

10th International Symposium
on

Environmental Pollution and its Impact on Life in the Mediterranean Region

October 2nd to 6th, 1999

ALICANTE - SPAIN

Organized by the
Mediterranean Scientific Association of Environmental Protection
- MESAEP -



In collaboration with:

University Joseph Fourier, GRECA, Grenoble, France
CSIC - Consejo Superior de Investigaciones Científicas, Sevilla, Spain
University Miguel Hernández, Elche, Spain
Techn. University of Braunschweig, Inst. of Ecol. Chem. and Waste Analysis, Germany
European Commission, JRC Ispra, Environment Institute, Italy
GSF- National Research Center for Environment and Health,
Institute of Ecological Chemistry, München, Germany
Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, Germany
Balkan Environment Association, Sofia, Bulgaria
CAM - Caja de Ahorros del Mediterráneo, Alicante, Spain

FINAL PROGRAMME

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Sponsored by

Ministère de l'Aménagement du Territoire et
de l'Environnement, Paris, France

Mayor of the City of Alicante, Spain

CAM - Caja de Ahorros del Mediterráneo, Alicante, Spain

GSF- National Research Center for Environment and Health,
Institute of Ecological Chemistry, München, Germany

Techn. University of Munich, Dept. of Chemical Technical Analysis and
Food Technology, Germany

Organization

Steering Committee	P. Foster (Univ. Grenoble), J. Navarro (M.H.Univ. Alicante), M. Bahadir (TU Braunschweig), J. Bartzis (RCD, Athens), W. Bergheim (GSF, Munich), J. Cornejo (CSIC, Sevilla), J. Mataix (M.H.Univ. Alicante), S. Michaelidou (Min. Health, Nicosia), K. Nikolaou (OMPEP, Thessaloniki), G. Pagano (Ist. Pascale Naples), A.B. Paya-Perez (JRC, Ispra), M. Saraci (TU Munich), F. Vosniakos (TEI Thessaloniki)
Scientific Board	M. Ammati (IAV, Rabat), P. Buurman (Univ. Wageningen), R. Caputo (Univ. Naples), A. Carlier (Univ. Paris 7), M. Catizzone (DG XII, EC, Brussels), H.J. Collins (TU Braunschweig), U. Dörfler (GSF, Munich), I. Ferrari (Univ. Ferrara), I. Gebefügi , (GSF, Munich), F. Gemirli-Bambuna (TU Istanbul), A. Ghazi (DG XII, EC, Brussels), C.F. Gökçay (METU, Ankara), E. Gonzalez-Pradas (Univ. Almeria), M.C. Hermosín (CSIC, Sevilla), H. Hornung (NIO, Haifa), P. Jamet (INRA, Paris), H. Kambezidis (NO, Athens), M. Karayannis (Univ. Ioannina), W. Karcher (JRC, Ispra), A. Kettrup (GSF, Munich), W. Klein (FhG, Schmallenberg), J.H. Koeman (Univ. Wageningen), F. Korte (TU Munich), D. Kotzias (JRC, Ispra), T. Kouimtzi (Univ. Thessaloniki), M. Lahaniati (RCD, Athens), E. Lahaniatis (TU Munich), J.P. Lay (DBU, Osnabrueck), G. Lebras (CNRS, Orleans), G. Leupold (TU Munich), F. Lobnik (Univ. Ljubljana), F. Manes (Univ. Rome, La Sapienza), M. Mansour (GSF, Munich), J.M. Martin (JRC, Ispra), M. Millán (CEAM, Valencia), P. Moza (GSF, Munich), D. Orhon (TU Istanbul), A. Panajotou (EERI, Ioannina), E. Papachristou (Univ. Thessaloniki), D. Papameletiou (JRC, Sevilla), H. Parlar (TU Munich), G. Pfister (GSF, Munich), A. Piccolo (Univ. Naples), G. Pilidis (Univ. Ioannina), G. Poulet (Univ. Orleans), B. Rubin (Univ. Jerusalem), M. Sanchez-Camazano (CSIC, Salamanca), K.W. Schramm (GSF, Munich), R. Schroll , (GSF, Munich), N. Sotiriou (GSF, Munich), M. Spittler (Univ. Kassel), L. Torres (TU Toulouse), R. Tsitouridou (Univ. Thessaloniki), G. Vasilikiotis (Univ. Thessaloniki), P. Vasseur (Univ. Metz), A. Virzo de Santo (Univ. Naples), R. Viswanathan (TU, Munich), F. Voutsinou-Taliadouri (NCMR, Athens), I. Vukadin (IOF, Split), P. Wallnöfer (LfE, Munich), S. Wolff (LfU, Munich), A. Yediler (GSF, Munich), C. Zerefos (Univ. Thessaloniki)

Organization

About the Symposium

The 10th International Symposium on “ Environmental Pollution and its Impact on Life in the Mediterranean Region” is being organized by the Mediterranean Scientific Association of Environmental Protection (MESAEP) in Alicante, Spain, from 2nd to 6th October 1999.

Since October 1979, MESAEP, a non-profit making association has been contributing to the improvement of the Euro-Mediterranean cooperation on environmental issues. The scientific network of the association is already operational over the whole Mediterranean territory and has intensified collaborative efforts to control and preserve natural resources, protect environmental and human health, and combat pollution, erosion, and desertification in the Mediterranean region. More informations on MESAEP activities can be found at the Internet address <http://www.gsf.de/mesaep>.

Previous symposia were held in Athens, Greece (1981), Crete, Greece (1983), Istanbul, Turkey (1985), Kavala, Greece (1987), Blanes, Spain (1989), Como, Italy (1991), Antibes, France (1993), Rhodos, Greece (1995) and S. Agnello di Sorrento, Italy (1997).

Objectives

The objectives of the symposium are to provide opportunities for scientists of different countries to:

- exchange recent results related to all kind of pollution in the Mediterranean Region,
- discuss current technological and/or legal measures to avoid or to reduce pollution,
- present suggestions and recommendations to the regulatory authorities on environmental quality and safety in the Mediterranean and other neighbouring countries.

Structure

The programme of the symposium will include plenary and keynote lectures as well as posters. Special focus will be devoted to the presentation of posters of original papers which will be discussed in full audience sessions. No parallel sessions are scheduled. Oral and poster contributions will be regarded as scientifically equivalent in the programme.

Each topic will be introduced by selected oral presentations. A slide projector and an overhead projector will be available. Special focus will be devoted to the presentation of posters of original papers which will be displayed in a separate room. Posters will be discussed in full audience sessions. The sizes of the display boards will be 1 m wide by 1.20 m high.

Information

Location The symposium will take place in the Aula de Cultura de la Caja de Ahorros del Mediterraneo (CAM), at the Street(calle): Doctor Gadea no.1, 03003 Alicante, Spain.
Tel.: +34.96. 5905639, Fax: +34.96. 5905820.

Registration: October 2nd, 1999, 16.00 - 19.00
October 3rd, 1999, 8.00 - 9.30

Registration fees	Non-Members	650 DM
	Members of MESAEP	550 DM
	Students	300 DM
	Accompanying persons	250 DM

The registration fee includes a final programme, a book of abstracts, hospitality desk, refreshments during the symposium, welcome parts, Gala-Dinner, social and cultural events. Accompanying guests will be entitled to all the above reception and activities.

Payment of registration fees should be made in German MARKS (DM) by Credit Card (VISA or EUROCARD/MASTERCARD) or by Bank Transfer made payable (please indicate MESAEP 99) to the order of:

MESAEP, account no. 6117220
Deutsche Bank, Schwabing Branch, Leopoldstr. 71, Munich,
Germany, Bank code 700 700 10

Language The official language of the symposium will be English.
No facilities will be provided for simultaneous translations.

Correspondence All correspondence until 20th of September should be addressed to:

Dipl.Ing. M. Saraci
Techn. University of Munich, Dept. of Chem. Techn. Analysis and
Food Technology, Weihenstephaner Steig 23, 85350 Freising -
Weihenstephan, GERMANY
Tel: +49-8161-713686, Fax: +49-8161-714418
E-Mail:saraci@gsf.de

After this date to:

Prof. Dr. J. Navarro or Prof. Dr. P. Foster
Caja de Ahorros del Mediterráneo, Doctor Gadea 1,
E-03003-Alicante, SPAIN
Phone: ++34965905639, Fax : ++34965905820
E-Mail: jnavarrob@medymed.cam.es

Travel Information Alicante is very well known mediterranean touristic city. It can be reached in the following ways:

1. By air. Alicante has an international airport linked daily with many european capitals. Moreover, there are several daily domestic flights in connection with the international airports of Madrid and Barcelona.
2. By train. Alicante main railway station can be easily reached by train from all over Europe.
3. By private transportation. Alicante is well connected to the rest of Europe by the a modern highways network. Is directly connected to France by the A-7 (E-15) highway, and with Madrid and other citys of Spain by several highways and roads.

Accomodation The Steering Committee suggest the following Hotels:

Hotel MELIA ALICANTE****

Playa del Postiguet, s/n, 03001 Alicante - Spain
Tel.: +34-96 520 50 00 Fax: +34-96 520 47 56
Single room about 13000 ptas
Double room about 15.000 ptas

Hotel HESPERIA***

Pintor Lorenzo Casanova, no.31
Tel:+34-96.5130440 (Miss Cristina)
Single room about 11.000 ptas
Double room about 13.000 ptas

TRYP GRAN SOL HOTEL****

Rambla Mendez Nuñez, no.3
Tel.+34-96.5203000
Single room about 11.000 ptas
Double room about 13.000 ptas

Please make your reservation directly by the hotel by yourself, indicating MESAEP, or contact your local travel agency.

**Instructions
for the
Preparation of
Posters**

In a poster session, simultaneous presentations are made by several persons. The presenter must be present for the specified time to engage in discussion with interested individuals. The poster should be well organized and, if possible, self-explanatory. Material should be displayed in logical sequence (introduction, development, conclusion).

The Conference will supply poster boards **approximately 1.2 m high and 1 m wide**. One Poster will be assigned for each presentation. It will be identified by a number corresponding to the number in the programme. A heading for the top of the poster space must be prepared, indicating title, authors and affiliation, using letters not less than **2.5 cm high**. Printing should be a minimum of 0.8 cm. Remember that illustrations and printing must be readable from distances of **1 m to 1.5 m**.

**Contributed
Papers**

Papers (in english, 6 pages maximum including tables and figures) of contributions (invited and volunteered, oral and poster) presented at the Symposium will be reviewed and published in the international journal FRESINIUS ENVIRONMENTAL BULLETIN. Detailed informations about the transmission of the papers will be given during the Symposium in Alicante.

