



**“Gh. Asachi” Technical University Iasi
Faculty of Industrial Chemistry**

DEPARTMENT OF ENVIRONMENTAL ENGINEERING

In co-operation with

**InterMEDIU Information, Consultancy and ODL Department
Academic Organization for Environmental Engineering and
Sustainable Development, OAIMDD**

1st INTERNATIONAL CONFERENCE

ENVIRONMENTAL ENGINEERING AND MANAGEMENT

ICEEM/01

CONFERENCE PROGRAM

**26-28 September 2002
IASI, ROMANIA**

*The first International Conference on **Environmental Engineering and Management, ICEEM/01** is organised by the Department of Environmental Engineering, Faculty of Industrial Chemistry, Technical University of Iasi, Romania. This event marks a decade of existence of the Environmental Engineering profile at the Technical University of Iasi.*

INTERNATIONAL SCIENTIFIC COMMITTEE

Prof. Dr. Eng. MATEI MACOVEANU – Technical University, Iasi, Romania

Conference Chairman

Prof. Dr. Eng. ION GIURMĂ- Technical University, Iasi, Romania

Prof. Dr. Eng. VALENTIN I. POPA- Technical University, Iasi, Romania

Prof. Dr. dr.h.c. GHEORGHE DUCA- State University Chisinau, Moldova

Prof. Dr. dr.h.c. CH. ANTONIUS KETTRUP-Technical University of Munchen, Germany

Prof. Dr. Eng. EUGEN PINCOVSCHI- Politehnica University, Bucuresti, Romania

Prof. Dr. WERNER WEISWEILER- University of Karlsruhe, Germany

Prof. Dr. Eng. MARIA GAVRILESCU- Technical University, Iasi, Romania

Prof. Dr. Ir. JOOP SCHOONMAN- Technical University, Delft, The Netherlands

Prof. Dr. Eng. CARMEN TEODOSIU- Technical University, Iasi, Romania

Prof. Dr. Eng. MICHAEL S. JORGENSEN- Technical University of Denmark

Prof. Dr. Eng. ION BALASANIAN-Technical University, Iasi, Romania

Prof. Dr. Eng. GABRIEL LUCA- Technical University, Iasi, Romania

CONFERENCE SECRETARIAT

Drd. Eng. ANCA FLORENTINA CALIMAN

Drd. Eng. BRINDUSA ROBU

Drd. Eng. CEZAR CATRINESU

Eng. DANIELA TELEMAN

Eng. OANA PENCIU

CONFERENCE PROGRAM

SEPTEMBER 25

17³⁰ - 20⁰⁰ Registration, Orizont Hall, Faculty of Industrial Chemistry,
Address: Blvd. D. Mangeron 71 A, Iasi

SEPTEMBER 26

8⁰⁰ – 11³⁰ Registration, Orizont Hall, Faculty of Industrial Chemistry,
Blvd. D. Mangeron 71 A, Iasi

**9³⁰-10³⁰ Opening Ceremony, *Aula of the Technical University of Iasi,*
*Blvd. Carol 11, Iasi ****

11³⁰ - 11⁴⁵ Coffee break, Orizont Hall

11⁴⁵-14⁰⁰ Sessions of the ICEEM Conference, Faculty of Industrial Chemistry, Blvd. D.
Mangeron 71 A, Iasi

14⁰⁰-14¹⁵ Plenum– MATRIXROM Publishing House- Books Presentation

14¹⁵-15⁰⁰ Coffee break / Registration, Orizont Hall

15⁰⁰-17⁴⁵ Sessions of the ICEEM Conference, Faculty of Industrial Chemistry, Blvd. D.
Mangeron 71 A, Iasi

19⁰⁰ Gala Dinner – Restaurant Bolta Rece, Str. Rece nr. 10.

SEPTEMBER 27

9⁰⁰- 11⁰⁰ Sessions of the ICEEM Conference, Faculty of Industrial Chemistry, Blvd. D.
Mangeron 71 A, Iasi

11⁰⁰ - 11³⁰ Coffee break, Orizont Hall

11³⁰- 13⁰⁰ Sessions of the ICEEM Conference, Faculty of Industrial Chemistry, Blvd. D.
Mangeron 71 A, Iasi

13¹⁵ - 13³⁰ Coffee break, Orizont Hall

13³⁰ Plenum - Closing Ceremony, CH III Room, Faculty of Industrial Chemistry,
Blvd. D. Mangeron 71 A, Iasi

SEPTEMBER 28

Excursion to Moldavian Monasteries (organized on specific request of participants)

