multidisciplinary environmental concepts, outside the confines of conventional environmental science, leading to a revised educational system for the entire planet. Major goals of the I.U.B.E. include:

- international educational reforms, and promoting an efficient, global bio-education, through the Internet and the use of satellites and other communication links
- basic core of educational curricula and incorporating interdisciplinary elements into all educational programs, with the hope of making bio-environmental education the major link among all disciplines in all nations
- international cooperation for environmental protection, leading to a new era of bio-diplomacy
- international legislation on bios rights
- bios-related dimensions to business and management concepts world-wide
- incentives for business leaders, political decision-makers and the general public to elaborate on a new strategy compatible with the interests, needs and values of the bio-environment
- up the framework for New Economic Strategies, compatible with environmental preservation
- an international campaign for Environmental Olympics and awarding Bios Prizes to "individuals or institutions that have contributed to the preservation and appreciation of the bio-environment"
- public opinion to the ramifications of the biological sciences
- an international bio-assessment of technology, so as to ensure technological and economic progress that support the bio-environment



Bio-Assessment of Technology

Present society resembles an inverted pyramid, with human rights representing the tip and technology expanding the unstable base. This imbalance could be changed if we "re-invert" the pyramid and place bios rights as the wide base of our society. Human rights will then occupy the stable tip of the structure.



A world-wide bio-assessment of technology can contribute towards bridging the gap between technological progress and societal values. Progress may be viewed through the scope of Bios in the Next Millennium and retain positive aspects that help in the preservation of the bio-environment. In a dialectic exchange of views, experts in respective fields will be asked to present a thesis and antithesis, and then create a synthesis of new concepts. Emphasis will be placed on identifying ways of reducing negative environmental impact, so as to truly benefit from the contributions of technological breakthroughs.

Greece can be the ideal meeting place for people from all disciplines to convene and assess progress in their respective fields. Every corner of the country may represent a separate field, depending on its cultural contribution. Delphi could be the place for philosophers to convene and propose future values for society. Patmos, the island of the Apostle John, may serve as the meeting place for theologians to examine the effects of technology on religion. Olympia may serve for the assessment of athletic values, Kos for Medicine, Rhodes for Tourism, Ikaria for Aeronautics and Thraki, the birthplace of Demokritos, for the Physical Sciences. Mythology, history and tradition, as well as modern technology, may combine and provide a future based on the harmonious coexistence of all forms of life.

However, in addition to a theoretical approach, action needs to be taken, in order to apply technological progress towards preserving the environment. It is therefore necessary to:

- develop new curriculum materials for all educational levels, as well as audio-visual materials on issues related to bios and the bio-environment
- introduce a positive feeling among the unemployed, by paying a Green Salary instead of benefits, and having the unemployed engage in environmental projects (tree-planting, resource recovery, recycling etc.)
- generate environmental action groups, utilizing both the enthusiasm of the young and the experience of senior citizens, to tackle local issues
- establish local Genetic Banks, as a means for protecting biodiversity
- encourage the establishment of a clearing-house as a means to provide a network of people wishing to cooperate on bios related issues
- establish a computerized Bank of Ideas in which any interested individual may express their thoughts and create a rich source of information and reflections on bios
- elicit the cooperation of the media, so that a news bulletin on the bio-environment may become a regular item on news programs, in the same way that weather and stock-market reports already are
- organize a World Referendum so as to allow people throughout the world to express their willingness to preserve bios on our planet

The Changing Role of Communication Technology

Communication technology offers, without doubt, major business opportunities for the future, in addition to having a most crucial social impact. Of the many factors responsible for shaping modern society, Media and Communications are perhaps the most potent. As a result, communication technology can become the vehicle with which to inseminate society with new biocentric thinking, and provide a world-wide multidisciplinary exchange of information promoting appreciation of the bio-environment as the core component of every human endeavor.

We are moving into a truly interdependent world, where communication is vital to development. Information technology can bring the world together. Mass media has the power to influence and the power to educate, and this power should be applied to guarantee peace and international cooperation, eliminating isolation and division. It also has the potential to raise the necessary global awareness of the urgent need to take action against environmental destruction and abuse. International bio-education through satellite communication can be one of the many ways of applying this potential, in order to achieve environmentally literate global citizens. Such projects, in addition to providing direct and efficient exchange of information, can allow for world-wide simultaneous participation in the attempt to preserve bios on our planet. Meanwhile, as a more immediate plan of action, the B.I.O. has been proposing the introduction of a news bulletin on the bio-environment, as a regular item on news programs, in the same way that weather and stock-market reports already are.