**Instructions
for the
Preparation of
Manuscripts**

1. Manuscripts should be typed to one and a half spaces, using a black ribbon (blue ink cannot be reproduced) on good quality, white bond paper. The typist should ensure a clean, clear impression of the letters. It should be used only typewriter or laser-printer.
2. Any good quality paper may be used, provided the actual typing area is **18.0 cm by 26.0 cm**, the margins being provided during reproduction. Two photocopies should accompany the original.
3. The title should be all in capital letters, centred on the width of page 1 with the title at least 2 cm from the top of the typing area. After one line space, the authors name and address should appear double spaced, capitalizing the first letter of all main words. The author or authors to whom correspondence should be addressed by readers of the journal should be indicated by an asterisk.
4. The drawing of formulae, graphs and other figures should be included in the text, so as not to exceed the specified typing area. Illustrations may be in the form of glossy prints pasted into the appropriated place or else they may be carefully drawn in black ink on the typing paper in a size that will remain legible after a slight reduction. Again ensure that the caption does not become confused with the text.
5. **Abstract:** Authors are requested to include an abstract of 3-10 lines typed in single spacing. This must appear immediately after the address before the commencement of the paper.
6. **Key words:** Each abstract should be accompanied by up to six key words, which between them should characterize the paper.

Topics

Session I	Atmospheric Chemistry and Climate Changes
Session II	Ecotoxicology and Radioactivity in Water, Soil and Sediments
Session III	Biological and Chemical Aspects of Environmental Control
Session IV	Environmental Modeling, Management, Law and Education
Session V	Evaluation and Remediation of Soils and Water Quality
Session VI	Technologies for Treatment and Recycling of Wastes
Round Table	Toxic Spill of the Aznalcollar Mine on the Guadiamar River Area

Time Table

Saturday, Oct. 2nd, 1999

16.00-19.00 Registration

Sunday, Oct. 3rd, 1999

8.00 - 9.30	Registration
9.30 - 10.45	Inauguration and Welcome Addresses
10.45 - 11.00	Special Awarding
11.30 - 13.00	Main Lectures
15.00 - 19.15	Afternoon Session (Session I)
21.00	Welcome Party

Monday, Oct. 4th, 1999

8.30 - 13.00	Morning Session (Session II)
15.00 - 19.10	Afternoon Session (Session III)
21.00	Social Event in the Santa Barbara Castle

Tuesday, Oct. 5th, 1999

8.30 - 13.00	Morning Session (Session IV)
afternoon	Free
20.15	MESAEP General Assembly

Wednesday, Oct. 6th, 1999

8.30 - 12.20	Morning Session (Session V and VI)
12.20 - 13.30	Round Table
15.00 - 18.30	Afternoon Session (Session VI cont.)
18.30 - 19.15	Final Plenary Discussion
21.15	Final Cocktail

Sunday, Oct. 3rd, 1999, Morning

- 8.00 - 9.30** **Registration**
- Chairmen** P. FOSTER, J. NAVARRO, J. CORNEJO, S. MICHAELIDOU,
F. VOSNIAKOS
- 9.30 - 10.15** **Inauguration and Welcome Addresses**
- 10.15 - 10.45** Special Lecture
20 Years of MESAEP
D. Kotzias
European Commission, J.R.C. - Ispra, Environmental Inst.,
21020 Ispra, ITALY
- 10.45 - 11.00** **Special Awarding**
- 11.00 - 11.30** **Break**
- 11.30- 12.00** Plenary Lecture and Discussion
**Development of a Scientific Observational Network on European
River Basins and Coastal Zones**
C.N. Murray and G. Bidoglio
European Commission, J.R.C. - Ispra, Inst. f. Remote Sensing
Applications, 21020 Ispra, ITALY
- 12.00- 12.30** Plenary Lecture and Discussion
Chemical Safety: An International Issue
K. Ziegler-Skylakakis
Technical University of Munich, Inst. of Toxicology and
Environmental Hygiene, 80636 München, GERMANY
- 12.30- 13.00** Plenary Lecture and Discussion
**Environmental Perception of Italian and Five European Pupil
Populations (CH, D, DK, F, IRL)**
F.X. Bogner
Pedagogical University of Ludwigsburg, Inst. of Natural Sciences,
71634 Ludwigsburg, GERMANY

Sunday, Oct. 3rd, 1999, Afternoon

Session I	Atmospheric Chemistry and Climate Changes
Chairmen	M.I. KARAYANNIS, G. PAGANO, A.B. PAYA-PEREZ, J.P. SOLEILHAVOUP
15.00 - 15.25	Plenary Lecture and Discussion New Improvements in Tropospheric Multiphase Chemistry <u>P. Carlier</u> and A. Monod Universités Paris VII et XII, Lab. Interuniversitaire des Systèmes Atmosphériques, 9401 Creteil cedex, FRANCE
15.25 - 15.50	Plenary Lecture and Discussion Improving Air Quality in the Mediterranean Region: Challenges for the 2000s D. Kotzias European Commission, J.R.C. - Ispra, 21020 Ispra, ITALY
15.50 - 16.10	Plenary Lecture and Discussion Air Pollution in Restoration Environment: Evaluation of the Suitability of Products Used in Works of Art Field <u>S. Lorusso</u> , F. Prestileo, G. Occhini and F. Buonocore University of Bologna, Fac. di Conservazione dei Beni Culturali, 48100 Ravenna, ITALY
16.10 - 16.30	Plenary Lecture and Discussion First Data on Concentration Levels of Volatile Hydrocarbons in Urban Areas of Northern Greece <u>G. Vasilikiotis</u> , M. Lahaniati, J. Hatzianestis, A. Papadopoulos, A. Triandafyllou, F. Vosniakos and J. Bartzis University of Thessaloniki, Dept. of Chemistry, 54006 Thessaloniki, GREECE
16.30 - 16.50	Plenary Lecture and Discussion Simulation of the Physicochemical Processes in the Atmosphere <u>F. Roubani-Kalantzopoulou</u> , I. Bassiotis, Th. Artemiadi and S. Margariti National Technical University of Athens, Dept. of Chemical Engineering, Athens, GREECE
16.50 - 17.20	Break

17.20 - 18.20 Poster Session I**Chairmen**

F. DELMAS, E.S. LAHANIATIS, C. MORAIS, H. PARLAR

I 1 Sampling and Analysis of Organochlorine Pesticides in Ambient Air

I. Alonso Jimenez, R.J.W. Zwartjes and P.R. Kootstra
National Institute of Public Health and the Environment (RIVM), 3720
Bilthoven, THE NETHERLANDS

I 2 Analysis of Carboxylic Acids in the Atmosphere. Traces for the Identification of Anthropogenic Pollutants

C. Astorga, D. Baglio and B.R. Larsen
European Commission, J.R.C. Environmental Institute, 21020 Ispra
(VA), ITALY

I 3 Ozone Biomonitoring in a Rural Area Near Viterbo, Central Italy

C. Calfapietra, A.R. Paolacci, A. Burinello, M.R. Abenavoli and M.
Badiani
Università di Reggio Calabria, Dip. Agrobiologia e Agrochimica,
89061 Gallina di Reggio Calabria, ITALY

I 4 Traffic Noise Measurements in Thessaloniki

Y.I. Bamnios
T.E.I. of Thessaloniki, Dept. of Electronics, 54101 Thessaloniki,
GREECE

I 5 Concentration Levels of Non-Volatile PAHs on Particulate Matter in the Atmosphere of Athens

M. Lahaniati, T. Maggos, J. Hatzianestis, A. Bartzis and J. Bartzis
NCSR "Demokritos", Inst. of Nuclear Energy Radiation Protection,
15310 Ag. Paraskevi Attikis, GREECE

I 6 Influence of the Road Trips Distribution on the Thessaloniki Air Pollution

S. Basbas, K. Nikolaou and G. Toskas
University of Thessaly, Dept. of Civil Engineering, 38334 Volos,
GREECE

I 7 Tunable Diode Laser Absorption Spectroscopy of CH₄ - v₃ Band

M. Zghal, M. Saidi and Z. Ben Lakhdar
University of Tunis, Dept. of Physics, Tunis 1060, TUNISIA

I 8 The Effort of Explanation of the Atmospheric Heavy Metal Pollution in Bayrampasa District of Istanbul Via Source-Receptor Relationship

K. Alp, A. Bassari, E. Cital and E. Yuksel
Istanbul Techn. University, Environ. Engineering Dept., 80626
Maslak, Istanbul, TURKEY

- I 9 An Assessment of Atmospheric Pollution in Tirana (Albania)**
A. Cullaj, M. Vasjari, A. Tabaku and K. Shqau
University of Tirana, Fac. of Natural Sciences, Tirana, ALBANIA
- I 10 The Impact of Windbreaks in the Peat Soils of Maliq, Korca Region, Albania**
R. Damo and M. Saraci
University " Fan S. Noli" Korca, Dept. of Soil, Korca, ALBANIA
- I 11 Traffic Pollution Monitoring Using Lichens as Bioaccumulators of Heavy Metals and Polycyclic Aromatic Hydrocarbons**
M. Owczarek, M. Guidotti, G. Blasi, C. De Simone and A. De Marco
Istituto Sperimentale per lo Studio e la Difesa del Suolo, 02100 Rieti, ITALY
- I 12 A New Way of Measuring PAH's by Solid Phase Microextraction (SPME)**
L. Lassagne, P. Desuzinges, P. Baussand, V. Jacob and P. Foster
Université Joseph Fourier Grenoble 1, GRECA, 38000 Grenoble, FRANCE
- I 13 Atmospheric Study and Behaviour of New Component Used as Added Compound for Reformulated Gasolines: Ethyltoluene. Participation of this Product to the Formation of Ozone in the Troposphere**
V. Jacob, A. Colomb, P. Baussand, G. Pilidis and P. Foster
Université Joseph Fourier Grenoble 1, GRECA, 38000 Grenoble, FRANCE
- I 14 Realization of a Pilot Unit Using Circular Fluidized Bed Combustion of Coal. Study of the Temperature Influence in PAH Formation and NO/NO_x Production**
P. Baussand, L. Lassagne, V. Jacob and P. Foster
Université Joseph Fourier Grenoble 1, GRECA, 38000 Grenoble, FRANCE
- I 15 The Chemical Load of Size Separated Outdoor Particles**
I. Gebefügi, K. Wolf, J. Schnelle-Kreis and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
- I 16 Characterization of the Organic Compounds Deposited on Monument Surfaces**
B. Hermosin and C. Saiz-Jimenez
C.S.I.C., Inst. de Recursos Nat. y Agrobiologia, 41080 Sevilla, SPAIN

