

SCIENTIFIC EVENTS OF THE YEAR 2005

Between 2-4 June 2005 the city of Galati hosted *The VIIIth Symposium on colloidal and surface chemistry* under auspices of University Dunarea de Jos, University of Bucharest, Romanian Society of Chemistry and Romanian Association for Colloidal and Surface Science. The scientific contributions were organized in 3 sections which contained plenary lectures (8), oral communications (42) and posters (24):

I -Disperse systems and physical chemistry of interfaces

II - Biocolloids (food products, cosmetics, pharmaceutical)

III- The functional charge of surfaces

For editorial space reasons we mention only plenary lectures:

1. *New colloidal delivery systems* -Prof. dr. M.Olteanu, from Bucharest University - scientific secretary of this symposium
2. *Elastic turbulence in a dilute proline solution. A lagrangean frame investigation* - Dr. Teodor Burghilea – from Weizman Institute of Science-Israel.
3. *Effect of sol-gel thin film microstructure on the electrical and optical properties of oxide film coated surfaces* - Dr. Viorica Musat, dr. Regina Monteiro, dr. Elvira Fortunato.
4. *Cobalt and cobalt-vanadium-modified MCM-41*- Dr. G. Kadinov, dr. S. Todorova, dr. K. Teuchev, dr. Viorica Parvulescu, dr. B.L. Su (Institute of Catalysis Bulgarian Academy of Sciences, Institute of Physical Chemistry, Romanian Academy, The University of Namur, Belgium).
5. *A novel way to stabilize a nanoemulsion*-dr. Lavinia Popescu, dr. Radu Chisleag, dr. Teodor Visan (Estee, Lauder Companies, Melville UEA, Politehnica University of Bucharest)
6. *Surface cationic active agents with technological application*- dr. Traian Florea, dr. Mircea Leonte-(University of Galati, Dunarea de Jos).

At poster session from our Faculty were participated the following staff members: I. Baciu (1), M. Leca (4), M. Micutz (2), M. Olteanu (9), Manuela Spiroiu (3), Teodora Stancu (2).

In the 2005 vol.5 number (1-2) of *Journal of Colloid and Surface Chemistry* (ISBN 1953-4800), published by Romanian Association for Colloids and Surface Chemistry appear 10 selected papers, communicated at this scientific forum.

The social program of this event was also very rich including a Folk Show and a festive dinner in 3rd June, an cocktail in walk ship on Danube river, in 4th June. All this have

occasioned interesting discussions between researchers of this very modern domain of science.

Between 20-24 June 2005 in Chishineu was organized the **12nd International Ciugaeffs Conference in Coordination Chemistry** under support of Russian Academy of Sciences, High Council on Science and Development of Moldova Republic and American Found for Citizen Research and Development. This event is dedicated to 100th anniversary of the academician A.V. Ablov, founder of coordination chemistry school in Moldova. Chair of the International Council of Conference was academician N. Gerbalau, co-chair academician N.T. Kuznetsov. Academician Ionel Haiduc and corresponding member of Romanian Academy Professor. dr. Andruh Marius were participated in this council from Romanian part.

The scientific contributions were distributed in two sections as plenary conferences, oral communications (60) and posters (395).

We can mention titles of some open conferences:

The famous scientist-founder of the coordination chemistry school in Moldova (A.P. Gulea, Chishineu, R. Moldova); *Oximes in coordination chemistry from Ciugaeff to Ablov and in present* (V.I. Kukuskin, Sankt Petersburg, Russia), *Development of coordination Chemistry with calcogene semicarbazonides in Moldova* (N.D. Revenko - R. Moldova); *Complexes with charge transfer in ecological chemistry* (J. Duca - R. Moldova); *Coordination Chemistry, metal organic chemistry, supermolecular chemistry – the magic triangle of inorganic chemistry* (I.Haiduc - Romania); *Thiosemicarbazide as sintonic ligand in coordination chemistry* (N. Garbelau - R. Moldova); *Biometal complexes in medicine and agriculture* (C.Turta - R. Moldova).

In program of conference were included a *Remembering session*, organised by friends and co-workers of that soul and spirit full of treasure, which was academician Antonie Ablov (1905-1978), edition of a booklet and opening of a memorial plate at the Institute of Chemistry of Academy of Sciences.