** Please note the different address for the opening ceremony*

DETAILED CONFERENCE PROGRAM

September 26, 2002

9³⁰ OPENING CEREMONY

Welcome address

Prof. Dr. Eng. Matei Macoveanu
"Gh. Asachi" Technical University, Iasi
Conference Chairman

Prof. Dr. Eng. Ecaterina Andronescu
Minister, Romanian Ministry of Education and
Research

Prof. Dr. dr. h.c. Gheorghe Duca
Minister, Ministry of the Environment, Republic of
Moldova

Prof. Dr. Eng. Mihai Cretu
Rector of "Gh. Asachi" Technical University, Iasi

Eng. Dumitra Mereuþã
Director, Ministry of Water and Environmental
Protection

Prof. Dr. Eng. Valentin Popa
Dean of the Faculty of Industrial Chemistry

Plenary Conference

***"Ten Years of Environmental Engineering and Management Education and
Research at the "Gh. Asachi" Technical University of Iasi"***

Prof. Dr. Eng. Matei Macoveanu
Prof. Dr. Eng. Carmen Teodosiu
Technical University, Iasi, Romania

September 26, 2002

SESSION I

ENVIRONMENTAL ENGINEERING SECTION

ENVIRONMENTAL POLLUTION AND MONITORING

(CH III Room)

Conference chairmen:

**Raluca Mocanu
Valentin Popa**

11⁴⁵ Barsa River Monitoring

M. Sica, R. Toader, C. Draghici, R.Tica,
D. Dragan

12⁰⁰ Case Study Regarding the
Cleaning of some Equipment from the
S.C. Metadet S.A. Falticeni Industrial
Platform

M. Nicu, M. Macoveanu, N.C. Ilie
V.Barboiu

12¹⁵ Analytical Characterisation of the
Black Sea Coast Lakes

E. Chirila, S. P. Godeanu, M. Godeanu,
L.D. Galatchi, P. Capota

12³⁰ Environmental Pollution and its
Harmful Impact on Vegetal Species

V. I. Popa, C. Teaca, R. Bodarlau

12⁴⁵ Discussions

13⁰⁰ Atmospheric Heavy Metal Survey
by Means of Mosses: A Regional Study

S. Cucu – Man, R. Mocanu, E Steinnes

13¹⁵ The Impact of Energy Production
on the Environment in Romania

C. Zaharia, M. Surpateanu

13³⁰ The Medical and Sanitary Problems
in Transborder Pollution of the Air

V. Botocan, F. Schneider, A. Burlacu

13⁴⁵ Discussions

14⁰⁰ Plenum – MATRIXROM Publishing House- Books Presentation

14¹⁵-15⁰⁰ Coffee Break / Registration

15⁰⁰ Environmental Analysis by
Capillary electrophoresis

C. Draghici

- | | |
|--|--|
| 15¹⁵ Aspects Concerning the Lasting Development of Maritime Ports | H. Menadil, V. Popescu |
| 15³⁰ Speciation of Chromium in Sediments, Plants and Water from "Tabacarie Lake" | S. Birghila, V. Popescu |
| 15⁴⁵ Development of a Monitoring System for the Environmental Factors at Company Level | I. Persu, A. Iancu, L. Dragos, C. Fluerau |
| 16⁰⁰ Occurrence of Cadmium, Chromium, Lead and Nickel in Corn Leaves During the 1999 Total Sun Eclipses by ICP-AES | E. Chirila, I. Carazeanu, S. Dobrinas, M. Ropota |
| 16¹⁵ Discussions | |

September 26, 2002

ENVIRONMENTAL ENGINEERING SECTION

**ENVIRONMENTAL MODELLING, SIMULATION AND OPTIMIZATION
(CH III Room)**

Conference Chairmen :

**Maria Gavrilesco
Ion Balasanian**

- | | |
|---|---|
| 16³⁰ Optimisation of Power Plant Burning Process in Order to Minimise Pollutants Emission and the Lost the Heat | C. Cojocaru, M. Macoveanu, V. Nagacevschi |
| 16⁴⁵ Prediction of the Toxicity of Some Aromatic Pesticides by Neuro-Fuzzy Method | C.D. Neagu, L.P.Georgescu, F. Popescu |
| 17⁰⁰ Modelling and Simulation of the Triphasic Fluidised System Applied to Attached – Growth Nitrification | M. Gavrilesco, F. Ungureanu, B. Robu |
| 17¹⁵ Discussions | |
| 19⁰⁰ Gala Dinner | |