- I 17 Dry Atmospheric Inputs of Trace Metals Along the Mediterranean Coast of Israel**
B. Herut, R. Chester, M. Nimmo and M.D. Krom
Israel Oceanogr. and Limnol. Research, Nat. Inst. of Oceanography, 31080 Haifa, ISRAEL
- I 18 Air Pollution Impacts on Forests in Turkey**
M.D. Kantarci and M.Ö. Karaöz
University of Istanbul, Fac. of Forestry, Dept. of Soil Science and Ecology, Istanbul, TURKEY
- I 19 Measurements of Ammonia in Rural and Urban Locations in Bavaria, Germany**
M. Kirchner, S. Braeutigam, H. Römmelt and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
- I 20 Ten Years Trends of the Urban Air Pollution in Thessaloniki. Part I: The Primary Pollutants**
K. Nikolaou and N. Papadakis
Org. for the Master Plan and Environmental Protection of Thessaloniki, 54643 Thessaloniki, GREECE
- I 21 Ten Years Trends of the Urban Air Pollution in Thessaloniki. Part II: The Secondary Pollutants**
K. Nikolaou and N. Papadakis
Org. for the Master Plan and Environmental Protection of Thessaloniki, 54643 Thessaloniki, GREECE
- I 22 Heavy Metals in the Air in the South of Poland**
B. Nowak, A. Salamon, J. Kowol and R. Rochel
Silesian University of Medicine, Department of Toxicology, 421-200 Sosnowiec, POLAND
- I 23 Ryegrass Species as Biomonitors of Atmospheric Heavy Metals Emissions: The Integration of Chemical-Physical and Biological Techniques**
R. Caggiano, M. D'Emilio, M. Macchiato, M. Ragosta and S. Sabia
Università degli Studi della Basilicata, Dept. di Ingegneria e Fisica dell'Ambiente, 85100 Potenza, ITALY
- I 24 The Advanced Local Energy Planning Methodology (ALEP) for the Development of Air Quality Protection and recovery Plans - Case Study Basilicata Region (Southern Italy)**
C. Cosmi, E. Conte, V. Cuomo, M. Macchiato, L. Mangiamele, G. Marmo and M. Salvia
Università degli Studi della Basilicata, Dept. di Ingegneria e Fisica dell'Ambiente, 85100 Potenza, ITALY

- I 25 Impact of Autoexhaust on Cairo City Atmosphere**
A.A. Shakour, N.M. El Taieb and S.M. Kamal
National Research Center, Air Pollution Department, Cairo, EGYPT
- I 26 The Relationship Between the Concentrations of Heavy Metals and PAHs Associated with Ambient Aerosols**
S.M. Talebi and S. Maghsoudi
University of Isfahan, Department of Chemistry, Isfahan, IRAN
- I 27 In Urban Areas, Effects of Air Pollution and Local Climate on Acid Rain (Sivas, Turkey)**
L. Tecer
Cumhuriyet University, Environmental Eng. Dept., 58140 Sivas, TURKEY
- I 28 Lichens in Environmental Pollution Monitoring**
M. Owczarek, U. Tomati, C. De Simone and A. De Marco
C.N.R., Istituto di Biochimica e Ecofisiologia Vegetale, 00016 Monterotondo Scalo, Roma, ITALY
- I 29 Seasonal Measurements of Automobile-Induced Air and Noise Pollution in the City of Thessaloniki**
D. Prapas, J. Triandafyllis, F. Vosniakos and E. Sossidou
T.E.I. of Thessaloniki, Dept of Vehicles, 54101 Thessaloniki, GREECE
- I 30 An Analysis of Atmospheric Pollutants Concentration in Urban Area in Greece**
A.G. Triantafyllou, F. Vosniakos, A. Patra, J. Zoubourtikoudis and N. Zoumakis
T.E.I. of Kozani, Dept. of Geotech. and Env. Engineering, Lab. of Env. Physics and Technology, 50100 Kozani, GREECE
- I 31 Factors Affecting Chemical Composition of Atmospheric Particles in the Eastern Mediterranean and Black Sea**
G. Tuncel
Middle East Technical University, Dept. of Environmental Engineering, 06531 Ankara, TURKEY
- I 32 A Simple Method for Simultaneous Analysis of Reduced Sulfur Compounds in Ambient Air**
Ch. Vassilakos, Th. Maggos, J. Bartzis and P. Papagiannakopoulos
NCSR "Demokritos", Environmental Research Lab., Athens 15310, GREECE

- I 33** **Determination of the Height of the Polluted Layer in the Industrial Area of Thessaloniki, Greece Using Spectrophotometric Measurements**
N.M. Zoumakis, A.G. Kelessis, T.I. Kozyraki and F.K. Vosniakos
T.E.I. of Thessaloniki, Lab.of Atmospheric Physics, 54101 Sindos - Thessaloniki, GREECE

18.20 - 19.15 **Poster Session Discussion**

21.00 **Welcome Party**

Monday, Oct. 4th, 1999, Morning

Session II	Ecotoxicology and Radioactivity in Water, Soil and Sediments
Chairmen	M. MANSOUR, D. PAPAMELETIOU, M. SARAÇI, L. TORRES
8.30 - 9.00	Plenary Lecture and Discussion Ecotoxicological Testing of Effluents from Waste Disposal in Underground Mines <u>M. Bahadır</u> , G. Schrader and M. Wundram Techn. University of Braunschweig, Inst. of Ecol. Chem. and Waste Analysis, 38106 Braunschweig, GERMANY
9.00 - 9.30	Plenary Lecture and Discussion Metal Extractability of Some Soils of the Guadiamar River Basin Affected by Mine Wastes E. Diaz-Barrientos, <u>L. Madrid</u> and I. Cardo C.S.I.C., Inst. de Recursos Nat. y Agrobiologia, 41080 Sevilla, SPAIN
9.30 - 9.50	Plenary Lecture and Discussion Pollution from Dye Industry: The Implementation of Biological Methods Adjunct to the Chemical Ones for Early Identification of Emerging Pollution <u>St.C. Michaelidou</u> , M. Christodoulidou, E. Vatiliotou, P. Piera, E. Loizou and S. Nicolaou Ministry of Health, Environmental Chemistry and Ecotoxicology , 1451 Nicosia, CYPRUS
9.50 - 10.10	Plenary Lecture and Discussion Caesium-137 Distribution in the Eastern Mediterranean and Black Sea - Sources and Marine Pathways <u>H. Florou</u> , P. Kritidis, F. Vosniakos, J. Triandafyllis, R. Delfanti, C. Papucci, A. Cigna, G.G. Polikarpov, V.N. Egorov, A.S. Bologna and V. Patrascu NCSR "Demokritos" Inst. of Nuclear Energy Radiation Protection, Athens, GREECE
10.10 - 10.30	Plenary Lecture and Discussion Ecological Risk Assessment of Agrochemicals in Aquatic Environment <u>E.A. Feicht</u> , M. Mansour, K.-W. Schramm, A. Behechti and A. Kettrup GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
10.30 - 11.00	Break

11.00 - 12.00

Poster Session II**Chairmen**

E. ALONSO, D. KOTZIAS, C. MAQUEDA,
P. PAPAGIANNAKOPOULOS

- II 1 Optimal Use of Metam Sodium under Different Application Conditions**
M. Ammati and N. El Hadiri
University of Mohammed V, Agronomic and Veterinary Institute,
Rabat, MOROCCO
- II 2 Organotin Pollution in Deep-Sea Fish from the Northwestern Mediterranean**
V. Borghi and C. Porte
C.I.D.-C.S.I.C., Dept. of Environmental Chemistry, 08034 Barcelona,
SPAIN
- II 3 Mobility of Herbicides Triflusuron Methyl and Imazapyr as Reduced by Soil Amendment**
E. Mechrafi, M. El Azzouzi, A. Bouhaouss, A. Dahchour, M. Ferhat
and M. Mansour
University of Mohammed V, Dept. of Chemistry, Rabat, MOROCCO
- II 4 Evaluation of TBT Toxicity on Murine Macrophages and their Intracellular Targets**
M. Bragadin, M. Carrara, F. Cima and L. Ballarin
University of Padua, Dept. of Pharmacology, 35131 Padova, ITALY
- II 5 Sediments in Reservoir in Cyprus: A Sink of Recent and Historical Pollution**
S.C. Michaelidou, M. Christodoulidou, E. Loizou, Y. Piera,
S.A. Nicolaou and D. Demetriou
Environmental Chemistry and Ecotoxicology, State General
Laboratory, 1451 Nicosia, CYPRUS
- II 6 Characterization of Sediment Quality in the Golden Horn of Istanbul Before and After the Dredging Works**
C. Kinaci, E. Cital, M.F. Sevimli, A.F. Aydin, E. Yuksel, O.A. Arikan,
B. Inanc and D. Topacik
Istanbul Techn. University, Environ. Engineering Dept., 80626
Maslak, Istanbul, TURKEY
- II 7 Organic Amendment as Affecting Simazine and 2,4-D Leaching in Soils**
L. Cox, J. Cornejo, R. Celis and M.C. Hermosin
C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN

- II 8 Short-Term Effects of Enhanced Zinc Concentrations on Population Parameters of *Dinophilus gyrociliatus* (Polychaeta)**
R. Crema and M. Mauri
Dipto Biologia Animale, Univ. Modena, 41100 Modena, ITALY
- II 9 Evaluation of Toxic and Genotoxic Activity of Eleven Compost from Different Origin**
C. De Simone, U. Tomati, E. Galli, M. Owczarek, A. De Marco, C. D'Ambrsio, F. Alianiello and L. Cortellini
Istituto Sperimentale per lo Studio e la Difesa del Suolo, 02100 Rieti, ITALY
- II 10 Chemical Characteristics of the Seawater and the Sediments in the Aegean Sea**
N. Friligos and E. Krasakopoulou
National Centre for Marine Research, Oceanography Department, 16604 Hellinikon - Athens, GREECE
- II 11 Preliminary Chemical Observations of the Surface Sediments of the Aegean Sea**
N. Friligos, A. Moriki, J. Hatzianestis, S. Barbetseas, E. Sklivagou and E. Krasakopoulou
National Centre for Marine Research, Oceanography Department, 16604 Hellinikon - Athens, GREECE
- II 12 Mobility of Imidacloprid from Alginate-Bentonite Controlled Release Formulations in Greenhouse Soils**
E. Gonzales-Pradas, M. Fernandez-Perez, M. Villafranca-Sanchez and F. Flores-Cespedes
University of Almería, Dept. of Inorganic Chemistry, 04120 - Almeria, SPAIN
- II 13 Qualitative and Quantitative Determination of Heavy Metals and Xenobiotics in the Mediterranean Sea near the Coast of Syria**
M. Kamal
University of Aleppo, Chemistry Department, Aleppo, SYRIA
- II 14 Sunlight Photodegradation of Herbicides in Various Natural Waters and Soils**
I.K. Konstantinou and T.A. Albanis
University of Ioannina, Department of Chemistry, 45110 Ioannina, GREECE
- II 15 Investigation of Pollution Berdan River and Developing Solution Modells**
H. Kumbur and Z. Özer
University of Mersin, Dept. of Environmental Engineering, 33160 Mersin, TURKEY

