Proceedings

Volume 7

International Conference on Environment : Survival and Sustainability

Organized by Near East University

**Published By:** EDUCATIONAL FOUNDATION OF NEAR EAST UNIVERSITY

Near East University, tefkosa, Turkish Republic of Northern Cyprus Tel: +90 392 223 64 64

Fax: +90 392 223 64 61

e-mail: [info@neu.edu.tr](mailto:info@neu.edu.tr)

web: [www.neu.edu.tr](http://www.neu.edu.tr)

**Citation: Gok~eku~, H., 2009 (Editor) Proceedings of the International Conference on Environment: Survival and Sustainability.** Nicosia (Lefkosa),

Turkish Republic of Northern Cyprus: Educational Foundation of

Near East University. 10 volumes, LXXVI, 5498, XIV pages.

**Copyright:** Reproduction of this Publication for Educational or other non-commercial purposes is authorized without prior permission from the copyright holder. Reproduction for resale or other commercial purposes prohibited without prior written permission of the copyright holder.

**ISBN:** Volume 1: 978-975-8359-53-0

**Disclaimer:** While every effort has been made to ensure the accuracy of the information contained in this publication, the EDUCATIONAL FOUNDATION of the NEAR EAST UNIVERSITY will not assume liability for any use made of the proceedings and the presentation of the participating organisations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

**Printed by:** Near East University Tel: +90 392 223 64 64 Fax: +90 392 223 64 61



**Editor:** Prof. Dr. Huseyin GOKCEKUS Near East University

Lefkosa,

Turkish Republic of Northern Cyprus [*ghuseyin@neu.edu.*](mailto:ghuseyin@neu.edu.) *tr.* [*gokcekushuseyin@gmail.com*](mailto:gokcekushuseyin@gmail.com) *Tel/Fax: 00 90 392 223 54 27*

**Members of the Editorial Board:**

AnwarNASIM

Aysel YONT AR Cyro Do VALLE Derin ORHON

Elchin KHALILOV Giovanni BARROCU Gunnar TELLNES JimLAMEROX

Pakistan TRNC Brasil Turkey Azerbaijan Italy Norway USA

Konstantin V. SUDAKOV Russia

Luc HENS Belgium

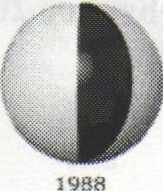
Mtmur OZTURK Turkey

Reinhold STEINACKER Austria

Tarzan LEGOVIC Ulric ROTT UmutTURKER Omit HASSAN Vedat DOYURAN Walter KOFLER Zekai SEN

III

Crotia Germany TRNC TRNC Turkey Austria Turkey



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

CONTENTS

Pages

Editor/Members of the Editorial Board III

Preface VII

Acknowledgments VIII

Organizing Committee Members IX

International Advisory Board Members X

Scientific Committee Members XIII

Messages XVII

·Message from Dr. Suat i.Gunsel, Honorary President of the Conference ·Message from Prof.Dr. Huseyin Gokcekus, President of the Conference

Opening Speeches XIX

·Prof. Dr. Dmit Hassan, Rector of Near East University, TRNC

·Prof.Dr. Huseyin Gokcekus, President of the Conference & Organizing Committee, TRNC ·Rahmi Ko9, Honorary Chairman & Founding Member ofTURMEPA, TURKEY

-Esref Cerrahoglu, Chairman of Executive Board ofTURMEPA, TURKEY

·Cemal Bulutoglulan, Mayor, Turkish Municipality of Lefkosa, TRNC

-Asim Vehbi, Minister of Environment and Natural Resources, TRNC

·Tahsin Ertugruloglu, Leader of the National Unity Party(UBP), TRNC

·Assoc. Prof.Dr. Turgay Avci, Deputy Prime Minister & Minister of Foreign Affairs ofTRNC -Turkekul Kurttekin, Turkish Ambassador to Lefkosa, TRNC

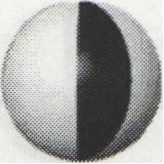
·Ferdi Sabit Soyer, Prime Minister ofTRNC

·Prof. Dr. Ekmeleddin Ihsanoglu, OIC Secretary General ·Mehmet Ali Talat, President of TRNC