In the very dense schedule of conference were also included in 24th July different discussions and visits of scientific and cultural institutions from Chishineu.

Between 5-8th July at Saint Malo-France have been organized **Electrochemistry days 2005** under auspices of Bretagne Region, National Council for Scientific Research (CNRS), University of Rennes, High National School in Chemistry at Rennes, Atalanta of Rennes, National Army Department. The International Scientific Committee (from Romanian part, professor. Maria Jitaru- Babes -Bolyai University of Cluj) selected the papers concerning the following topics which constitute the 10 sections of conference:

1. Electrochemistry and interfacial phenomena (12, 18)
2. Molecular electrochemistry and bioelectrochemistry (20, 29)
3. Electroanalysis, captors, biocaptors and biosensors (20, 46)
4. Electrods materials, electrocatalysis, nanoelectrochemistry (19, 33)
5. Electrosynthesis (12, 22)
6. Thermodynamics, properties of electrolytes, electrochemical generators (9,9)

7. Electrochemical genius (Electrochemical engineering and procedures for pollution removal (10, 17)
8. Electrochemical genius(Electrochemical engineering procedures for pollution removal (10,12)
9. Corrosion (14, 23)
10. Treatments of surfaces and electrochemical depots (15, 18).

The selected contributions at this conference have been organized in each topics have been organized as invited plenary conferences (3), thematic conferences (12) oral communication and posters. The number of oral communications and posters is done in parentheses after corresponding title of section.

From our faculty in section I have been presented the oral communication: *Reactivity of some substituted heterocyclic sevenatomsring sulfone: spectroelectrochemical and modeling study* (authors: Elena Volanschi, L Preda, M. Hillebrand, A. Perjebby) and poster: *Influence of unconventional electrolyte on the reactivity of ion radical electrical generated: case of ionic liquids* (authors: Loredana Preda, C Lagrost, P. Hapiot, M. Vaultier and E. Volanschi.)

The American Romanian Academy of Art and Science (ARA) organized his **30th ARA Congress** between 5-10 July in Chishinew, hosted by Academy of Economic Studies of Moldova Republic (chairman Prof. dr. Dumitru Todoroi). This year's theme of Congress: *From the Information Society to a knowledge based society* Unfortunately, the 30th ARA anniversary is deeply marked by the loss of his founder and the first President of ARA, Monseignor dr. Octavian Barlea, as mentioned actual President Ion Paraschivoiu, (Polytechnic University of Montreal - Canada) in his message for participants and has documented in his memorial paper by Cezar Vasiliu ARA Member, professor at University Sherbrooke, Canada.

From our faculty in Chemistry section were presented two oral communications: *IR spectral and theoretical study concerning the nature of oligomeric association forms in some sterols solutions. Comparison on cholesterol/cholestanol behavior* – authors: V.Chiosa, I. Stanculescu, C. Teodoreanu and *Molecular modeling in complex chemiluminescent systems containing ester-oxalates* - authors: I. Stanculescu, C. Tutuianu, A. Gimiga, C. Mandravel. The first author of last communication was distinguished with a diploma by organizers.

It does a special mention to the plenary conferences with general themes: *The European integration and the competitiveness of the universities* - Grigore Belostecinic -Honorary Chairman of 30th ARA Congress.

Dan Barbilian - *Ion Barbu - the beginning of the history and philosophy of mathematics in Romania*, Dragos Vaida - Bucharest University, Romania. *The Evolution of geopolitics in SE Europe and the fate of the Republic of Moldova* - Prof. S.I. Chirca - Honorary Member of Romanian Academy, R. Moldova.

The Congress program contained plenary sessions and oral communications scheduled in traditionally 16 sections: Applied mathematics (14), Biology (8), Computer Sciences (27), Chemistry (15), Economy (15), Education (17), Engineering (38), Environment (11), Arts

(3), History - Antropology (9), Law (24), Linguistics (9), Literature (9), Medicine (7), Philosophy Politics Theology (11), Physics (15). In parentheses is mentioned number of oral communications presented at each section.