- II 16 A Promising New Embriotoxicity Test with Sea Urchin**
S. Manzo, S. La Ferrara and E. De Rosa
C.R. ENEA - Environmental Dpt., 80055 - Portici (VA), ITALY
- II 17 A Study on the Concentration of Heavy Metals and PCBs in Bottom Sediments of Spanish Mediterranean Marinas**
M.G. Martin and C.R. Sanchez-Carratala
Universidad Politecnica de Valencia, Department of Applied Physics,
46022 Valencia, SPAIN
- II 18 Toxic Metal Migration Studies in Finger Paints**
M. Guerrero, J.L. Todoli, L. Gras, J. Mora and A. Canals
University of Alicante, Departm. of Analytical Chemistry,
03080 Alicante, SPAIN
- II 19 Application of a Modified 3-Steps Sequential Extraction Scheme for Heavy Metals Determination in Sediments from Lake Flumendosa (Sardinia, Italy)**
A. Sahuquillo, D. Pinna, R. Vivian and H. Muntau
Joint Research Centre, Environmental Institute, Ispra, ITALY
- II 20 Risk Assessment for Heavy Metal Contamination after Dam Failure in the Valley of Guadamar**
I. Nagel, U. Schmidt, L. Clemente, F. Cabrera and M. Kaupenjohann
University of Hohenheim, Institute of Soil Science,
70599 Hohenheim, GERMANY
- II 21 Evaluation of Hepatic and genetic Toxicity Biomarkers in *Anguilla anguilla* L.: Time and Dose-Dependent Responses to β -Naphthoflavone**
M. Pacheco and M.A. Santos
University of Aveiro, Department of Biology, 3810-193 Aveiro,
PORTUGAL
- II 22 Distribution of Dissolved Oxygen and Nutrients in Strymonikos Gulf, Greece. The Influence of Strymonas River**
A. Pavlidou
National Centre for Marine Research, Athens, GREECE
- II 23 Stabilization Assessment of Phenolic Compounds from Foundry Sludges using Additives**
M.C. Ruiz, A. Andrés and A. Irabien
Universidad de Cantabria, E.T.S.I.I. y T., Dpto. de Química,
39005 Santander, Cantabria, SPAIN

- II 24 Evaluation of a *Daphnia magna* Renewal Life-Cycle Test Method with Thiobencarb**
M. Sánchez, M.J. Villarroel, M.D. Ferrando and E. Andreu-Moliner
Univ. of Valencia, Fac. of Biological Sciences, Dept. of Animal Biology, 46100 Burjasot, Valencia, SPAIN
- II 25 Threshold of Benzene and its Chlorinated Derivatives Cytotoxicity and Related HSP72 and GRP78 Stress Protein Expression in Human Cells *in Vitro***
F. Croute, J. Poinso, Y. Gaubin, V. Simon, L. Torres and J.P. Soleilhavoup
Université Paul Sabatier Toulouse III, Faculté de Médecine-Purpan, Lab. Biol. Cell. et Pollution, 31073 Toulouse, FRANCE
- II 26 Heavy Metal Concentrations of Cigarettes in Turkey**
H. Barlas, G. Ubay, B. Soyhan and C. Bayat
University of Istanbul, Faculty of Engineering, Dept. of Envir. Engineering, Istanbul, TURKEY
- II 27 Chronic Toxicity Assessment of Receiving Streams with Daphnids**
T. Tisler and J. Zagorc-Koncan
National Institute of Chemistry, Hajdrihova 19, 1000 Ljubljana, SLOVENIA
- II 28 Use of Lumistox Test to Assess the Toxicity of Industrial Wastewaters**
N.B. Ünal and F. Sengül
Dokuz Eylül University, Engineering Faculty, Dept. of Environmental Engineering, 35160 Buca-Izmir, TURKEY
- II 29 Vertical Distribution of Organic Matter (TOC, LOI) and PAHs in Marine Sediments**
J. Viguri, A. Andrés, C. Leiva, A. Coz and A. Irabien
University of Cantabria, Dept. of Chemistry, 39005 Santander, SPAIN
- II 30 Environmental Impact Assessment of a Nuclear Power Plant in the South Eastern Mediterranean Area**
A.A. Cigna, G. Vasilikiotis, F.K. Vosniakos and P. Foster
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki, GREECE
- II 31 Natural Radioactivity in the Soils of Northern Greece**
F.K. Vosniakos, K.S. Farmakis, E.N. Sossidou, N.N. Zoumakis and P. Mentzelou
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki, GREECE

- II 32 Soil to Corn Plant Transfer of Radioactive Cs-137 and K-40 in Northern Greece**
K.S. Farmakis, F.K. Vosniakos and Koninckx
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki, GREECE
- II 33 The Radioactive Contamination in Greece due to the Chernobyl Accident and its Impact to the Environment**
F.K. Vosniakos, K.S. Farmakis and N. Zoumakis
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki, GREECE
- II 34 Speciation of Trace Metal Elements in Marine Sediments of the Split Area - The Adriatic Sea, Croatia**
I. Vukadin, N. Odzak and M. Bulic
Institute of Oceanography and Fisheries, 21000 Split, CROATIA
- II 35 Toxicity of Dyestuffs and Auxiliaries Used in Textile Finishing Industry to Luminescent Bacteria *Vibrio Fischeri***
Ch. Wang, A. Yediler, D. Lienert and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
- II 36 Investigation on the Effects of the Operations of Peeling and Washing on Fungicide Residues on Cucumber**
O. Zeren, Y. Uysal and H. Arslan
University of Mersin, Dept. of Environmental Engineering, 33160 Mersin, TURKEY
- II 37 Dissolved Zinc in North Aegean Sea Waters (Eastern Mediterranean)**
C. Zeri
National Centre for Marine Research, Inst. of Oceanography, 16604 Athens, GREECE
- II 38 Measurement of Radon Concentration in Northern Greece Ground Water**
A. Savidou and N. Zouridakis
Institute of Physical Chemistry, National Centre for Scientific Research "Demokritos", Athens-Attiki, GREECE

12.00 - 13.00 Poster Session Discussion

Monday, Oct. 4th, 1999, Afternoon

Session III	Biological and Chemical Aspects of Environmental Control
Chairmen	R. CAPASSO, M. DURAN, M. SALVIA, G. VASILIKIOTIS
15.00 - 15.25	Plenary Lecture and Discussion Endocrine Disrupting Chemicals (EDC) from Combustion Sources <u>K.-W. Schramm</u> , K. Rehmann, A. Hofmaier and A. Kettrup GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
15.25 - 15.50	Plenary Lecture and Discussion Determination of Short-Chain Polychlorinated Paraffines in Fish samples with a New Method <u>M. Coelhan</u> , M. Saraci and H. Parlar Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, 85350 Freising - Weihenstephan, GERMANY
15.50 - 16.10	Plenary Lecture and Discussion Micelle-Mediated Methodology for Metal Speciation by Atomic Absorption Spectrometry E.K. Paleologos, C.D. Stalikas, S.M. Tzouwara-Karayanni, G.A. Pilidis and <u>M.I. Karayannis</u> University of Ioannina, Laboratory of Analytical Chemistry, Ioannina, GREECE
16.10 - 16.30	Plenary Lecture and Discussion MD-HRGC-HRMS Enantiomer Separation - a Suitable Method for the Determination of Environmental Behaviour of Chiral Pesticides <u>G. Leupold</u> , H. Parlar and G. Koske Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, 85350 Freising - Weihenstephan, GERMANY
16.30 - 16.50	Plenary Lecture and Discussion Spatial and Temporal Distribution of Phytoplanktonic Biomass in Relation with Hydrological Structures in North Aegean Sea <u>V. Zervakis</u> , G. Assimakopoulou, K. Pagou and D. Georgopoulos National Centre for Marine Research, Inst. of Oceanography, 16604 Athens, GREECE
16.50 - 17.20	Break

17.20 - 18.20

Poster Session III**Chairmen**

I. GEBEFÜGI, C.F. GÖKÇAY, L. PALMISANO, A. YEDILER

- III 1 Sorption and Photolysis Studies in Soil and Sediment of an Herbicide: The Napropamide**
J.P. Aguer, C. Richard, L. Cox, M.C. Hermosin and J. Cornejo
Université de Blaise Pascale, Laboratoire de Photochimie,
63177 Aubière Cedex, FRANCE
- III 2 Application of Solid-Phase Extraction Disks followed by GC-FTD and GC-MSD for Pesticide Analysis in Environmental Waters**
T.A. Albanis, D.G. Hela and D. Lampropoulou
Univers. Ioannina, Dept. of Chemistry, Ioannina 45110, GREECE
- III 3 Factors Affecting Photodegradation of Carcinogenic Polyaromatic Hydrocarbons in the Marine Environment I - Water Quality**
U. Youssef et. al.
University of Alexandria, Dept. of Oceanography, 21511 Alexandria,
EGYPT
- III 4 The Impact of Motorway on Hydrocarbons Content in Coastal Sediments - Case Study**
O. Bajt
National Institute of Biology, Marine Biological Station, 6330 Piran,
SLOVENIA
- III 5 Directe and Indirecte Photolysis of Imazapyr in Water**
M. El Azzouzi, A. Bouhaouss, M. Ferhat, S. Guittonneau, P. Meallier
and M. Mansour
University of Mohammed V, Dept. of Chemistry, Rabat, MOROCCO
- III 6 Vegetation Control of the Swiss Federal Railways Using Glyphosate. Determination of the Mobility and Degradation of the Compound after Application on the Ballast**
J. Brauchli-Theotokis
Swiss Federal Research Station for Fruit Growing, Viticulture and
Horticulture, 8820 Wädenswil, SWITZERLAND
- III 7 Photolysis of Triflurosulfuron Methyl in Aqueous Solutions**
N. Chafik, M. Mansour and M.K. Elamrani
GSF-National Research Center for Environment and Health, Inst. of
Ecological Chemistry, 85758 Neuherberg, GERMANY

- III 8 Application of Neural Networks to Quantitative Structure-Antifungal Activity Relationships of 1-[1-(Substituted phenyl)vinyl]imidazoles**
S. Mghazli, A. Jaouad, D. Villemin, M. Mansour and D. Cherqaoui
Departement of Chemistry, Fac. de Sciences Semlalia, Marrakech, MOROCCO
- III 9 Soluble Microbial Product Formation in Biological Systems**
F. Ciner and H.A. San
Cumhuriyet University, Eng. Faculty, Dept. of Environ. Eng.,
58140 Sivas, TURKEY
- III 10 Hexazinone Residues in Forest Field Nursery**
M.J. Calderon, M.C. Hermosin, A. Diaz, J. Cornejo, M. Ortega,
F. Gonzalez and J.L. Garcia-Baudin
C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN
- III 11 Organosmectites to Reduce Leaching Losses of Acidic Herbicides**
M.J. Carrizosa, M.C. Hermosin, W.C. Koskinen and J. Cornejo
C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN
- III 12 Laccase-Catalyzed Removal of Chlorophenols in the Presence of an Additive**
S.R. Stazi, A. D'Annibale and G. Giovannozzi Sermanni
University of Tuscia, Dept. of Agrobiology and Agrochemistry,
01100 Viterbo, ITALY
- III 13 Effects of Macro and Micro Nutrients on the Performance of Four Full-Scale Anaerobic Processes**
O. Ugurlu, M. Duran and C. Bayat
University of Istanbul, Dept. of Environmental Engineering,
34850 Istanbul, TURKEY
- III 14 Perturbation of Anaerobic Fermentation by High Energy Substrates**
M. Duran and R.E. Speece
University of Istanbul, Dept. of Environmental Engineering,
34850 Istanbul, TURKEY
- III 15 The Use of Mussel as Bioindicator for Cadmium Pollution: Bioaccumulation and Resistance**
I. El Ghazi, M.K. Elamrani, A. Chafik and A. Benhra
University Hassan II, Faculte des Sciences - Ain Chok,
20100 Casablanca, MOROCCO