September 26, 2002

SESSION II

ENVIRONMENTAL MANAGEMENT AND SUSTAINBLE DEVELOPMENT SECTION

ENVIRONMENTAL IMPACT AND RISK ASSESMENT (Professoral Council Room)

Conference chairmen :

**Maria Gavrilescu
Matei Macoveanu**

11⁴⁵ Savinesti Chemical Platform-
Technologies and Impact on
Groundwater Pollution

S. Dezsy

12⁰⁰ The Environmental Impact of
Natural Radionuclides Arising from
some Non-Nuclear Industries in
Romania

E. Botezatu, C. Grecea, O. Iacob

12¹⁵ Effects and Risk Analysis of
Insecticides Used in Dutch Agricultural
Systems on Non- Target Insects

M. Vaal, M. Van Mannekes, D.
Groenendijk, M. Van den Berg

12³⁰ Discussions

12⁴⁵ Risk Management: Land-Use
Planning under European Approach

M. Gavrilescu

13⁰⁰ Research on the Impact Produced
by the Storage of Urban Garbage

V. Meglei, D. Zeciu, C. Paiusi,
C Popescu, D. Scarlatache, M. Popescu
P. Matei

13¹⁵ Thermoenergetics Sustainable
Development: Combined Heat and
Power

D. Ursescu, V. Zubcu, M. C. Miler, G.
Ursescu, D. Balanescu

13³⁰ Discussions

14⁰⁰ Plenum – MATRIXROM Publishing House- Books Presentation

14¹⁵-15⁰⁰ Coffee break / Registration

September 26, 2002

SESSION I

ENVIRONMENTAL ENGINEERING SECTION

WATER AND WASTEWATER TREATMENT TECHNOLOGIES

(Professoral Council Room)

Conference chairmen:

**Carmen Teodosiu
Eugen Pincovschi**

15⁰⁰ The Mechanism of Nitrates Transformation in the Processes of Electrochemical Treatment of Natural Waters

Gh. Duca, M. Gonta, V. Matveevici, V. Iambartev

15¹⁵ Treatment of the by-Products Resulted in the Analysis of Anionic Surfactants in Wastewater

A. Duta

15³⁰ Transport and Flocculation of some Cationic Polyelectrolytes

L. Ghimici, S. Dragan

15⁴⁵ Applications of Heterogeneous Photocatalysis for Industrial Wastewater Treatment

A.F. Caliman, C. Teodosiu, I. Balasanian

16⁰⁰ Use of Oxidised Activated Carbons in Water Treatment Processes

T. Lupascu, M. Ciobanu, N. Tambaliuc

16¹⁵ Discussions

16³⁰ Removal of some Radioactive Isotopes from Nuclear Wastewaters Using Natural Exchangers

E. Popovici, I. Cretescu, E. Botezatu, G. Soreanu, A. Hanu, C. Hristodor

16⁴⁵ Applicability of Shrinking Core Model for Ion Exchange Processes on Sulphonated Gel Resins

A. M. Oancea, C. Matei, M. Radulescu, E. Pincovschi

17⁰⁰ Organo – zeolites in Environmental Pollution Abatement Processes
II. Removal of Metal Anions

E. Popovici, C. Hristodor, G. Burtica, R. Pode, M. Petruc, A. M. Hanu

17¹⁵ Catalytic Wet Peroxide Oxidation of Azo Dye Reactive Yellow 84 over Fe-Exchanged Ultrastable Y Zeolite

C. Catrinescu, M. Neamtu, A. Yediler, M. Macoveanu, A. Kettrup

17³⁰ Discussions

19⁰⁰ Gala Dinner

September 27, 2002

SESSION I

ENVIRONMENTAL ENGINEERING SECTION

TREATMENT TECHNOLOGIES FOR GASEOUS FLUXES (CH III Room)

Conference chairmen:

**Anne Giroir – Fendler
Werner Weisweiler**

9⁰⁰ Removal of Nitrogen Oxides from Diesel Exhaust: Laboratory Studies for the Development of a SCR - Catalyst - System using Solid Urea as Reducing Agent

W. Weisweiler

9³⁰ High Temperature Desulphurization of Hydrogene Sulphide Containing Gases on Zinc Oxide Absorbents

I. Untea, E. Pincovschi, M. Dancila

9⁴⁵ Thermodynamic and Kinetic Study of Gas Desulphurization by Adsorption on Zeolites

I. Untea, D. Brasoveanu, M. Dancila, S. Bocskor

10⁰⁰ No_x and SO₂ Removal from Exhaust Gases in Combined Electric Fields

T. Sajin, A. Craciun, C. Botez, Gh. Duca

10¹⁵ Technologies and Atmospherical Pollutants in the Savinesti Chemical Platform