Final Report of the International Conference On Environment: Survival and

Sustainability XXXIX

v



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

1986

List of Papers and Posters XLIII

Papers and Posters

Volume 1: MT-1: Business and Environment: Redefining Interests 1

Volume 2: MT-2: Conservation and Management of Biodiversity 187

Volume 3: MT-3: Cultural Heritage and Environmental Factors 769

Volume 4: MT-4: Economics, Development and Sustainability 1043

Volume 5: MT-5: Energy and Development: New and Renewable Energy 1673

MT-6: Environment and Health 1953

Volume 6: MT-7: Environmental Awareness, Education, and Lifelong Leaming 2369

MT-8: Environmental Knowledge and Information Systems 2615

MT-9: Environmental Law and Ethics 2807

MT-10: Environmental Organizations: Roles, Problems and Prospects 2895

Volume 7: MT -11: Environmental Science and Technology 2923

MT-12:Global Warming: How Much of A Threat? 3607

Volume 8: MT 13 -Green Factor In Politics 3785

MT-14: Integrated Water Resources Management. 3847

Volume 9: MT-15: International Relations and Environmental Issues 4367

MT-16: Literature and Environmental Awareness 4527

MT-17: Natural and Man-Made Disasters: Emerging Link and Challenges 4587

MT-18: Pesticides In The Environment and Food Commodities 4741

MT-19: The Role of Media: Problems and Challenges 4809

Volume 10: MT-20: Seas, Ecological Balance, and Sustainable Environment. 4915

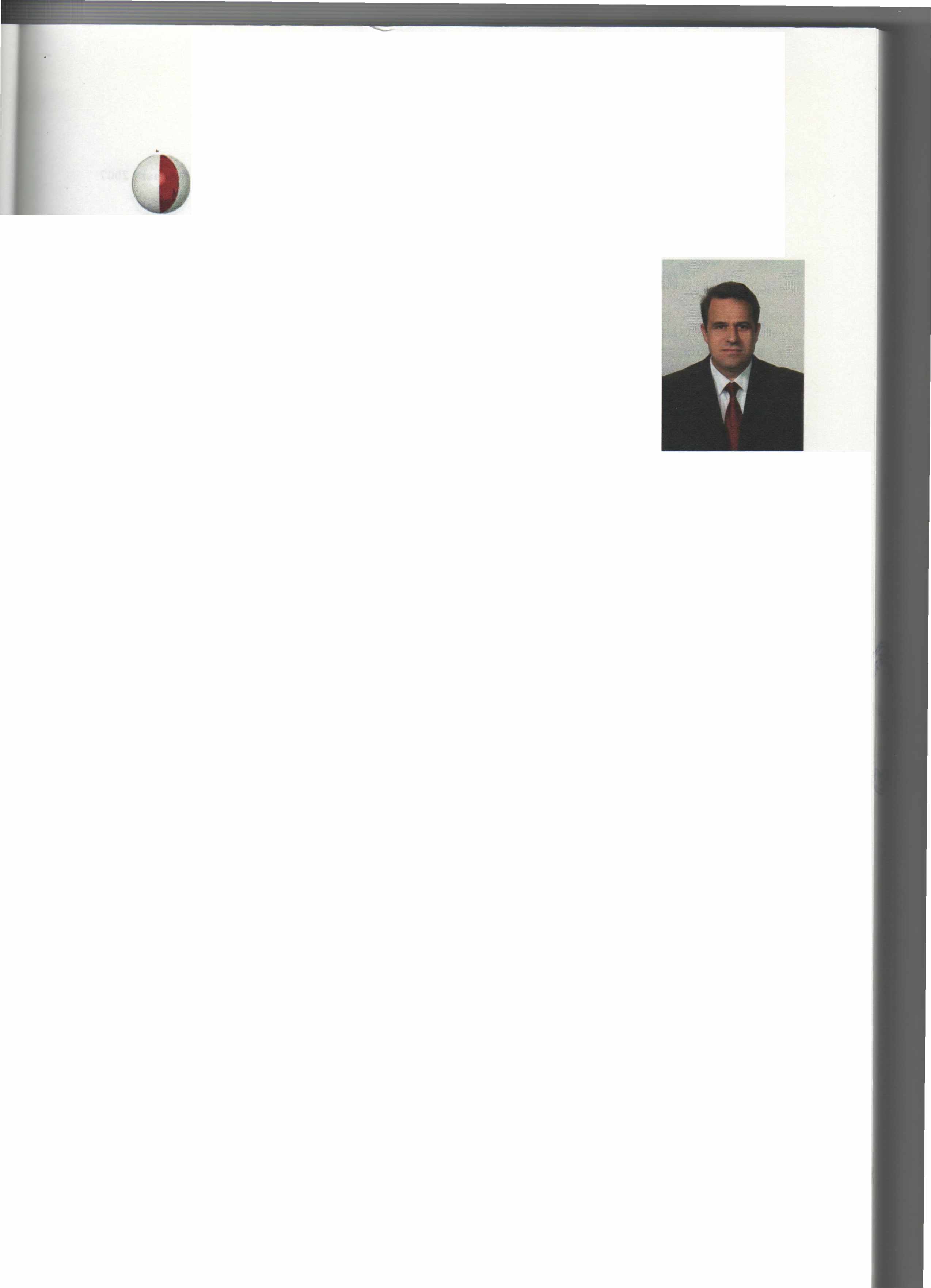
MT-21: Social and Psychological Dimensions of Environmental Issues 5117

Index I

Brief Information About Near East University XI

Brief Information About Turkish Republic of Northern Cyprus XV

VI



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

1998

**PREFACE**

Creating a sustainable and a healthy environment is one of the most important global issues facing mankind today. Therefore, serious consideration should be given to environmental problems and concerted efforts should be made worldwide in order to respond and prevent present and future environmental risks and challenges.

The International Conference on Environment: Survival and Sustainability (ESS 2007) organized by the Near East University between the dates 19 and 24 February 2007 was held in Lefkosa, Turkish Republic of Northern Cyprus. The main objective of this multidisciplinary conference was to gather scientists from all over the world to discuss the overall issue of the environment, to find out sustainable solutions for environmental problems and to identify areas for future collaboration in this matter. The conference brought together 2,052 participants from 108 different countries. During the conference a total of 1,463 papers were presented under 21 different subtopics, representing various scientific disciplines. The topics included environmental law and ethics, environmental knowledge, technology and information systems, media, environmental awareness, education and lifelong learning, the use of literature for environmental awareness and the effects of the green factor in politics and in international relations.

The Scientific Committee of International Conference ESS2007 evaluated all of the 1,463 papers and selected among them 610 papers to be included in The Proceedings of Environment: Survival and Sustainability. The readers will notice the wide range of topics represented by the papers included in the Conference Proceedings.

It is hoped that this book will serve to contribute to increase in awareness towards various environmental issues as well as drawing more attention to the urgency of international cooperation and collaboration in pursuing sustainable environmental management.

Prof. Dr. Huseyin Gokcekus

President of the Conference and the Organizing Committee Vice Rector of the Near East University

Lefko~a-TRNC

18 February 2009

VII



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

1988

**ACKNOWLEDGMENTS**

The Organizing Committee of the ESS2007 Conference would like to extend its sincere appreciation to Dr. Suat Gi.insel, the Founding Rector of the Near East University, to Prof. Dr. Ekmeleddin lhsanoglu, General Secretary of the Organization of Islamic Conference and to Prof. Dr. Walter W. Kofler, President of ICSD/IAS for their significant support and encouragement in the conference.

Appreciation is also extended to the chairpersons, the keynote speakers and the presenters of papers in the conference.

We are deeply grateful for the members of the editorial board who have carefully read and recommended the papers for publishing.

We also wish to express our gratitude to numerous individuals for their valuable contribution to the editing process.

Prof. Dr. Hi.iseyin Gokcekus

President of the Conference and the Organizing Committee Vice Rector of the Near East University

Lefko~a-TRNC

VIlI

International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

19!lf!