- III 16 Decomposition of Chlorophenols and Selected Pesticides by the UV/Light, Hydrogenperoxide, Ozone and Titanium Dioxide Processes**
M. Mansour, E.A. Feicht, K.-W. Schramm and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85758 Neuherberg, GERMANY
- III 17 Effect of Time on Physiological Changes in Eel, *Anguilla Anguilla* induced by Thiobencarb**
C. Fernandez-Vega, E. Sancho, M.D. Ferrando and E. Andreu-Moliner
Dept. of Animal Biology, Faculty of Biological Sciences, University of Valencia, 46100 Burjasot, Valencia, SPAIN
- III 18 Leaching and Persistence of Imidacloprid and Diuron in a Citrus Crop in Valencia**
F. Flores-Céspedes, M. Urena-Amate, M. Fernandez-Perez, F. Gonzalez-Pradas, J. Garratt and R. Wilkins
University of Almería, Dept. of Inorganic Chemistry, 04120 Almeria, SPAIN
- III 19 Juvenile *Dicentrarchus labrax* L. Biochemical and Genotoxic Responses after Short-Term Exposure to β -Naphthoflavone and PAHs Contaminated Harbour Waters**
C. Gravato, M.A. Santos and I. Magalhaes
Universidade de Aveiro, Dept. de Biologia, Sector de Pisilogia Animal/Ecotoxicologia, 3810 Aveiro, PORTUGAL
- III 20 Determination of Life Time of Photodegradation of Pesticides in Aqueous Medium with Solar Light**
S. Guittonneau, I. Konstantionou, C. Emmelin and P. Meallier
University Claude Bernard Lyon I, Lab. d'Application de la Chimie à l'Environnement, 69622 Villeurbanne Cedex, FRANCE
- III 21 Biosorption of Heavy Metals by Anaerobically Digested Dead Biomass**
B. Haytöglu, Ü. Yetis and G. Demirer
Middle East Technical University, Dept. of Environmental Engineering, 06531 Ankara, TURKEY
- III 22 Preliminary Results on Total Nitrogen and Organic Carbon Content of the Suspended Particulate Matter in the North Aegean Sea**
H. Kaberi, E. Krasakopoulou and Ch. Anagnostou
National Centre for Marine Research, Institute of Oceanography, 166 72 Vari, Athens, GREECE

- III 23 Effect of Microbial Aerosols from Composting Sites on Human Health**
C. Herr, J. Mach, A. zur Nieden, R.H. Bödecker, U. Gieler, A. Neef, A. Albrecht, J. Kupfer, A.B. Fischer, P. Kämpfer and Th. Eikmann
Justus-Liebig-Universität, Institut für Hygiene und Umweltmedizin, 35392 Giessen, GERMANY
- III 24 Phytoplankton and Nutrients, with Special Reference to Picocyanobacteria, in Strymonikos Gulf, North Aegean Sea, Greece**
H. Mihalatou, D. Ioannidou, N. Stamatis, E. Lazaridou and E. Kourtrakis
Aristotle University of Thessaloniki, Fac. of Biology, Dept. of Botany, 54006 Thessaloniki, GREECE
- III 25 Preliminary Data on Bacteria and Picocyanobacteria in the Inner Thermaikos Bay, Greece**
H. Mihalatou, G. Nikolaidis and M. Moustaka - Gouni
Aristotle University of Thessaloniki, Fac. of Biology, Dept. of Botany, 54006 Thessaloniki, GREECE
- III 26 Relation Between Distributions of DOM Components and Metals (Cd, Cu, Fe) in the Po-Adriatic Mixing Area**
M. Mingazzini, M. Camusso, E. Trimarchi and L. Onorato
CNR, Water Research Institute, 20047 Brugherio - Milano, ITALY
- III 27 Elemental Analysis of Environmental Samples by Inductively Coupled Plasma Atomic Emission Spectrometry**
J.M. Cano, S. Maestre, J. Mora, J.L. Todoli and A. Canals
University of Alicante, Departm. of Analytical Chemistry, 03080 Alicante, SPAIN
- III 28 Photodegradation of Selected Fungicides on Soil**
P.N. Moza, K. Hustert and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of Ecological Chemistry, 85356 Freising - Attaching, GERMANY
- III 29 Chloronicotinyl Insecticides - Abiotic Environmental Fate of Imidacloprid and Important Degradation Products**
D. Redlich and H. Parlar
Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, 85350 Freising - Weihenstephan, GERMANY
- III 30 Metal Pollution in Pireaus Port, a Major Mediterranean Port**
F. Sakellariadou, M. Dassenakis, L. Michailidou and L. Haralambides
University of Pireaus, Dept. of Maritime Studies, 18532 Pireaus, GREECE

- III 31** *Anguilla anguilla* L. Liver Organ Culture as a Toxicological Model: *In Vivo* and *in Vitro* Liver Erod Induction by β -Naphthoflavone
M.A. Santos, M. Pacheco and I. Magalhães
University of Aveiro, Dept. of Biology, Animal Physiology/Ecotoxicology Sector, 3810 - 193 Aveiro, PORTUGAL
- III 32** Clean-up Technique for the Separation of C₁₀-C₁₃ Polychlorinated n-Alkanes from Interfering Chlorinated Organic Compounds in Fatty Foods
M. Saraçi, M. Coelhan, D. Angerhöfer and H. Parlar
Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, 85350 Freising-Weihenstephan, GERMANY
- III 33** Determination of C₁₀-C₁₃ Polychlorinated n-Alkanes in Fish, Fish Products and Fish Feed
M. Saraçi, M. Coelhan, D. Angerhöfer and H. Parlar
Techn. University of Munich, Dept. of Chem. Techn. Analysis and Food Technology, 85350 Freising-Weihenstephan, GERMANY
- III 34** Kinetics of Denitrification Processes and Experimental Work for Denitrification
M. Sarioglu and N.J. Horan
Cumhuriyet University, Environmental Eng. Dept., 58140 Sivas, TURKEY
- III 35** Mussels as Indicators of Organic Pollution in Coastal Waters. The Case of Thermaikos Gulf, Greece
E. Sklivagou, J. Hatzianestis and E. Georgakopoulou
National Centre for Marine Research, 16604 Hellinikon - Athens, GREECE
- III 36** Temporal Variation of Dissolved Oxygen in the Deep Layers of the Northern Aegean Sea
E. Souvermezoglou and E. Krasakopoulou
National Centre for Marine Research, 16604 Hellinikon - Athens, GREECE
- III 37** Heavy Metal Concentrations in Mussels from an Eutrophic Area (Amvrakikos Gulf-Greece)
E. Stroygloudi and V.-A. Catsiki
National Centre for Marine Research, 16604 Hellinikon - Athens, GREECE

- III 38 Analysis of Hydrocarbons and Fatty Acids in Superficial Sediments Collected near the El Jadida Industrial Sewage (Moroccan Atlantic Coastal)**
I.T. Lancar, N. Bouchry, B. Tabyaoui, G. Mille and P. Doumenq
Université Chouaib Doukkali, Fac. de Science, Dept. de Chimie,
BP 20, El Jadida 24000, MOROCCO
- III 39 Hydrocarbons Contamination of Superficial Sediments of the Moroccan Atlantic Littoral from Mohammedia to El Jadida**
J.T. Lancar, N. Bouchry, B. Tabyaoui, C. Gonzalez and O. Thomas
Université Chouaib Doukkali, Fac. de Science, Dept. de Chimie,
BP 20, El Jadida 24000, MOROCCO
- III 40 Arsenic Speciation in Water by Gas Chromatography**
S.M. Talebi
University of Isfahan, Department of Chemistry, Isfahan, IRAN
- III 41 Stimulatory Effect of Fe(III) on Oxidation of Fe(II) in Continuous Flow Iron Removal Systems**
N. Tüfekci
Istanbul Technical University, Environmental Engineering
Department, 34850 Istanbul, TURKEY
- III 42 Heavy Metal Concentrations in Surface Sediments of Aegean Sea (Eastern Mediterranean)**
F. Voutsinou-Taliadouri and E. Sklivagou
National Centre for Marine Research, Inst. of Oceanography,
16604 Hellenikon - Athens, GREECE
- III 43 Temporal and Spatial Variations of Dissolved Trace Elements in Aegean Sea Waters (Eastern Mediterranean)**
F. Voutsinou-Taliadouri and C. Zeri
National Centre for Marine Research, Inst. of Oceanography,
16604 Hellenikon - Athens, GREECE
- III 44 An Investigation on Factors Increasing Pesticide Pollution in Turkey**
M.S. Yazgan
Istanbul Technical University, Fac. of Civil Engineering, Istanbul,
TURKEY

18.20 - 19.10 Poster Session Discussion

21.00 Social Event in the Santa Barbara Castle

Tuesday, Oct. 5th, 1999, Morning

Session IV	Environmental Modeling, Management, Law and Education
Chairmen	E. FEICHT, C.R. SÁNCHEZ-CARRATALÁ, M.D. URENA-AMATE, P. WALLNÖFER
8.30 - 8.50	Plenary Lecture and Discussion Managing Environmental Risks in a Business Context J. Huggard and <u>H. Schlesing</u> The Weinbergh group LLC, Avenue Louise 326, 1050 Brussels, BELGIUM
8.50 - 9.10	Plenary Lecture and Discussion TGI's Works in Tunisia <u>M. Blázquez</u> , L. Olea and A. Oumaya Tecnología y Gestión de la Innovación, Dept. of Environment and Quality, 28001 Madrid, SPAIN
9.10 - 9.30	Plenary Lecture and Discussion The Environmental Aspect of Integrated Smart Card Based Services in Thessaloniki <u>K. Nikolaou</u> , G. Toskas, V. Mizaras and S. Basbas Org. of the Master Plan and Environm. Protection of Thessaloniki, 54643 Thessaloniki, GREECE
9.30 - 9.50	Plenary Lecture and Discussion Policy Options for the Recycling of Waste from Electric and Electronic Equipment in the EU D. Papameletiou European Commission - J.R.C., Inst. f. Prospective Techn. Studies (IPTS), 41092 Sevilla, SPAIN
9.50 - 10.20	Plenary Lecture and Discussion Submerged Archaeological Heritage an Coastal Zone Management in Alexandria, Egypt (Marine Pollution Control Criteria) H. Awad University of Alexandria, Dept. of Oceanography, 21511 Alexandria, EGYPT
10.20 - 10.40	Plenary Lecture and Discussion Multidisciplinary Data and Model Fusion: A Key to Environmental Problem Solving D.A. Sarigiannis European Commission, J.R.C. - Ispra, 21020 Ispra (VA), ITALY
10.40 - 11.10	Break