C. Miclaus, M. Nicu

10³⁰ Effect of V³⁺/Fe²⁺ Substitution on the Selective Catalytic Reduction of No by Ammonia over Mixed Oxides Derived from Layered Double Hydroxides

G. Carja, H. Niiyama

10⁴⁵ Mixed Oxides Derived from Vanadium Substituted Layered Double Hydroxides as Catalysts Precursors for SO₂ Oxidation

G. Carja, I.M. Popa, G. Ciobanu, N. Aelenei

11⁰⁰ Discussions

11¹⁵-11³⁰ Coffee Break

September 27, 2002

SESSION III

ENVIRONMENTAL EDUCATION AND CURRICULUM DEVELOPMENT SECTION

**CURRICULUM DEVELOPMENT FOR ENVIRONMENTAL ACADEMIC PROFILES,
ENVIRONMENTAL EDUCATION**
(CH III Room)

Conference chairmen:

**Carmen Teodosiu
Michael Jørgensen**

11³⁰ Graduate and Post- Graduate
Curricula in Environmental Management
at the Technical University of Denmark

M.S. Jørgensen, U. Jørgensen

11⁴⁵ The Public Perception on the Risk
of Environment Pollutions in Iasi County

C. Horaicu, F. Prisacaru

12⁰⁰ Innovative Environmental Education
- the Case of IIIEE - Sweden

A. Budeanu

12¹⁵ NGO's Involvement in Education
for Environment Protection

B. Dima, M. Dima, V. Meglei

12³⁰ Community based research as
part of the curriculum

M. Vaal

12⁴⁵ Discussions

13⁰⁰ Workshop Program SOCRATES/CDI- Curriculum Development at Initial level for
the Environmental Protection Academic Profiles

13¹⁵ Coffee Break

13³⁰ Plenum- Closing Ceremony , CH III Room

September 27, 2002

SESSION II

ENVIRONMENTAL MANAGEMENT AND SUSTAINBLE DEVELOPMENT SECTION

ENVIRONMENTAL INTEGRATED MANAGEMENT (Professoral Council Room)

Conference chairmen:

**Michael Jørgensen
Gabriel Luca**

9⁰⁰ Strategies for Corporate
Environmental Competence
Development

M.S. Jørgensen, M. Forman

9¹⁵ Implementation of an Environmental
Management System at S.C. Lafarge
S.A. Bucuresti

C. Teodosiu, F. Amarandei

9³⁰ Waste and Environment Protection
Management of the German Small and
Medium Sized Foundries

E.G. Depner, I. Pencea, C. Dumitrescu
M. Hell, M.Ion

9⁴⁵ Management Options for the
Industrial and Municipal Wastes in the
City of Iasi

C. Teodosiu, M. Petruc

10⁰⁰ Life-Cycle Assessment of Some
Alternatives for the Supply of Thermal
Energy in the Municipality of Iasi,
Romania

N. Peiu

10¹⁵ Preliminary Actions For The ISO
14001 Implementation in a Synthetic
Yarns And Fibres Plant

B. Robu , C. Teodosiu

10³⁰ Changing Concepts of High
Performance to Socially Sustainable
Organization

C. Rusu, N. Davis

10⁴⁵ Discussions

11⁰⁰-11³⁰ Coffee Break

September 27, 2002

ENVIRONMENTAL POLLUTION PREVENTION
(Professoral Council Room)

Conference chairmen:

Matei Macoveanu
Eugen Pincovski

11³⁰ Well Defined Silica-Alumina Supports for Environment Pollution Prevention

A. Giroir-Fendler L. Tidahy, E. Iojoiu, A. Julbe

11⁴⁵ The Disposal of Used Ion Exchange Resins – the Possibility to Re-use the Ion Exchange Resins in Various Applications

M. Chirica, V. Dicu

12⁰⁰ Researches Regarding the Numerical Evaluation of the Toxicity Indices for the Noxes produced by the Burning Sources

V.D. Negrea, S. Ponoran, G. Padure, V. Sandu

12¹⁵ Reducing the Environment Hazard Using the Lignosulfonates as Copolymerization Partners

L. Dumitrescu, V. Petrovici, R. Tica, I. Manciulea

12³⁰ Low-Pollution Bleaching of Pulp

D. Gavrilescu

12⁴⁵ Discussions

13⁰⁰ Coffee Break

13³⁰ Plenum- Closing Ceremony, CH III Room