**ORGANIZING COMMITTEE MEMBERS**

Honorary President

Dr. Suat i. GUNSEL, Founding Rector of the Near East University

President

Prof. Dr. Hiiseyin GOK<;EKUS, Vice Rector of the Near East University

Members

Prof. Dr. Umit HASSAN, Rector of the Near East University Prof. Dr. Aysel YONTAR

Dr. Hatice GOK<;EKUS (M.D.) Asst. Prof. Dr. Umut TURKER Asst. Prof. Dr. Mesut YAL VA<; Asst. Prof. Dr. Rifat RESATOGLU Asst. Prof. Dr. Mehmet OKCAN Asst. Prof. Dr. Dudu OZKUM Asst. Prof. Dr. Salih GUCEL

irfan GUNSEL

Giirdal HUDAOGLU

Havva ARSLANGAZi

Tiimer GARiP

AlpOZERK

Ahmet SA V ASAN

Nesrin MENEMENCi

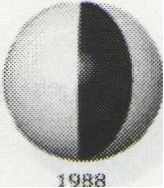
Sakir ALEMDAR

Zebra BASARAN

Temel RIZZA

Emel TOZLU ASLAN Sifa ABiK

IX



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

INTERNATIONAL ADVISORY BOARD MEMBERS

A. I., OLAYINKA A., JAGADEESH Abdul, KHA.KEE

Abdullahi Elmi, MOHAMED

Agustin Gonzales Fontes de, ALBORNOZ Ajmal, KHAN

Aleh, RODZKIN

Alex, CHENG

Ayman Abou, HADID Ane, DONMEZER Aziz, ERTUN<;

Belay, TEGENE Cagatay, GULER Dana, KOLEVSKA Ed, BOLES

Elizabeth, GONZALEZ Elizabeth, THOMAS-HOPE Ersi, ABACI KALFOGLU Filiz, DILEK

Furkat, KHASSANOV Gaudelia A., REYES George, CONSTANTINOU George, PETRIDES Giinay, KOCASOY

Guntis, BRUMELIS Halime, PAKSOY Hallvard, ODEGAARD

Nigeria India Germany Somalia

Spain Pakistan Belarus

USA Egypt Turkey Turkey Ethiopya Turkey Macedonia Belize

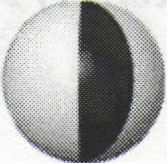
Uruguay

Jamaica

Turkey Turkey Uzbekistan Philippines Cyprus Cyprus Turkey Latvia

Turkey Norway

x



|  |
| --- |
| Turkey |
| Turkey |
| Bahrain |
| Qatar |
| Turkey |
| Belgium |
| Namibia |
| Malawi |
| Morocco |
| Malaysia |
| Turkey |
| Jordan |
| Spain |
| Netherland |
| Zimbabwe |
| Guyana |
| Iran |
| Jordan |
| Lebanon |
| Turkey |
| Turkey |
| Turkey |
| Turkey |
| Palestine |
| Palestine |
| Austria |
| Armenia |
| Ireland |
| Turkey |
| Turkey |
| XI |

International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

l98~

Hasan, ERTEN Hunay, EVLIYA

Ibrahim Abdel Gelil Said, ABDULA Ibrahlm S., ALNAIMI

irfan, GUNEY

Jaco, V ANGRONSVELD Joe, LEWIS

John, SAKA

Lyoussi, BADIAA

M. Nasir, SHAMSUDIN Mahmut Parlak, TUNA Mannar, FAYYAD Manuel Benito, CRESPO Marcel, STIVE Margaret, ZIMBA

Mark, BYNOE

Mohsen, HOSSEINI Moneef R., ZOU'BI Mutasem, EL-FADEL Neset, KILIN<;ER Nilkhet, TURGUT Orban, ALT AN

Peyman, Y AL<;IN Qasem Abdul, JABER Ramzi, SANSUR Reinhold, STEINACKER Renee, RICHER Richard, MOLES

Safak, URAL

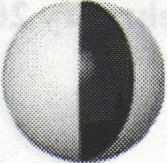
Selim, KAPUR



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

|  |  |
| --- | --- |
| 1968 |  |
| Serpil, OPPERMAN | Turkey |
| Seval, SOZEN | Turkey |
| Sevgi, SARYAL | Turkey |
| Skender, OSMAN! | Albania |
| Songiil A., V AIZOGLU | Turkey |
| Tarzan, LEGOVIC | Croitia |
| Tetsuo, YUHARA | Japan |
| Tuluhan, YILMAZ | Turkey |
| Turan, OZTURAN | Turkey |
| Umit, ERDEM | Turkey |
| Valentina, Y ANKO-HOMBACH | Canada |
| Waleed Khalil, ZUBARI | Bahrain |
| Yigal, RONEN | Israel |
| Zekai, SEN | Turkey |
| Zohra Ben, LAKHDAR | Tunisia |

XII



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

1Q8H

SCIENTIFIC COMMITTEE MEMBERS

Ferid, MURAD - Nobel Laureate Richard R., ERNST - Nobel Laureate Yuan T., LEE - Nobel Laureate

USA

Switzerland

Taiwan

A.H.,ZAKRI

Ahmad, MARRAKCHI Alexey Arkady, VOINOV Andrea E., RIZZOLI Andrew, BROOKES

Anne, BUTTIMER Anthony J., JAKEMAN Anwar, NASIM

Barry W., WILSON

Bjarne Bruun, JENSEN Branimir, JOV ANCICEVIC Charles N ., ALPERS

Dan C.C., GALERIU

David A., ST AH

Derin, ORHON

Elchin, KHALILOV

Eric, JOHNSON

Esteban G., JOBBAGY Fabian M., JAKSIC

Farhat M., ALI Frederick.LB., KAY AN JA Gabriele, VOIGT Galip,AKAY

G-C.,FANG

Malaysia Tunisia

USA

Switzerland Australia

Ireland Australia Pakistan

USA

Denmark

Serbia and Montenegro USA

Romania

USA

Turkey Azerbaijan Switzerland Argentina Chile

Pakistan

Uganda Austria

UK

Taiwan

XIII



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

l9!J8

Geoff, BERTRAM George G., LUNT Gerald, LALOR Germano, MW ABU Giovanni, BARROCU Girja K., SHUKLA Gopal B., THAPA Hanwant B., SINGH Hartmut, FRANK Heila, LOTZ-SISITKA Helen, SCHNEIDER Hillel S., KOREN Hiromi, YAMASHITA Holmes, ROLSTON Hruska, JAKUB