A New Pathway for Democracy

As humanity enters the next millennium, the issue of bios will grow in complexity. More than just the appreciation and protection of the bio-environment, in all its varied manifestations, humanity will have to confront fundamental moral, legal and political dilemmas resulting from cumulative technological advancements. These advancements could be life-enhancing or life-threatening depending on our ability to understand their various implications, as well as our readiness to preserve the common good. The urgent task ahead is to inform the public regarding these challenges, so as to be morally and mentally prepared to face the uncertainties ahead.

In this crucial endeavor, it is essential to have global participation. Up to now, even in democratic regimes, citizens rarely speak out as a majority and are often overshadowed by the presumptuous attitudes of arrogant minorities. Present breakthroughs in the field of communication technology can provide the opportunity for the public to be actively involved in issues concerning our daily lives and be able to cast a vote, anytime, through computer networks and other communication link-ups, which can make immediate feedback possible from any corner of the globe. A proposed World Referendum on the commitment to protect the bio-environment can be the manifestation of such an attempt, with many more dimensions to follow. These dimensions can open up new pathways for a participatory democracy, where opinions will be actively expressed and politicians will no longer be able to evade their responsibilities.

In order to avoid a robot-like, mechanistic society, human creativity needs to be channeled towards an inspired and productive "renaissance." Technology, coupled with a sound system of values, provides ample opportunities for growth and can lead to the blossoming of the human spirit. As we are traversing an electronic era, telecommunications will inevitably shape the future of our society. It is therefore imperative that we apply the full potential of these new tools to guarantee a society made up of responsible and affected citizens.

Investing in the Bio-Environment - A New Source of Business Opportunities

Bio-Tourism

Tourism can be among the most important and profitable industries of any nation. As modern technology is continuously contributing to making traveling easier and more affordable, new possibilities for tourist development are opening up all over the world. This development, however, should not be carried out at the expense of the environment, which unfortunately often seems to be the case. We all need to realize that the environment can be a tourist attraction in itself. After all, the most sought-after tourist sites world-wide are those located in areas of exceptional natural beauty. Nevertheless, tourism and environmental protection are invariably regarded as incompatible projects.

In an effort to raise awareness of the importance of incorporating environmental protection as an essential dimension in every aspect of economic and intellectual endeavor, the B.I.O. wishes to draw attention to the concept of bio-tourism, a profitable and efficient way of caring for the environment, while pursuing new opportunities for tourist development. More than just a conventional catering service, bio-tourism sets an example of how environmental preservation is becoming a necessity for successful business activity and may evolve as one of the most important aspects of a country's international image.

Green Salary

With current unemployment rates rising and governments forced to allot significant portions of their budgets for covering unemployment benefits, the time has come to seriously consider viable alternatives to counter the situation. The B.I.O. has been promoting the introduction of a Green Salary for the unemployed, with the commitment to work for the protection of the bio-environment. Projects could include tree planting, city cleanup, recycling, resource recovery and many other similar constructive activities. This Green Salary can help elicit a positive feeling among the unemployed, in addition to providing new opportunities for work and aiding the attempt to lower unemployment levels. Moreover, businesses could be granted special tax deductions when providing opportunities for the unemployed to be involved in environmental projects.

Genetic Banks

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, the 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 coordinated 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 the bio-environment. 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.

Bank of Ideas

The rapid growth of information technology opens up new pathways and expands the boundaries of human thought. However, the current environmental crisis is shaking the very foundations of our private and public existence. Ethical values, societal structure, and national and international issues have to be reexamined with reference to the new perspectives of modern society. Bios and the bio-environment can therefore become the new focal points for a reassessment of priorities in society and the development of new models and new thinking for the future.

Up to now, only a privileged few had the opportunity of making their reflections and ideas available on a wider basis, and valuable contributions from less prominent individuals are forever gone. In order to allow for every individual to express and document their thoughts, the B.I.O. has been promoting the establishment of a computerized Bank of Ideas in which scientists, scholars and philosophers, as well as any interested party, may deposit their thoughts and create a rich source of information and reflections on bios. This depository would be available to future generations, in order to serve as a treasury of material for the development of society in the years to come.

Bio-Diplomacy - Investing in "Defense for Bios"

Present threats to bios are international problems. The required solutions entail the development plans of action for peace and international understanding. International cooperation may lead to a new era for the diplomatic world; the era of bio-diplomacy. Nations will no longer be at war with each other but, with environmental destruction and abuse. Foreign policy may thus shift from a fragmented, competitive framework to a vision of unity and interdependence.

Bio-diplomacy recognizes that cultural differentiation constitutes the wealth of the body of humanity. Furthermore, humanity is part of the overall body of bios, where DNA, the genetic code for every living organism, is the link connecting all forms of life. Trees, the source of oxygen on our planet, can be considered the "lungs" of the body of bios. Damage to the lungs is not an isolated event but results in the whole body suffering. These unifying concepts will be promoted as the primary consideration of bio-diplomacy which will be involved in enhancing international cooperation on environmental issues and will actively support all efforts to protect and maintain biodiversity. At the same time, bio-diplomacy will seek to improve human relations and attain the goal of world peace, by replacing current diplomatic attitudes with a complete international and intercultural perspective.