11.10 - 12.10 Poster Session IV**Chairmen**

B. HERUT, M. RAGOSTA, K.-W. SCHRAMM, N. SOTIRIOU

- IV 1 A Biological Method for the Calculation of a Safety Index for Monitoring Sludge Discharge**
F. Delmas, I. Villaescusa, F. Croute, J.P. Soleilhavoup and J.C. Murat
Université Paul Sabatier, Lab. de Biologie Cellulaire & Pollution, 31073 Toulouse, FRANCE
- IV 2 Water Quality of a Mediterranean Sea Coastal Area Containing Underwater Archaeology of Ancient Alexandria Suffering from Sewage Pollution, Egypt**
O. El-Rayis and D. Hinckely
University of Alexandria, Oceanography Dept., 21511 Alexandria, EGYPT
- IV 3 Modelling Analysis for the Assessment of the Leachate Intrusion into an Aquifer Located in the Surroundings of a Landfill Site in Greece**
D. Fatta, C. Naoum and M. Loizidou
National Technical University of Athens, Laboratory of General Chemistry, Chemical Engineering Dept., 15773 Athens, GREECE
- IV 4 Implementing an Environmental Management System According to ISO 14001 : A Case Study Mercedes - Benz Türk**
O. Hanhan and D. Orhon
Mercedes - Benz Türk A.S., Quality Management Department, Hadymköy-Istanbul, TURKEY
- IV 5 Appropriate Effluent Limitations for Industrial Wastewaters - Principles and Selected Case Studies**
G. Insel, I. Kabdasli, D. Orhon, Ö. Karahan and A. Yediler
Istanbul Technical University, Fac. of Civil Engineering, 80626 Maslak, Istanbul, TURKEY
- IV 6 Globalisation - Regionalism and Sustainable Mediterranean**
J.N. Kinnas
Helliniki Etairia HGO, 116 33 Athens, GREECE
- IV 7 A Multimedia Program for Environmental Training**
F. Alexiou, P. Samaras, A. Kungolos and G.P. Sakellaropoulos
University of Thessaloniki, Chemical Proc. Engineering Res. Inst, 57001 Thermi-Thessaloniki, GREECE

- IV 8 Incorporation of Bioassays in the Legislation Concerning Industrial and Municipal Effluents**
P. Samaras, A. Kungolos and G.P. Sakellaropoulos
University of Thessaloniki, Chemical Proc. Engineering Res. Inst,
57001 Thermi-Thessaloniki, GREECE
- IV 9 The Strategic Planning of the Waste Management System on a Regional Case**
I. Tsakarestos and G. Lyberatos
University of Patras, Dept. of Chemical Engineering, 26500 Patras,
GREECE
- IV 10 Environmental Policies and Economic Aspects**
P. Mentzelou
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki,
GREECE
- IV 11 Educational Evaluation of an Environmental Technology Studies Programme in Thessaloniki**
K. Nikolaou
Org. of the Master Plan Implementation and Environm. Prot. of
Thessaloniki, 54643 Thessaloniki, GREECE
- IV 12 Temporal Evolution of the Environmental Education Programmes in Thessaloniki**
K. Nikolaou
Org. of the Master Plan Implementation and Environm. Prot. of
Thessaloniki, 54643 Thessaloniki, GREECE
- IV 13 Assessment of Urban Background Concentrations of Aromatic Compounds in Air by Means of Diffusive Sampling**
P. Pérez Ballestra, R. Connolly, J. Cancelinha and A. Boix
European Commission, J.R.C. - Ispra, 21020 Ispra (VA), ITALY
- IV 14 Tropospheric Reactivity Between Nitrate Radical and Chloride Double Bonds**
M.P. Pérez-Casany, I. Nebot-Gil and J. Sanchez-Marin
University of Valencia, Fac. of Chemistry, Dept. Physical Chemistry,
46100 Burjassot, Valencia, SPAIN
- IV 15 Assessment of Ecological State of Submediterranean Landscapes of the Black Sea Coast of Russia**
M.N. Petrooshina
Moscow State Lomonosov University, Dept. of Physical Geography
and Landscapes, 119899 Moscow, RUSSIA

- IV 16 Modelling of Natural Systems of Abrau Peninsula (The Black Sea Coast)**
M.N. Petrooshina and M.L. Zaitsev
Moscow State Lomonosov University, Dept. of Physical Geography and Landscapes, 119899 Moscow, RUSSIA
- IV 17 Lake Ohrid Conservation Project Monitoring Program**
V. Puka, M. Sanxhaku, L. Selfo, Z. Krstanovski and Z. Spirkovski
Hydrometeorological Institute, Water Quality Section, Tirana, ALBANIA
- IV 18 The Management of Urban Waste at Regional Scale: The State of the Art and its Strategic Evolution - Case Study Basilicata Region (Southern Italy)**
C. Cosmi, V. Cuomo, M. Macchiato, I. Mancini, L. Mangiamele, S. Masi and M. Salvia
Università degli Studi della Basilicata, Dept. di Ingegneria e Fisica dell' Ambiente, 85100 Potenza, ITALY
- IV 19 Environmental Assessment of Dredged Material from Small Craft Harbours in the Spanish Mediterranean Coast**
C.R. Sánchez-Carratalá
Universidad Politécnica de Valencia, Dept. of Applied Physics-ETSICCP, 46022 - Valencia, SPAIN
- IV 20 Hephaestus: A Data-Base for Energy and Environment**
D. Sanopoulos, A. Kungolos and Z. Kiparissides
Chemical Proc. Engineering Res. Institute, P.O. Box 361, 57001 Themi-Thessaloniki, GREECE
- IV 21 The Environmental Impact on Traffic Accidents in the Major Area of Thessaloniki-Greece**
E.N. Sossidou, F.K. Vosniakos, M.D. Grammatikopoulos and J.E. Trigonakis
T.E.I. of Thessaloniki, Lab. of Applied Physics, 54101 Thessaloniki, GREECE

12.10 - 13.00 Poster Session Discussion

Afternoon Free

20.15 MESAEP General Assembly

Wednesday, Oct. 6th, 1999, Morning**Session V and VI Evaluation and Remediation of Soils and Water Quality and Technologies for Treatment and Recycling of Wastes****Chairmen**

C. FERNADEZ-VEGA, E. GONZALEZ-PRADAS, J. MATAIX,
K. NIKOLAOU

8.30 - 8.50

Plenary Lecture and Discussion

Heavy Metal Pollution of Soils Affected by the Guadiamar Toxic Flood

F. Cabrera, L. Clemente, E. Diaz Barrientos, R. López and
J.M. Murillo

CSIC, Inst. de Recursos Naturales y Agrobiologia, 41080 Sevilla,
SPAIN

8.50 - 9.10

Plenary Lecture and Discussion

The Evaluation of River Pollution by Vegetation in the Maltese Islands

S.M. Haslam

University of Cambridge, Dept. of Plant Sciences, Cambridge CB2
3EQ, U.K.

9.10 - 9.30

Plenary Lecture and Discussion

The Use of Corn Cultures for Soil Bioremediation against Organic Xenobiotic Compounds

P. Ravanel and M. Tissut

Université Joseph Fourier, UMR Ecosystèmes et Changements
Environnementaux , BP 53, 38041 Grenoble Cedex 9, FRANCE

9.30 - 9.50

Plenary Lecture and Discussion

Industrial Wastewater Management for Recycle and Reuse - A Case Study for the Textile Industry

Ö. Karahan, G. Insel, H. Dulkadiroglu, I. Kabdasli, A. Yediler,
D. Orhon and A. Kettrup

Istanbul Technical University, Fac. of Civil Engineering,
80626 Maslak, Istanbul, TURKEY

9.50 - 10.10

Plenary Lecture and Discussion

Analysis of Volatile Odorous Compounds Emitted by wastewater in Wine Industries of Mediterranean Region

J.M. Guillot and V. Desauziers

Ecole des Mines d'Ales, Lab. Génie de l'Environnement Industriel,
30319 Ales, FRANCE

- 10.10 - 10.30** Plenary Lecture and Discussion
Environmental Effects of the Coagulation Process in Wastewater Treatment and Drinkwater Production
G. Pagano, A. De Biase, M. Iaccarino, S. Meric and O. Tünay
 Istituto Nazionale Tumori, Fondazione "G. Pascale", 80131 Naples, ITALY
- 10.30 - 11.00** **Break**
- 11.00 - 11.40** **Poster Session V and VI**
- Chairmen** J.M. GUILLOT, M.C. HERMOSIN, M. MINGAZZINI, G. PILIDIS
- V 1** **Effect of Ammonia and Oxygen Concentrations on Nitrification in Packed Bed**
 U. Altinbas
 Tubitak-Marmara Research Center, Environmental Engineering Dept., 41470 Gebze - Kocaeli, TURKEY
- V 2** **The Remediation Method for High Polluted Soils with Zn and Pb**
 O.S. Bezuglova, I.V. Morozov and A.V. Shestopalov
 Rostov State University, Department of Biology and Soil Science, 344006 Rostov on Don, RUSSIA
- V 3** **Study of Sorption Process of Dicofol Pesticide on non Stoichiometric Apatite**
 K. Aboulfad, A. Bensaoud, M. El Azzouzi, K. El Kacemi, A. Bouhaouss, M. Schiavon and Bessièrè
 University of Mohammed V, Dept. of Chemistry, Rabat, MOROCCO
- V 4** **Accumulation of Heavy Metals in Crop Plants Affected by the Guadiamar Toxic Spill**
 J.M. Murillo, T. Marañón, F. Cabrera and R. López
 CSIC, Inst. de Recursos Naturales y Agrobiología, 41080 Sevilla, SPAIN
- V 5** **Physicochemical Treatment and Dewaterability of Septage**
 L. Akca, M.F. Sevimli, E. Citil and A. Demir
 Istanbul Techn. University, Environ. Engineering Dept., 80626 Maslak, Istanbul, TURKEY
- V 6** **Adsorption of the Anionic Contaminant Species on the Layered Double Hydroxide: Crystallinity Effects**
 I. Pavlovic, M.C. Hermosin, M.A. Ulibarri, C. Barriga and J. Cornejo
 C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN

- V 7 Sorption of Some Water Contaminants Using Activated Carbons Prepared From a Novel Precursor**
B.S. Girgis, A.A.M. Daifullah and M.N. Alaya
Atomic Energy Authority, Hot Laboratories Centre, Analytical Dept.,
Cairo, EGYPT
- V 8 Field Trials of Brassica Carinata and Brassica Juncea in Polluted Soils of the Guadiamar River Area**
M. del Rio, R. Font, J. Fernández Martínez, J. Domínguez and
A. De Haro
CSIC, Inst. of Sustainable Agriculture, 14080 Córdoba, SPAIN
- V 9 Phytoremediation of the Polluted Soils after the Toxic Spill of the Aznalcóllar Mine by using Wild Species Collected in Situ**
A. De Haro, A. Pujadas, A. Polonio, R. Font, R. Montoro and
M. del Rio
CSIC, Inst. of Sustainable Agriculture, 14080 Córdoba, SPAIN
- V 10 Pollution of Nitrate in Moroccan Ground-Water. Removal by Electrodialysis**
A. Elmidaoui, F. Elhannouni, M. Taky, L. Echihabi, H. Elabbasi,
M. Hafsi and A.T. Cherif
University Ibn Tofail, Dept. of Chemistry, Kénitra, MOROCCO
- V 11 Removal of Fluorides in Brackish Water by Electrodialysis**
Z. Amor, M. Taky, B. Bariou, N. Mameri and A. Elmidaoui
University Ibn Tofail, Dept. of Chemistry, Kénitra, MOROCCO
- V 12 Quality of Surface Waters in Sakarya Delta**
K. Gunes and I. Unver
Tubitak-Marmara Research Center, Energy System & Environmental
Research Institute, 41470 Gebze-Kocaeli, TURKEY
- V 13 Evaluation of Nitrogen Removal Efficiencies for Predenitrification and Alternating Systems**
G. Insel, S. Sözen, E. Gorgun, O. Hanhan and D. Orhon
Istanbul Technical University, Fac. of Civil Engineering,
80626 Maslak, Istanbul, TURKEY
- V 14 Determination of Sludge Quantities Originated from Industrial Wastewater Treatment Plants in Istanbul European Side**
O.K. Yavuz, C. Kinaci, O. Tünay and I. Kabdasli
Istanbul Technical University, Fac. of Civil Engineering, Istanbul,
TURKEY

- V 15 Monitoring Land Cover Change Detection with Remote Sensing Methods in Magnesia Prefecture in Greece**
K. Perakis, K. Kyrimis and A. Kungolos
University of Thessaly, Dept. of Planning and Regional Development, 38334 Volos, GREECE
- V 16 Mobilisation of Metals from Homogeneous Soil Columns by Various Aqueous Solution**
L. Madrid and E. Diaz-Barrientos
C.S.I.C., Inst. de Recursos Nat. y Agrobiologia, 41080 Sevilla, SPAIN
- V 17 Retention of Copper by a Calcareous Soil and its Textural Fractions in the Presence of two Agricultural Industry Residues**
C. Maqueda, P. Rodriguez-Rubio and E. Morillo
CSIC, Instituto de Recursos Naturales y Agrobiologia, 41080 Sevilla, SPAIN
- V 18 Studies on the Persistence and Mobility of Tribenuron Methyl in Moroccan Soils**
M. Mekkaoui, A. Satrallah, A. Dahchour, H. Mountacer, M. Ferhat and M. Mansour
Department de Chimie, Faculte des Sciences de Rabat, Rabat, MOROCCO
- V 19 Biodegradation of Metalaxyl in Portuguese Vineyard Soils and in Charles River Mice**
C. Morais, F. Candeias, R. Martins, R. Ferreira, A. Costa and R. Tykva
University of Évora, Department of Chemistry, 7000-671 Évora, PORTUGAL
- V 20 Effects of Urban Waste Compost and Copper Addition on the Sorption and Leaching of Glyphosate by a Sandy Soil**
E. Morillo, C. Maqueda and V. Martin
C.S.I.C., Instituto de Recursos Naturales y Agrobiologia, 41080 Sevilla, SPAIN
- V 21 A Study of the Interaction of Terbutylazine with Humic Acids**
H. Mountacer, M. Mansour and M. Ferhat
Dept. de Chimie Appliquée et d'Environnement, Faculté des Sciences et Techniques de Settat, Settat, MOROCCO
- V 22 The Effect of Nitrate and Different Substrates on Biological Excess Phosphorous Removal in Sequencing Batch Reactors**
N. Özgür and R. Tasli
Istanbul Technical University, Civil Engineering Faculty, Environmental Eng. Dept., 80626 Maslak, Istanbul, TURKEY

- V 23 Toluene Photocatalytic Oxidation in the Presence of Tetradecyldimethylamino-Oxide in Aqueous Suspensions of TiO₂ (Anatase)**
V. Augugliaro, G. Marci, L. Palmisano, M. Russo, M. Schiavello, F.P. Cavasino, C. Sbriziolo and M.L. Turco Liveri
Università di Palermo, Dip. di Ingegneria Chimica dei Processi e dei Materiali, 90128 Palermo, ITALY
- V 24 Photochemical Transformation of Priority Organic Chemicals and Pesticides in Water**
D. Vialaton, D. Baglio, C. Richard, H. Skej-Andresen and A.B. Paya-Perez
European Commission, J.R.C. , Environment Inst., 21020 Ispra (VA), ITALY
- V 25 The Use of Nematodes as Bioindicators for the Sanitary Evaluation of Wastewater in the Province of Seville**
E. Alonso, C. Santos, J.R. Pidre, E. Trujillo, M. Cabello and M. Casaus
Centre for the New Water Technologies, Isla de la Cartuja, 41092 Seville, SPAIN
- V 26 Surfactant-Enhanced Desorption of Linuron Sorbed on Soils with Different Organic Matter Contents**
M.J. Sánchez-Martín, M.S. Rodríguez-Cruz and M. Sánchez-Camazano
C.S.I.C., Inst. de Recursos Nat. y Agrobiologia, 37001 Salamanca, SPAIN
- V 27 Metal Retention by Composts from Several Wastes**
E. Ruiz-Cortés and L. Madrid
C.S.I.C., Instituto de Recursos Naturales y Agrobiologia, 41080 Sevilla, SPAIN
- V 28 Impact of Land Based Sources of Pollution on the Levels of Lead and Cadmium in El-Mex Bay, a Mediterranean Basin under Stress**
M.A.H. Saad, M.A. Abdel-Moati and W.A.N. Younis
University of Alexandria, Oceanography Dept., 21511 Alexandria, EGYPT
- V 29 Assessment of the Efficiency of Selected Surfactants for Enhancing the Desorption of Hydrophobic Pesticides from Soil to Water**
M. Sánchez-Camazano, M.S. Rodríguez-Cruz and M.J. Sánchez-Martín
C.S.I.C., Inst. de Recursos Nat. y Agrobiologia, 37071 Salamanca, SPAIN

- V 30 Adsorption of Carbofuran on Clay Minerals**
M. El M'Rabet, A. Dahchour, M. Massoui, M. El Yachioui and M.J. Sánchez-Martín
C.S.I.C., Inst. de Recursos Nat. y Agrobiología, 37001 Salamanca, SPAIN
- V 31 Mobility of Toxic Elements in Packed and Undisturbed Columns of Soils Affected by the Spill from the Aznalcollar Pyrite Mine (Sevilla, Spain)**
M.J. Sánchez-Martín, M. Sánchez-Camazano and L.F. Lorenzo
C.S.I.C., Inst. de Recursos Nat. y Agrobiología, 37001 Salamanca, SPAIN
- V 32 Persistence and Mobility of Triflusaluron-Methyl in Moroccan Soils**
A. Satrallah, A. Dahchour, E. Essassi and M. Mansour
Institut Agronomique et vétérinaire Hassan II, Unité de chimie, 6202 Rabat, MOROCCO
- V 33 Chemical Study of an Olive Oil Mill Wastewater Bioremediation System Based on *Azotobacter vinelandii***
C.I. Piperidou, C.I. Chaidou, K. Soulti, C.D. Stalikas, G.A. Pilidis and C. Balis
European Environ. Research Institute, 45333 Ioannina, GREECE
- V 34 Influence of Compost Addition on the Degradation Rate of Simazine and Hexazinone**
M.D. Fernández, C. Sánchez-Brunete and J.L. Tadeo
INIA, Dept. de Uso Sostenible del Medio Natural, 28040 Madrid, SPAIN
- VI 1 Evaluation of Some Plant Using in the Constructed Wetland Treatment System**
L. Akca, S.C. Ayaz, C. Kýnacý and M.F. Sevimli
Istanbul Techn. University, Environ. Engineering Dept., 80626 Maslak, Istanbul, TURKEY
- VI 2 Post Treatment of Leachate by Aquatic Plant and Wetland Systems**
L. Akca, H. Bayhan and S. Karagöz
Istanbul Techn. University, Environ. Engineering Dept., 80626 Maslak, Istanbul, TURKEY
- VI 3 Biological Treatment of Cyanide Wastewater in an Aerobic Completely Mixed Reactor**
G. Ubay, H. Barlas, M. Karadisogullari and Ü. Alver
University of Istanbul, Faculty of Engineering, Dept. of Envir. Engineering, Istanbul, TURKEY

VI 4 Effects of COD to SO₄⁼ Ratio on Anaerobic Sulfate Removal Process

G. Ubay, H. Barlas, Ü. Alver and C. Bayat
University of Istanbul, Faculty of Engineering, Dept. of Envir.
Engineering, Istanbul, TURKEY

VI 5 Oxidation of Manganese(II) with Air in Water Treatment

S. Aydin, N. Tüfekçi, S. Arayici, A.G. Özalp, C. Kivilcimdan and
H.S. Tugcu
Istanbul University, Dept. of Environmental Engineering, Istanbul,
TURKEY

VI 6 The Method of Coagulation and Flocculation in the Treatment of Domestic Wastewater

N. Tüfekçi, E. Çetin, B. Soyhan, S. Aydin, D. Balayi, P. Ütnü and
S. Arayici
Istanbul University, Dept. of Environmental Engineering, Istanbul,
TURKEY

11.40 - 12.20 Poster Session Discussion

12.20 - 13.30 Round Table

Toxic Spill of the Aznalcollar Mine on the Guadamar River Area

Moderator: J. CORNEJO

Members: F. Cabrera, A. De Haro, L. Madrid, C. Maqueda,
J.M. Murillo, I. Nagel and M.J. Sanchez-Martin

Wednesday, Oct. 6th, 1999, Afternoon**Session VI cont. Technologies for Treatment and Recycling of Wastes****Chairmen** J. BARTZIS, F. CABRERA, M. CARRARA, S. LORUSSO**15.00 - 15.20** Plenary Lecture and Discussion
Underground Waste Disposal: A Potential Technology for Reducing Pollution of the BiosphereTh. Brasser and W. Brewitz

Gesellschaft für Anlagen- und Reaktorsicherheit (GRS), Abt. Geochemie, 38122 Braunschweig, GERMANY