Irena, TW ARDOWSKA Isfaq, AHMAD J.F.Santos, OLIVEIRA James, DEVILLERS Jaroslav, BOHAC Jennifer, BROWN Jianping, WU

Jim C., BRIDEN

John, DAISH

John, GREGORY

John, HOSKINS

Judith T., ZELIKOFF Jyrki, LIESIVUORI Kaku,NOKOE

Kenneth N., TIMMIS

|  |
| --- |
| New Zealand |
| UK |
| Jamaica |
| Kenya |
| Italy |
| India |
| Thailand |
| USA |
| Germany |
| South Africa |
| South Africa |
| USA |
| UK |
| USA |
| Chezch Republic |
| Poland |
| Pakistan |
| Portugal |
| France |
| Chezch Republic |
| New Zealand |
| China |
| UK |
| New Zealand |
| UK |
| U.K |
| USA |
| Finland |
| Ghana |
| Germany |
| XIV |

International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

Kristine, W ALRAEVENS Kyaw Tha, PAW U Kyoung-Woong, KIM Luc, HENS

M. Shamsher, ALI Mamdouh, NOUH Manzoor, QADIR Marcel, ARNOULD Marcial, BLONDET Martha C., MONROE Mary, SEELY Mehmet, ERGIN Michael, WILHELM Miiniir, OZTURK Muthana, SHANSHAL Nairn H., AFGAN

Nicholas, MASCIE-TAYLOR Nicholas, ORNSTON Norhayati Mohd, TAHIR Pall, HERSTEINSSON Patricia, MAURICE

Paul W., JOWITT

Paulo B., LOURENCO

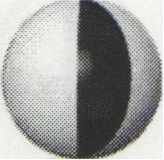
Peter, BRIMBLECOMBE Peter, KRUMBIEGEL

Peter, NOV AK

Philip E., LAMOREAUX Philip M., FEARNSIDE Ravi, JAIN

Richard, ROBINS

|  |
| --- |
| Belgium |
| USA |
| Korea |
| Belgium |
| Bangladesh |
| UAE |
| Syria |
| France |
| Peru |
| USA |
| Namibia |
| Turkey |
| Germany |
| Turkey |
| Iraq |
| Portugal |
| UK |
| USA |
| Malaysia |
| Iceland |
| UK |
| UK |
| Portugal |
| UK |
| Germany |
| Slovenia |
| USA |
| Brazil |
| Australia |
| France |
| xv |



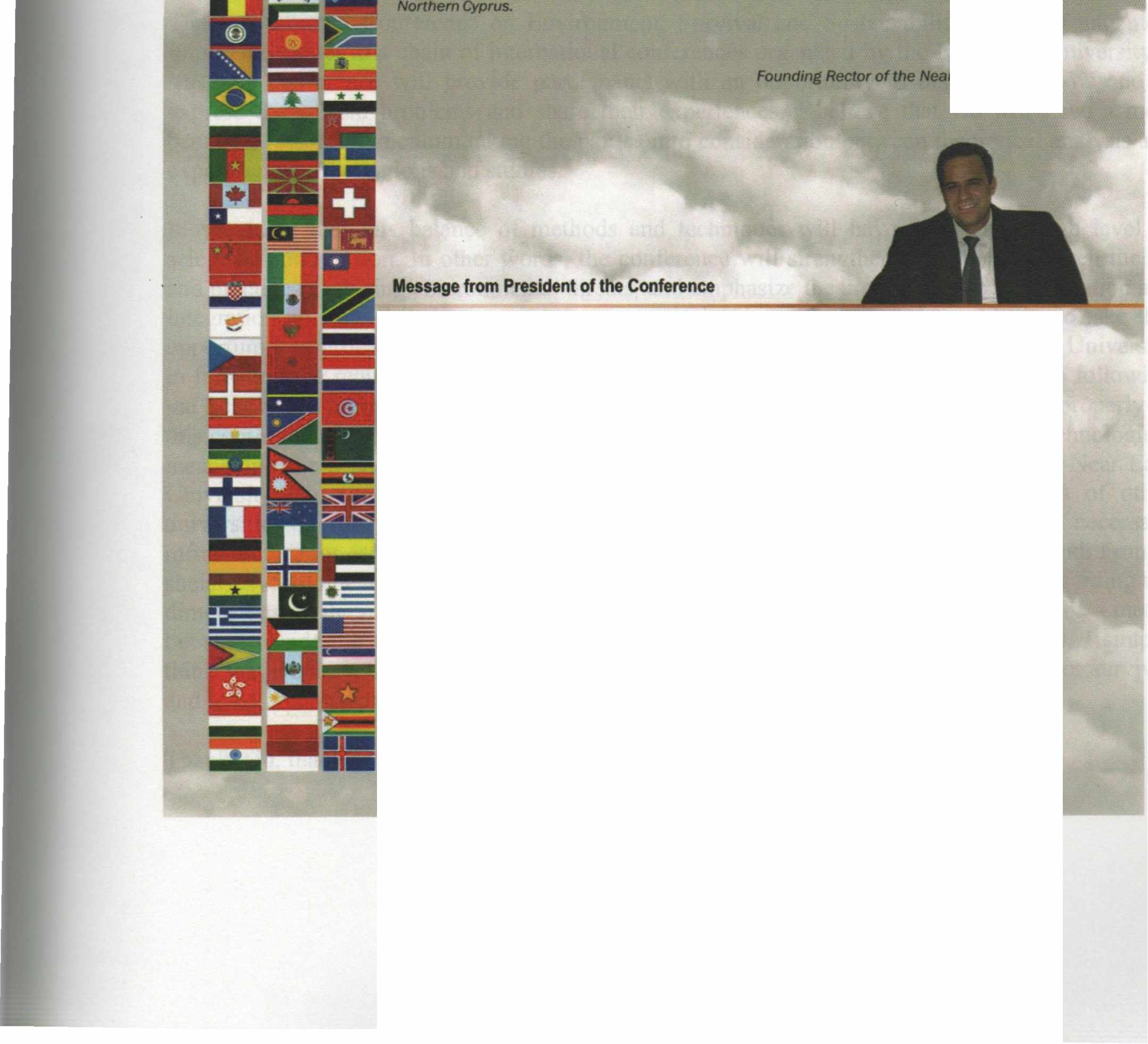
International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus

|  |  |
| --- | --- |
| 1988 |  |
| Robert J., LETCHER | Canada |
| Robert, GIFFORD | Canada |
| Roberto, DANOV ARO | Italy |
| Saffa B., RIFFAT | UK |
| Sam,KACEW | Canada |
| Sandor,.KERE.KES | Hungary |
| Scott, SLOVIC | USA |
| Sevket, DURUCAN | UK |
| Shafiqul I., BHUIYAN | Bangladesh |
| Shahamat U., KHAN | USA |
| Shian-chee, WU | Taiwan |
| Siaka, SIDIBE | Mali |
| Stephen P., MCCARTHY | USA |
| Tarzan, LEGOVIC | Croatia |
| Tomasz, ZYLICZ | Poland |
| Ulric, ROTT | Germany |
| Vedat, DOYURAN | Turkey |
| Victor G., PRIETO | USA |
| Walid A., ABDERRAHMAN | Saudi Arabia |
| Walter, KOFLER | Austria |
| William.J., MANNING | USA |
| Wiranto, ARISMUNANDAR | Indonesia |
| Zhihong, XU | Australia |

XVI



International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus



*It* gives me *the utmost pleasure in welcoming you all to the lflflemational Conference* • *Environment: Survival and Sustainability" here* at *the Near East Unltlerslty* In *Tlllf<Jsh Republic of* Northern C)'ptus ID *be held* at *19-24 February* 2007.

The c:onl8f'elice aimed at *brlnflfllt together more than 2,000 scholars and researchers from over* 90 countries *lllOUlld* the *world* IO *discuss* envlt'onlnental issues *from a variety of perspectives;* iindetllne rtNtImportance *of* the *need for UIJ(enCy in taking steps by the intemationat* Of.......,..., --. *local* authorlries *and non-governmental organizations to* move *to a* sustelnable 8flWDr.menVdellelopment*model; and* thereby makes *Its contribution to worldwide debate effort on* .,.,\_,,..,,llilfChe brldfe .between tlleot)I *and* practJce *In* meeting *environmental threats/challenges.*

Since *our* last *lnlematlonal* cordMNICe on *environment. "EIMtonmentel* Problems *of* the Mediterranean *Regions•, worldwldaetMrorlmental disasters• well• local-~ mu/flplled and environmental degradation and polluflon has continued.* Whlle majorltrides INMI a-n made In the *world* In *analyzing. understandiflll and Informing* the *pub/le* **8llout** Ille ~ cllaHenges *we are facing. we* st/II *have* a IOnilf way to go. *Our way at* life Is *still far from•* ***8Ultaltlllble*** model *and our environment continues to degrade and deteriorate due* to *human activities. The* consequences *can be* seen *In worldwide environmental disasters* as *well* as *locally* In *our dally* /Ives.

*This* Is *fOlfll to be our third lntematiollal conference on Environment organized by our youn.r university* since *It* was *estBblished In 1988.*

Yours sincerely, **Pref.Dr . .....,...~** *Jlice Rector of the Near East Universitv*

XVII



**International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus**

**VOLUME7**

**MT-11: ENVIRONMENTAL SCIENCE AND TECHNOLOGY**

ALTERNATIVE PATH ON SEWERAGE SYSTEM; CONDOMINIAL METHOD AND ITS APPLICATION

Umut Turker, Majed Hamad Abu Zahrah, Hiiseyin Gokcekus - NORTHERN CYPRUS *(Oral)* 2923

SALINITY-ALKALINITY & POLLUTION PROBLEMS IN THE GEDIZ BASIN~TURKIYE

Munir Ozturk, Serda! Sakcah, Hakan Bahadir, Guven Gork, Miisliim Beyazgiil - TURKEY *(Invited)* 2935

AMBIENT AIR PA TTICULA TE DRY DEPOSITION POLL UT ANTS (METALLIC ELEMENTS, IONIC SPECIES) STUDY IN TAIWAN

Guor-Cheng Fang - TAIWAN *(Invited)* 2943

SOLID WASTE MANAGEMENT IN THE DEVELOPING COUNTRIES: A CASE STUDY IN TURKEY

Giinay Kocasoy-TURKEY *(Invited)* 2971

MANAGEMENT OF HAZARDOUS ROAD DERIVED RESPIRABLE PARTICULATES USING MAGNETIC PROPERTIES OF TREE LEA YES.

K. Prajapati, B.D. Tripathi- INDIA *(Oral}* 2983

RAPID MEASURMENT OF APPLE VINEGAR'S ADDED SODIUM MET AB I SULFITE BY A NEW ULTRASONIC METHOD

Gokhan Savaroglu, Filiz Savaroglu -TURKEY *(Oral)* 2989

RECLAMATION OF SODIC SOILS THROUGH VERMITECHNOLOGY

Abdullah Adil Ansari - TURKEY *(Oral)* 3003

USING OF THE LIGNOSULFONATES: FERTILIZERS

Ali Riza Dernirkrran -TURKEY *(Oral)* 3013

MODELING THE AEROBIC BIO-OXIDATION STAGE OF AN INDUSTRIAL WASTEWATER TREATMENT PLANT USING ANFIS AS A SOFTWARE SENSOR

G. Civelekoglu, A. Perendeci, N.O. Yigit, M. Kitis-TURKEY *(Oral)* 3019

REMOVAL OF COBALT ION FROM AQUEOUS SOLUTIONS BY LIGNOSELLULOSICS MODIFIED WITH PAN

Mustafa Karaboyaci, Fethiye Gode, Aziz Sencan, Mustafa Cengiz - TURKEY *(Oral)* 3027