To encourage international cooperation on the bio-environment, the world needs to stop investing in war and start investing in the preservation of bios and the bio-environment. Competition for ways to destroy, should become cooperation for ways to save. Without interfering with vested interests, the greatest challenge for the 21st century should become the development of new ways of channeling current defense protocols so as to adopt the principle of defense for bios as the number one national and international priority.

Presently, enough incendiary weapons exist to destroy the earth several times over. Our planet is the only planet we know of where life exists. What purpose will it serve to wipe it out just to satisfy greed and over-consumerism? We need to realize that the real enemy is the depletion of the ozone layer, pollution, ignorance, starvation and disease. We cannot escape this planet. Billions of dollars have been invested in trying, while in the meantime life on our planet is jeopardized by our irresponsibility and pursuit of short-term satisfaction. While the B.I.O. respects space research and does not desire to limit its progress, it is evident that, at least in the foreseeable future, space travel cannot guarantee our survival.

It is thus imperative to take on a common responsibility to reverse destructive trends, and work towards preserving the bio-environment for the future. Many of these trends are due to short-sighted approaches adopted in decision-making processes. In order to curb environmental destruction and secure the continuity of life on our planet, decision-makers need to realize that respecting bios is crucial to the survival of humanity, and therefore policies ought to be developed and implemented with the intention of promoting harmony and coexistence among all forms of life.

Applying available financial and human capital, to invest in soil and water resources, in pollution prevention and in the development of recycling technology, will not only lead to a successful promotion of cleaner production and environmental management, but will result in a critical reassessment of assumptions and a new corporate strategy to meet the demands of an increasingly environmentally-conscious society.

Environmental Olympics - Bios Prizes - Athlos as an Intellectual Achievement

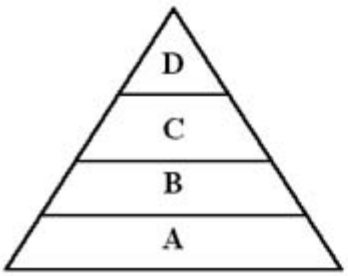
In the quest for new societal values for the next millennium, revival of the ancient Olympic spirit can contribute the necessary dimensions of unity and harmony to the development of every aspect of human endeavor. The Olympic Games, held in Greece for over ten centuries, constituted important political and cultural events, promoting a unifying vision of peace, kinsmanship and reconciliation.

Currently, the Olympic Games, a beacon of world peace and hope, award medals only for physical prowess. Moreover, the concept of athletics is synonymous with sports and feats of the body. Yet we should be reminded that the term athletics comes from the Greek word athlos, meaning achievement. Therefore, athletics encompasses all possible achievements of humanity, whether physical or spiritual. It is thus important that the concept of athletics regains its original significance and becomes redefined, on the basis of a new system of values.

The bios theory embraces the spirit of harmonious development, both mental and physical. People should not confine themselves to striving for excellence in sporting events only. In order to promote the bio-assessment of technology and a global bio-culture for the new millennium, the Biopolitics International Organisation has been proposing the creation of multidisciplinary international committees, assigned with the responsibility of assessing progress and awarding Bios Prizes to individuals, or institutions, that have significantly contributed to the preservation and appreciation of the bio-environment.

At present, international competitions take place in various fields, such as music, poetry, theater and scientific research. However, these competitions represent a fragmented view of human achievements. In order to re-establish the harmony and unity behind all expressions of human creativity, an overall recognition and award of achievement in sports, arts, and science may be carried out simultaneously, every four years, on the occasion of the Olympic Games. For example, legislators could be awarded for developing new legislation regarding bios rights; architects, for having worked in the construction of "biopolis" models; corporate leaders, for including environmental protection in their business activities. Prizes could be awarded in several disciplines, such as ethics, legislation, economics, business, theology, architecture, diplomacy, or philosophy, with the hope to eventually include all human accomplishments.

Example: Bio-Business



A. Global business community to nominate candidates
B. Leading CEO's to receive nominations and propose up to 150 candidates for award
C. Elected 30 member International Committee to select 15 nominations
D. 3 member International Committee to award 3 Bios Prizes

The Olympiads should be periods of world peace and occasions for all citizens of the world to celebrate the unifying concepts brought forth by the Olympic spirit. At the same time, the global community can be sensitized to the value of a harmonious co-existence as a vehicle for achieving a better quality of life. As a result, the B.I.O. has been proposing the revival of the ancient ideal of cease-fire during the Olympics. The hope is that the bio-environment will act as a unifying force for peace, leading to a new social structure, where respect for bios will be at the core of every action and thought.