15.20 - 15.40 Plenary Lecture and Discussion
An Investigation on Operational Problems of Textile Industry Wastewater Treatment Plants in TurkeyN. Tüfekci, I. Töröz, M. Duran and Y. Sahin

Istanbul Technical University, Environmental Engineering Department, 34850 Istanbul, TURKEY

15.40 - 16.00 Plenary Lecture and Discussion
Technologies for Wastewater Treatment. Catalytic Wet Oxidation over Mixed Pillared Mediterranean ClaysJ. Barrault and M. Demicheli

CNRS, Lab. de Catalyse en Chimie Organique - ESIP, 86022 Poitiers, FRANCE

16.00 - 16.20 Plenary Lecture and Discussion
Denitrification in a Fixed Film Reactor

H. Timur

Tubitak-Marmara Research Center, Energy Systems & Environmental Research Institute, 41470 Gebze-Kocaeli, TURKEY

16.20 - 16.50 **Break**

16.50 - 17.50**Poster Session VI cont.****Chairmen**

M. BAHADIR, L. MADRID, P. MOZA, P. RAVANEL, M.A. SANTOS

- VI 7 Color Removal from the Textile Wastewaters by Adsorption Techniques**
H. Barlas and T. Akgün
University of Istanbul, Dept. of Environmental Engineering,
34850 Istanbul, TURKEY
- VI 8 Treatment of Chlorinated Organic Materials Containing Wastewater by Oxidation Processes**
H. Barlas
University of Istanbul, Dept. of Environmental Engineering,
34850 Istanbul, TURKEY
- VI 9 Start-up Studies on Anaerobic Hybrid Reactor**
N. Büyükkamaci and A. Filibeli
Dokuz Eylül University, Dept. of Environmental Engineering,
35100 Buca, Izmir, TURKEY
- VI 10 Removal of THM Precursors by GAC Treatment**
G. Çapar, Ü. Yetis, G.N. Demirer and F.B. Dilek
Middle East Technical University, Environmental Engineering Dept.,
06531 Ankara, TURKEY
- VI 11 Analysis of the Inorganic Fraction and its Physico-Chemical Behaviour in Olive Oil Mill Waste Waters**
M. Arienzo and R. Capasso
University of Napoli, Dipto Sci Chim-Agrarie, 80055 Portici (NA),
ITALY
- VI 12 Inert COD Fraction of Wastewaters from Alcohol Destillation Industry**
E. Çetin, S. Arayici, N. Demirci, A. Altinay and M. Akkoç
Istanbul University, Dept. of Environmental Engineering, Istanbul,
TURKEY
- VI 13 Decolourizing of Textile Wastewater by Filtration - Adsorption of Organic Powders**
L. Laasri, M.K. El Amrani, M. Essaket and D. Cherkaoui
Ecole Supérieure des Industries du Textile et de l'Habillement,
Casablanca, MOROCCO
- VI 14 Wastewater Treatment Plants as a New Air Pollution Source in Istanbul**
K. Alp, E. Cital and A.F. Aydin
Istanbul Techn. University, Environ. Engineering Dept.,
80626 Maslak - Istanbul, TURKEY

- VI 15 Removing Heavy Metals from Water by Modified Clays**
R. Celis, M.C. Hermosin and J. Cornejo
C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN
- VI 16 Composition of Extractives in Process Waters During Kraft Pulping and TCF-Bleaching of Eucalyptus Globulus Wood**
A. Gutiérrez and J.C. del Rio
C.S.I.C., Inst. de Recursos Nat. y Agrobiol., 41080 Sevilla, SPAIN
- VI 17 Anaerobic Treatment of Olive Mill Wastes (OWM) in Batch Reactors**
T. Ergüder and G.N. Demirer
Middle East Technical University, Dept. of Environmental Engineering, 06531 Ankara, TURKEY
- VI 18 Use of Ferrate in Water and Wastewater Treatment**
T. Tüzün, G. Sürücü and F.B. Dilek
Middle East Technical University, Environ. Eng. Dept., 06531 Ankara, TURKEY
- VI 19 Effect of EDTA on Activated Sludge Properties**
F. Dilek Sanin
Middle East Technical University, Environ. Eng. Dept., 06531 Ankara, TURKEY
- VI 20 Innovative Technologies for Wastewater Treatment in Coastal Tourist Areas**
D. Orhon, I. Sekoulov and H. Dulkadiroglu
Istanbul Technical University, Fac. of Civil Engineering, 80626 Maslak, Istanbul, TURKEY
- VI 21 Photocatalytic Oxidation of the Textile Dye Basic Red 18 with Irradiated Titanium Dioxide**
I. El Ghazi, M.K. Elamrani and M. Mansour
Faculté des Sciences-Aïn Chok, Casablanca, MOROCCO
- VI 22 Pollution Profile of a Corn Wet Mill**
S. Övez, G. Eremektar, F. Germirli Babuna and D. Orhon
Istanbul Techn. University, Environ. Engineering Dept., 80626 Maslak, Istanbul, TURKEY
- VI 23 Solution of Problems of Waste Disposal in Developing Countries - the Example Egypt**
P. Spillmann, A. Nassour and H. Eschkötter
University of Rostock, Inst. of Landscape Building and Waste Management, 18051 Rostok, GERMANY

- VI 24 Metal Effects on the Biomass Yield of Activated Sludge**
C.F. Gokcay, U. Yetis and F. Dilek
Middle East Technical University, Dept. of Environmental
Engineering, 06531 Ankara, TURKEY
- VI 25 Municipal Wastewater Disinfection using Ultraviolet Light Pilot Unit**
A. Guitonas and A. Hatzigiannis
University of Thessaloniki, Dept. of Transportation and Hydraulic
Engineering, 54006 Thessaloniki, GREECE
- VI 26 Protein Removal and recovery from Leather Tanning Industry Wastewaters**
O. Tünay, T. Koca and I. Kabdasli
Istanbul Technical University, Fac. of Civil Engineering, Istanbul,
TURKEY
- VI 27 The Factors on Denitrification in Fixed Film Processes**
B. Karagözoglu and M. Sarioglu
Cumhuriyet University, Environmental Eng. Dept., 58140 Sivas,
TURKEY
- VI 28 Biological Nutrient Removal in a Combined UASB and RBC System - I. Effect of Recycle Ratio**
H. Kinli and D. Topacik
Tubitak-Marmara Research Center, Energy System & Environmental
Research Institute, 41470 Gebze, Kocaeli, TURKEY
- VI 29 Biological Nutrient Removal in a Combined UASB and RBC System - II. Effects of C, N, P Loading Rates**
H. Kinli and D. Topacik
Tubitak-Marmara Research Center, Energy System & Environmental
Research Institute, 41470 Gebze, Kocaeli, TURKEY
- VI 30 Pilot Scale Experiences of Membrane Technology to Complex Industrial Wastewater Treatment**
I. Koyuncu
Istanbul Technical University, Faculty of Civil Engineering, Dept. of
Environ. Engineering, 80626, Maslak, Istanbul, TURKEY
- VI 31 Ro Treatment of Dairy Industry Wastewaters**
I. Koyuncu, M. Turan and D. Topacik
Istanbul Technical University, Faculty of Civil Engineering, Dept. of
Environ. Engineering, 80626, Maslak, Istanbul, TURKEY

- VI 32 Role of Membrane Technology in Drinking Water Treatment in Turkey**
I. Koyuncu and D. Topacik
Istanbul Technical University, Faculty of Civil Engineering, Dept. of Environ. Engineering, 80626, Maslak, Istanbul, TURKEY
- VI 33 Effect of Operating Parameters on Enhanced Biological Phosphorous Removal**
S. Mazlum and F. Sengül
Süleyman Demirel University, Engineering and Architectural Faculty, 32206 Isparta, TURKEY
- VI 34 Enhanced Bio-P Removal in Two-Stage Biological Treatment**
S. Mazlum and N. Mazlum
Süleyman Demirel University, Engineering and Architectural Faculty, 32206 Isparta, TURKEY
- VI 35 Elimination of Cyanide form the Effluent of Esfahan Gold Production Factory in a Pilot Plant Scale**
K. Movassaghi and K. Jafarzadegan
University of Esfahan, Faculty of Sciences, Department of Chemistry, 81744 Esfahan, IRAN
- VI 36 Improvement of Low Hydraulic Performanced Sea Outfalls Using Bell-Mouthed Ports in the Black Sea Example**
N. Nemlioglu
University of Istanbul, Dept. of Environm. Engineering, 34850 Avcilar, Istanbul, TURKEY
- VI 37 Treatability Studies of Olive Oil Wastewater in Turkey**
E. Oktav and F. Sengül
Dokuz Eylül University, Dept. of Environmental Engineering, Kaynaklar Campus, 35160 Buca-Izmir, TURKEY
- VI 38 Treatability Alternatives for Sulfide and Sulfate in Indigo Dyeing Baths**
T. Ölmez, I. Kabdasli, O. Tünay, C. Kinaci, G. Eryilmaz and D. Yilmazoglu
Istanbul Technical University, Civil Engineering Faculty, Envir. Engineering Dept., Ayazaga Kampüsü, 80626 Maslak, Istanbul, TURKEY
- VI 39 Biological Phosphorus Removal Process from Wastewater: Microbial Research**
J.R. Pidre, E. Alonso and J. Toja
Centre for the New Water Technologies, Isla de la Cartuja, 41092 Seville, SPAIN

- VI 40 Wastewater Treatment Processes for Biological Phosphorus Removal**
M . Sarioglu
Cumhuriyet University, Environmental Eng. Dept., 58140 Sivas,
TURKEY
- VI 41 Treatability of Cutting Oil Effluents by Physico-Chemical Processes**
H. Barlas, K. Eti and B. Soyhan
University of Istanbul, Faculty of Engineering, Dept. of Envir.
Engineering, Istanbul, TURKEY
- VI 42 Treatability of Carpet Dying Wastewater - Case Study**
G. Sürücü, C.F. Gokcay, U. Yetis, F.B. Dilek and B. Arican
Middle East Technical University, Dept. of Environmental
Engineering, 06531 Ankara, TURKEY
- VI 43 Characterisation of Solid Wastes From Non-Ferrous Metals Recycling**
R. Ibanez, J. Viguri, A. Andrés and A. Irabien
University of Cantabria, Dept. of Chemistry, 39005 Santander,
SPAIN
- VI 44 Ozonation of the Hydrolized Reactive Azo Dye *Reactive Yellow (CI)***
M. Koch, A. Yediler and A. Kettrup
GSF-National Research Center for Environment and Health, Inst. of
Ecological Chemistry, 85758 Neuherberg, GERMANY
- VI 45 Biological Treatment Istanbul Municipal Landfill Leachate**
G. Yilmaz, I. Öztürk and G. Ubay
Istanbul Technical University, Dept. of Environmental Engineering,
34850 Istanbul, TURKEY

17.50 - 18.30 Poster Session Discussion

18.30 - 19.15 Final Plenary Discussion

21.15 Final Cocktail