A STUDY ON APPLICATION OF DIFFERENT DI SOLVED OXYGEN (DO) VARIATIONS IN SEQUENCING BATCH REACTOR

Engin Giirtekin, Nusret Sekerdag - TURKEY *(Oral)* 3037

MICROALGAE REMOVAL FROM SYNTHETIC WASTEWATER BY TILAPIA (OREOCHROMIS NILOTICUS AND OREOCHROMIS AUREUS)

Ahmet Yuceer, Olcayto Keskinkan - TURKEY *(Oral)* 3043

BIOREMEDIATON OF CD(II)-CONTAMINATED KAOLINE BY RHAMNOLIPID BIOSURFACTANT

Yeliz A~91, Macid Nurbas, Yesim Sag Acikel - TURKEY *(Oral)* 3051

PROPOSAL FOR A SOLID WASTE MANAGMENT SCHEME FOR THE TURKISH REPUBLIC OF NORTHERN CYPRUS

Selnur Ucaroglu, Mustafa YILDIRIM, Ipek Yilmaz, Orhan Kucukgul, Biilent Topkaya - NORTHERN CYPRUS *(Oral)* · 3059

A STUDY ON RECOVERY AND RECYCKLING OF USEFUL MATERIAL IN LEATHER TANNING INDUSTRY

Hafiz Moghira Badar, Ahmad Khan, Fatima Batool - PAKISTAN *(Oral)* 3069

LXII

**International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus**

COMPARISON OF THE METALS CONCENTRATIONS IN ATLANTIC HORSE MACKEREL, TRACHURUS TRACHURUS, FROM COASTAL WATERS OF TURKEY

Aysun Turkrnen, Yalcin Tepe, Mustafa Tiirkmen, Alpaslan Ates, Kutalmis Gokkus -TURKEY 3081

EFFECT OF TOTAL AMMONIA NITROGEN CONCENTRATION AND pH ON GROWTH RA TES OF LEMNA MINOR

Yalcm Tepe, Mustafa Tiirkmen, Yalcm Tore, ElifKuzu -TURKEY *(Oral)* 3089

SEQUENTIAL (ANAEROBIC- AEROBIC) TREATMENT OF CHEESE WHEY

Cansu Filik lscen, Semra Ilhan -TURKEY *(Oral)* 3097

DECADES OF TIN MINING IN JOS PLATEAU NIGERIA AND A LEGACY OF IMPOVERISHED AGRICULTURAL LAND AND HIGH RADIOACTIVE ELEMENTS: AN OVERVIEW OF INFRASTUCTRAL NEGLIGENCE

N.N. Jibiri- NIGERIA *(Oral)* 3105

PARTICULATE MATTER AND P AH POLLUTION IN ON INDUSTRIAL TOWN: DILOV ASI CASE

Aytug Sivashgil, Pmar Kus -TURKEY *(Oral)* 3119

AN INTEGRATED PREVENTIVE PRODUCTION PLANNING PROGRAM WITH WASTE MINIMIZATION

SedefElker, Sibel Uludag-Demirer-TURKEY *(Oral)* 3127

LEVELS OF HEAVY METALS IN WATER AND FISH (CARASOBARBUS LUTEUS HECKEL, 1843) WERE SAMPLED FROM GOLBASI LAKE, HATA Y, TURKEY.

Ayse Bahar Yilmaz, Mustafa Dogan - TURKEY *(Oral)* 3139

IMPACTS OF SOLUTION PH ON ARSENIC REMOVAL BY NANOFIL TRA TION AND TIGHT-UL TRAFIL TRATION MEMBRANES

Evrim Celik, Jaeweon Cho, Zhang Yang, Eunkyung Lee, Sungyun Lee, Mehmet Kitis -TURKEY, KOREA, KOREA, KOREA,

TURKEY (Oral) 3149

NONDESTRUCTIVE TEST TO TACK POLL UT ANT TRANSPORT INTO LANDFILL LINERS

A. Bezzar, F. Ghomari, H. Q. Wang-ALGERIE, FRANCE *(Oral)* 3157

INVESTIGATION OF BIOACCUMULATION OF COPPER AND NICKEL IONS BY RHIZOPUS DELEMAR

Dosal Acikel, Tugba Alp - TURKEY *(Oral)* 3169

COMPARISON OF BIOACCUMULATION AND BIOSORPTION OF COPPER IONS BY CANDIDA LIPOLYTICA

Dosal Acikel, Tugba Alp-TURKEY *(Oral)* 3177

ENVIRONMENTAL IMPACTS OF FLY ASHES FROM THERMAL POWER STATION

S.A. Kadioglu, A. Balci, A. Demirak, E. Tilkan - TURKEY *(Oral)* 3187

PLANTS, BRYOPHYTES, EPIPHYTIC MICROORGANISMS AND FUNGI AS BIOINDICATORS OF AIR POLLUTION

Marilena Onete, Mihaela Pauca-Comanescu, Joana Gomoiu, Sorin Stefanu], Daniela Sincu > ROMANIA *(Oral) 3197*

IMPORTANCE OF RAPID MIXING *1IME* ON SLUDGE DEWA-TERING PROPERTIES

S. Sam, M.A. Yukselen - TURKEY *(Oral)* 3213

TOLUENE INHIBITION OF AN ANAEROBIC REACTOR SLUDGE IN TERMS OF ACTIVITY AND COMPOSITION OF

ACETOCLASTIC METHANOGENS - - .,

O.Ince,M.Kolukirik, Z.<;::etecioglu, O.Eyice, N. Ayman Oz, Ozgul Inceoglu, B.Ince *-TUR:KEY""(Oral)* 3227