The Periodic Table of Economic Science

On the threshold of the third millennium, science and technology have expanded the horizons of human understanding. They have allowed the exploration of the macrocosmos and the microcosmos and have revealed a whole new world of discovery and insight. However, this explosion of knowledge has created a serious crisis of values in society, which is quickly leading humanity to an impasse. It is therefore essential to search for new values and a new vision for the future, elements urgently needed in order to face the challenges ahead. A critical reassessment of current assumptions will hopefully lead to the world-wide acknowledgment that environmental preservation is a prerequisite for a stable and harmonious global society.

In view of this pending reassessment of assumptions, economic science must seriously contemplate the inclusion of concepts that are currently considered abstract and qualitative. It is necessary to develop sound indicators for the formation of financial policies, taking into account the need to preserve natural resources and retracing environmental impact. The issue of quality of life needs to assume top priority, as well as health, happiness, inner wealth, culture and education. These elements, which are excluded from conventional theory of finance, need to become the framework for the new economics of the 21st century. Environmental preservation is inextricably linked to economic progress. Preserving the wealth and beauty of the bio-environment, securing the health of the earth's population, and guaranteeing equal educational opportunities for every country in the world can be a source of genuine profit, both monetary and social. Economics will need to be upgraded to a comprehensive science, in order to eliminate negative stereotypes of fragmentation and mutual exclusion. The study of the intricate relationships between economics and all the varied manifestations of our natural and cultural heritage can provide the missing elements for an integrated understanding of economic phenomena, thus leading to the formation of the Periodic Table of Economic Science, much like the periodic table of elements in chemistry, that the Russian chemist D.I. Mendeleyev drafted more than a century ago.

In devising the periodic table, Mendeleyev captured the order of the universe. Not only was he able to classify known elements and describe their properties in detail, but managed to accurately predict the existence and properties of elements discovered many years later. Even though

the periodic table was framed more than a century ago, it still remains the most important single correlation of chemistry, permitting us to deal with the great variety and diversity of nature.

The diachronic aspect of Mendeleyev's table is as important today as it ever was. If we view our future as a periodic chart, then we can begin to search for ways to enrich it and fill all the empty spaces with new values and a constructive vision. Modeling the periodicity of chemical properties in vertical and horizontal patterns, led to the discovery of the order and clarity of science. A vertical and horizontal classification of priorities in society reveals their interdependence and can lead to a harmonious future.

Electronic structure, which forms the basis of the periodic table, conveys the concepts of energy and potential. Similarly, priorities in society need to be classified according to their positive contribution towards uplifting values and human potential. This potential can be applied to enrich our society with a better understanding of biological and cultural diversity. Waves of energy and light, waves of communication, can bring us together as a global community to decide on a joint pathway for the future. New ethics have to govern our action and thought, in order to make full use of the benefits of economic progress and eliminate destructive trends.

Today, we have the wisdom to control economic progress and we should apply it to its full extent. We can use the knowledge gained to improve our quality of life and improve the world for the generations to come. We can fill all the empty spaces of our periodic table with the beauty and wealth of cultural and historical diversity and build a positive framework for the future. Once economic science acknowledges the urgency of reevaluating its role with reference to a long-term, global financial policy, it will be more efficient in answering to the challenges of the next millennium. Once business leaders acknowledge the urgency of protecting bios, they will be more successful in fulfilling the needs of the enterprise, the community, the country and the world.

Dr. Agni Vlavianos-Arvanitis founded B.I.O. in 1985, after having dedicated over 20 years to teaching and research in biology. In 1990, she launched the International University for the Bio-Environment and, in 1992, a campaign for Bios Prizes and cease-fire during the Olympics. A recipient of many high distinctions, she was elected, along with M. Gorbachev, N. Mandela and M. Strong, Honorary President for Life by the UNA of Sri Lanka, and is also an Abdi Ipekci Peace and Friendship Prize laureate. She is Vice President of the International Bioethics Society, Member of the *Journal of Cleaner Production* Advisory Board, Member of the Board of Trustees of the Uganda National Foundation for Research and Development, Vice President of the UNESCO-MAB Hellenic National Committee, Commissioner on the Global Commission to Fund the UN, Corresponding Member of the Pontifical Academy for Life, Member of the New York Academy of Sciences, the International Academy of Ecology, Human and Nature Safety Sciences, the Hellenic Philosophical Society and the National Society of Greek Writers. Author of poetry books, she is also Honorary Professor of St. Petersburg State University for Plant Polymers and *Doctor Honoris Causa* of Mendeleyev University. In 1995 she was nominated for the Nobel Peace Prize, a nomination renewed in 1997, 1998, 1999 and 2000.