CLEAN DYEING TECHNOLOGY WITH BASIC NATURAL DYE ON COTTON FABRICS USING ULTRASONIC TECHNIQUE

M.M Kamel, H.F. Mansour, H. M. Mashaly, A.A.Haroun - EGYPT *(Oral)* 3237

ADDRESSING SYNERGIES BETWEEN CHEMICAL SAFETY AND SUSTAINABLE PRODUCTION AND USE OF CHEMICALS

Sulejma Cehic - SLOVENIA (Oral) 3251

LXIII



**International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus**

ACUTE TOXICITY OF MERCURIC CHLORIDE ON RAINBOW TROUTS AND CHUBS

Billent Verep, E. Sibel Besli, llhan Altinok, Cengiz Mutlu -TURKEY *(Oral)* 3267

REMOVAL OF COLOUR FROM INDUSTRIAL WASTEWATER

D. Mohan, S. Sarkar, K. Ankur "- INDIA *(Oral)* 3279

•... - -·

APPLICABILITY OF PHOTOCA T AL YTIC OXIDATION PROCESS TO EFFLUENT"OF THE COMBINED WAS TEW ATER TREATMENT PLANT

Ayla Arslan -TURKEY (Oral) 3291

TRACE ELEMENT CONCENTRATIONS OF LICHENS NEAR SEYITOMER COAL-FIRED POWER PLANT

Filiz Gur, Gunseli Yaprak-TURKEY *(Oral)* 3301

REMOVAL OF TOXIC COPPER AND MANGANESE IONS FROM LEFKE-GEMIKONAGI DAM WATER

Selahattin Gokmen, Nilay Taser -TURKEY, NORTHERN CYPRUS *(Oral)* 3313

DEVELOPMENT AND ENVIRONMENTAL POLLUTION IN TURKEY AND IN KOCAELi

Savas Ayberk - TURKEY *(Oral)* 3319

ZOOPLANKTON COMPOSITION AND WATER QUALITY OF LAKE GOLBASI (HATAY-TURKEY)

Yalcm Tepe, Ahmet Bozkurt-TURKEY *(Oral)* 3325

THE SUSTAINABILITY OF WASTE DISPOSAL: POLLUTION OF UNDERGROUND WATER BY LEACHATES FROM OLD BURDENS (DUMPSITE)

Sokefun Olusola Bolarinwa - *NIGERIA(Oralj* 3343

NOISE AS AN INFLUENTIAL ENVIRONMENTAL PROBLEM.CASE STUDY: LEVELS OF DISTURBANCE BY ROAD TRAFFIC NOISE IN THE CITY OF NIGDE.

Lale Guremen, Cahit Tagi Celik - TURKEY *(Poster)* 3353

RECOVERY OF ZINC FROM QUARTZ BY RHAMNOLIPID BIOSURFACTANT

Yeliz A~91, Macid Nurbas, Yesim Sag Acikel -TURKEY *(Poster)* 3359

DRAINAGE GEOCHEMISTRY AND ENVIRONMENTAL IMPACT OF THE WHITTLE COALFIELD AREA, NORTHERN UK

Leyla Kalender - TURKEY *(Poster)* 3365

PROTECTION OF MARBLE USING BIODEGRADABLE POLYMERS

Yilmaz Ocak, Aysun Cakan Sofuoglu, Funda Tihmmhoglu, Basak Ipekoglu, Hasan Boke -TURKEY *(Poster)* 3393

SOLID WASTE MANAGEMENT AT THE SOUTH-EASTERN BLACK SEA COASTLINE

Egemen Aras, Mehmet Berkun - TURKEY *(Poster}* 3401

UTILIZATION OF THE RESIDUAL BRINES OF WATER DEMINERALIZERS

N.A.Salimova, F.M.Sultanova, L.V.Huseynova - AZERBAIJAN *(Poster)* 3411

BIODEGRADATION OF AZO DYES

Jonstrup Maria, Blanques Paqui, Guieysse Benoit- SWEDEN *(Poster)* 3415

PLANT SPECIES OF CMC MINING WASTE AREA AND HEAVY MET AL ACCUMULATION

Gulriz Baycu - TURKEY *(Poster)* 3419

GALVANIC WASTE WATER TREATMENT WITH CHELATING MACROPOROUS COPOLYMER AT ST A TIC AND DYNAMIC CONDITIONS

Aleksandra Nastasovic, Antonije Onjia, Zvjezdana Sandie, Ljiljana Malovic, Sladjana Kljajevic, Dragana Dordevic, Dragica

Jakovljevic - SERBIA *(Poster)* 3423

LXIV

**International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus**

**1988**

THEORETICAL SUB ST ANITA TION OF PROCESS OF RECTIFICATION OF OIL-POLLUTED SOIL.

Hasanov G. S, Abdullaev F. Z, Latifov F.I. - AZERBAIJAN *(Poster)* 3433

THE USE OF PURIFICATION SLUDGE OF PAPER INDUSTRY IN AGRICULTURE

Gumus Funda Goki;:e - TURKEY *(Poster)* 3443

DETERMINATION OF SEA POLLUTION IN ALIAGA BAY, IZMIR, TURKEY:7-ETHOXYRESORUFIN 0-DEETHYLASE (EROD) INDUCTION IN LEAPING MULLET (LIZA SALIENS).

0. K. Ulutas, A. Sen, B. Tutuncu, t. Cok - TURKEY *(Poster)* 3459

EXAMINATION OF SOME PARAMETERS FOR ECOLOGICAL GROWTH OF MAIZE IN PELIC VERTISOL

I.Stoimenova, St. Alexieva, S. Stratirva, E. Djonova, A.Taleva, N. Kaloyanova - BULGARIA *(Poster)* 3465

DECOLORIZATION OF TEXTILE DYES BY A FILAMENTED FUNGUS ASPERGILLUS ORYZAE

Hatice Atacag Erkurt, Mustafa Ozyurt, Ayla Ozer-TURKEY *(Poster)* 3471

ADSORPTION OF CHROMIUM (VI) BY WOOL

Nilgiin Balkaya, Nilden Bektas -TURKEY *(Poster)* 3481

REMOVAL OF LEAD FROM AQUEOUS SOLUTIONS BY PHOSPHOGYPSUM TREATED WITH LIME

Nilgiin Balkaya, Hasan Cesur - TURKEY *(Poster)* 3495

DECOLORIZATION OF DRIMARENE BLUE K2-RL BY FUNALiA TROGII ATCC 200800 CULTURE FILTRATE IMMOBILIZED IN ALGINATE BEADS

Emrah A. Erkurt, Mehmet A. Mazmanci, Hatice A. Erkurt, Ali Unyayar -TURKEY *(Poster)* 3509

ZETA POTENTIAL: A NEW WATER TREATMENT AND THE ALUMINUM INDUSTRY

Luiz Antonio Ferrari, Romeu Rovai Filho - BRAZIL *(Poster)* 3517

SIMULATION OF AN ACTIVATED SLUDGE TREATMENT SYSTEM USING ASM AND ANFIS MODELS

G. Civelekoglu, N.O. Yigit, 0. Cinar, M. Kitis -TURKEY *(Poster)* 3523

TOXICITY ASSESSMENT OF METHYL TERT-BUTYL ETHER, TERT-BUTYL ALCOHOL AND FORMALDEHYDE USING REDUCED INHIBITION CONSTANTS

W. Cho, K. S. Cho, H. W. Ryu - SOUTH KOREA *(Poster)* 3533

A GRAPHICAL APPLICATION IN TREATMENT OF RESIDENT AL WASTEWATER BY THE ACTIVATED SLUDGE PROCESS

S. Serkan Nas, Adem Bayram-TURKEY *(Poster)* 3541

INVESTIGATION OF RADON RISK IN WELL WATER

Akkurt, H.A. Yalim, H. Akyildmrn.A. Akkurt, F.B. Ozdemir, R. Una!, A. Sandikcioglu -TURKEY *(Poster)* 3551

THE EFFECT OF SOLAR - COSMIC RAYS ON THE BACKGROUND RADIATION

L Akkurt, N.<;.Bezir, B. Mavi, H. Akyrldmrn, C.Yali;:m, F. Kulah -TURKEY *(Poster)* 3555

SEASONAL AND SPATIAL DISTRIBUTIONS OF THE METALS IN THE WATER, "SEDIMENT AND AFRICAN CATFISH, CLARIAS GARIEPINUS, FROM THE RIVER ASI (ORONTES) IN SOUTHERN EAST MEDITERRANEAN AREA OF TURKEY

Mustafa Tiirkmen, Evren Cahskan - TURKEY 3559

GEOSYNTHETIC MATERIALS USED IN WASTE CONTAINMENT SYSTEMS

Pelin Aklik-TURKEY *(Poster)* 3577

RADIONUCLIDE EMISSION FROM THE SEYiTOMER COAL-FIRED POWER PLANT AND THE POPULATION EXPOSURE TO EXTERNAL RADIATION IN ITS VICINITY

Filiz Gur, Giinseli Yaprak-TURKEY *(Poster)* 3585

LXV



**International Conference on Environment: Survival and Sustainability 19-24 February 2007 Near East University, Nicosia-Northern Cyprus**

**1988**

BIOMONITORING OF TRACE ELEMENTS OF ZINK AND MANGANESE POLLUTION BY THE BARK OF TURKISH RED PINE (PINUS BRUTIA) IN WESTERN ANATOLIA

Y. Dogan, N. Durkan, S. Baslar, H.Aydin - TURKEY *(Poster)* 3595

INDUSTRIAL SOLID Wf>.STE MANAGEMENT IN TURKEY ··

Basak Mesci, Osman Nuri Ergun -TURKEY *(Poster)* 3601

**MT-12:GLOBAL WARMING: HOW MUCH OF A THREAT?-**

DEVELOPING COUNTRIES AND THE CHALLENGE OF CLIMATE CHANGE

Ishfaq Ahmad - PAKISTAN *(Invited)* 3607

GLOBAL WARMING THREAT ON WATER RESOURCES AND ENVIRONMENT

Zekai Sen - TURKEY *(Invited)* 3623

TRENDS AND V ARIA TIO NS OF AIR TEMPERATURE AND PRECIPITATION SERIES IN NORTHERN CYPRUS

Murat Turkes, Faize Saris - TURKEY *(Oral)* 3657

CONTROL OF GHG EMISSIONS RESULTING FROM THE TRANSPORT SECTOR IN TURKEY

Cem Sorusbay, Metin Ergeneman, M. Aydm Pekin - TURKEY *(Oral)* 3669

REGIONAL CLIMATE CHANGE AND ITS IMPACTS FOR TURKEY

Mehmet Karaca, Ozan M. Gokturk, Omer Lutfi Sen, Baris Ono!, Tayfun Kmdap, Nuzhet Dalfes - TURKEY *(Oral)* 3679

GLOBAL WARMING AND CLIMATIC CHANGES IN PAKISTAN

Abdul Razzaq Ghumman, Muhammad Ali Shamim, Raza Ali - PAKISTAN *(Oral)* 3687

WHO PAYS THE BILL? - THE IMP ACT OF CLIMATE CHANGE ON REAL ESTA TE MARKETS

Sven Bienert Mrics - GERMANY *(Oral)* 3 707

SIGNAL AND TREND ANALYSIS OF TEMPERATURE SERIES: A TURKISH CASE

Mete Tayanc, Murat Dogruel, Ulas Im, Mehmet Karaca-TURKEY *(Oral)* 3723

INTERNATIONAL CLIMATE CHANGE POLICIES AND TURKEY

Deniz Babus, Muzaffer Yiicel - TURKEY *(Oral)* 3 735

EVALUATIONS ON FOREST RESOURCES MANAGEMENT OF NORTHERN CYPRUS AND NEW PLANNING APPROACH IN ACCORDANCE WITH SUSTAINABILITY AND CLIMATE CHANGE RISK

Said Dagdas, Riistem Kins -TURKEY *(Oral)* 3747

GLOBAL WARMING: HOW FAR A PROBLEM

Somlata Sharma - INDIA (Oral) 3759

MODELING METHANE EMISSION FROM <;ANAKKALE OPEN DUMPSITE AND ITS EFFECT ON GLOBAL WARMING: A LANDGEM USE APPROACH

Edip Avsar, Hasan Griksel Ozdilek-TURKEY *(Oral)* 3767

INTEGRATED APPROACH IN SEARCHING SUSTAINABLE DEVELOPMENT OPPORTUNITIES

Giuseppe Fumarola, Aniello Russo Spena - IT ALY *(Oral)* 3 777

LXVI

ear East University - TRNC Tel: +90 392 223 6464/460 Tel/Fax: +90 392 223 5427 [infnlmno11.edu.tr-www.neu.edu.tr](http://infnlmno11.edu.tr-www.neu.edu.tr)

*VOL 7: ISBN* 978-975-8359-59-2