In general program of Congress was included: *Rector's reception* in 5th July, Round table *Distance Learning* in the evening of 6th July, moderator professor Ileana Costea (USA), a *Book exhibition* concerning AESM publications and ARA 30 Congress participant publications, a *Book donation from AES Bucharest*, located in Hall Blok B and a *Picture exposition* in 7th July - *Day of open doors at the AESM* (laboratories and book exhibition). In 7th July evening between 18-20, 30 hours was a beautiful banquet with announcement of ARA awards.

The Romanian Society of Catalysis organized in 24th June 2005, the workshop **Nano-oxides in Catalysis** in Eugen Angelescu Auditorium. The followings main conferences are sustained:

The preparation of oxidic catalysts with nano-structures techniques-senior researcher dr Viorica Parvulescu-Institute of Physical Chemistry I.G. Murgulescu

Use of Mossbauer Spectroscopy for nano structure evidence by ex-situ and in -situ experiments – senior researcher dr George Filoti - INRDPM

Structure determination for oxidic materials by experimental design – senior researcher Ligia Frunza - INRDPM

Reactions of oxidation using oxide catalyst with nanostructure – Prof. dr Vasile Parvulescu

3rd Black sea Basin Conference on Analytical Chemistry (3rdBBAC) was organized in Constantza at University Ovidiu between 12-14 September, 2005. As in the 1st BBCAC held in 11-15 September 2001, Odessa, Ukraine and the 2nd BBCAC held in 14-17 September 2003, Sile - Istanbul, Turkey, the Scientific program include: plenary lectures and keynotes (13), oral presentations (29) and posters (135). The main topics of the conference were:

1. Marine atmospheric and water environment: modelling, monitoring and assessment;
2. Metals and metallic compounds in environment and life;
3. Chemistry and fate of organic pollutants;
4. Chemical and biological techniques in environmental analysis;
5. Separation methods. Applicability in environmental analysis;
6. Bologna process: is it a "new-fashioned" or a real necessity? A special session dedicated to oil products pollution of marine environment was organised. At this conference were 150 participants from 54 university and research institutes from 18 countries.

The interesting conferences: *Biomonitoring of atmospheric metal deposition* – Prof.dr Eiliv Steinnes - University Trondheim; *New instruments for the ultra-sensitive detection of hono and hno₃ in the atmosphere: recent instrumental developments and results from field studies* – Prof. dr. Peter Wiesen - University Bergische, Wuppertal, Germany; *Advances and trends in environmental chemistry - the case of persistent, bioaccumulative and toxic compounds (pbts) in the environment* – Prof.dr. Ivan Holoubeck -University Masaryk, Brno; *Development of a chemiluminescent immunoassay for the detection of azinphos-methyl in honeybees* - Prof dr. Stefano Girotti University of Bologna, Italy; *Study of metallothionein isoforms as biomarkers by lc-es-ms and ce-es-ms* – Prof. dr. Jose Barbosa

Torralbo – University of Barcelona, Spain; *Study of metallothionein isoforms as biomarkers by lc-es-ms and ce-es-ms* – Prof.dr. J.F. Koos van Staden - University of Pretoria, South Africa; *Heavy metals long-range transport* – Prof.dr. Raluca Mocanu - University „Al.I.Cuza” Iasi, Romania; *Surface modification of electrodes and their application in chemical analysis* – Prof. dr. Ahmed Abdo Galal - University of Cairo, Egypt; *A new technology for oil products recovery from refining wastes* – Prof.dr. Dan Mandalopol, University “Ovidius” Constantza;

All the members of Department of Analytical Chemistry from our faculty and from host faculty (Prof dr. Elisabeta Chirila, Prof dr Dan Mandalopol) were participated actively at this event organisation and development of scientific and social program. The web address of 3 BBCAC is: http://www.univ-ovidius.ro/faculties/phys_chem_petr/3bbcac/index.php

Between 22- 24th September 2005 Faculty of Applied Chemistry and Materials Science from Polytechnic University of Bucharest organized *the Romanian International Conference on Chemistry and Chemical Engineering RICCCE XIV*. As co-organizers: CD Nenitescu Foundation, Romanian Chemical Society, Ministry of Education and Research- PNCDI Program MATNANTECH. This event was sponsored by Romanian and one Belgium firms which are presented on the end of program brochure. The conference program is divided in 11 traditional section of conference, containing key- note lectures, oral presentations and posters. All these three information and number of work containing staff members of our faculty, will be expressed in parentheses after section title:

1. Inorganic Chemistry [3,8,27,2];
2. Biochemistry and Organic Chemistry [3,13, 18,0];
3. Physical Chemistry [2,10,36,23];
4. Analytical Chemistry and Quality Control [2,16, 21, 3];
5. Biochemical and Chemical Engineering [2, 30, 28, 0];
6. Inorganic Chemical Technology and Environmental Protection [2, 12, 31, 5];
7. Organic Chemical Technology [2, 19, 17, 0];
8. Science and Engineering of oxide materials [2, 9, 32, 0];
9. Chemistry and technology of macromolecular compounds[1,13,17,0]
10. Electrochemistry and corrosion [6, 12, 36, 1];
11. Economic engineering [2,11,9,0].

The numerous invited as keynote speakers and members of International Scientific Community from various European countries contributed to the promotion of Romanian Scientific Community and to success of this event.

In the 18th October in the I.G. Murgulescu Auditorium in front of distinguished audience professor **Mashahiro Yamashita** from Tohoku University & Crest (JST) Japan sustained the conference *Nano-science of Advanced Metal – Complexes: Single Chain Quantum Magnets and Gigantic Optical Non-linearity of Nano – Wire Metal Complexes*. One from scientific objectives of professor Yamashita (resolved with participation of some members of Department of Inorganic Chemistry from our faculty ,particularly with lecturer dr

Marilena Fierbinteanu Cimpoiu) corresponds to reduction of magnetic units dimensions in devices for stock of the information. The synthesis of non-linear optics materials is a very modern research. For this reason the conference of professor Yamashita was very interesting.

Between 19-21 Oct. 2005 the INCD - Ecoind organizing committee, presided by Mrs. Margareta Nicolau, held the annual ***International Symposium Environment and Industry***. As co-organizers. Romanian Academy Section of Chemical Sciences, Romanian Chemical Society, Ministry of Economy and Trading National Authority for Scientific Research, Ministry of Environment and Waters Management, Balkan Society for Environment-RoB.E.N.A.

The program of symposium is systematized in four traditional sections. In parentheses after the title of section the number of oral communications and posters are given as follows:

- I. Actual trends in the domain of environmental technology [43, 20]
- II. Evaluation of pollution, audit environmental [21, 9]
- III. Methods and performing techniques for control and monitoring of industrial pollution [21, 8]
- IV. Laws and management of environments quality [16, 4]

Two round tables axed on *Future specialization in environments protection* (where participated from our faculty professors A. Danet, C. Mandravel and lecturer dr. V.Chiosa) and on *Prevention of pollution in mining activities*, concentrated also attention of a numerous specialists from Romania and from others European countries.

The Young Researchers from Moldova Association, Moldavian Sciences Academy and Moldavian Ministry of Education, Young and Sports were organized the

This conferences program contained three principal sections: ***International Conference of Young Researchers*** on 11th November 2005 in Chishinew.

- I *The biological, chemical and ecological sciences* (56 oral communications admitted)
 - II *The mathematical, physical and engineering sciences* (43 oral communications admitted)
 - III *The social, humanistic and economical sciences* (96 oral communications admitted).
- Abstracts of this international conference were published in English, Romanian or Russian

In the first section from faculty of Chemistry from Bucharest University the work *Spectral and molecular modeling study concerning the interaction of cholesterol with 2-pyridine aldoxime methylchloride (2 PAM)* (authors Chiosa Valentina, Manea Mihaela, Raju Gheervarghese, Ioana Stanculescu) was presented. The oral presentation in Power Point technique was realized by graduate Ph D student Manea Mihaela

This event represented a good training for young researches, an excellent chance for their experience intercommunication.

Between 6 - 10 December 2005 in Belgrade the Serbia Society of Chemistry sustained by European Society of Chemistry and Molecular Sciences organized the **6th European Meeting on Environmental Chemistry**.

The program of this meeting contained plenary lectures (4), session lectures (6), oral presentations (65) and posters.

The plenary lectures titles:

The emergence of stable isotopes in environmental and forensic geochemistry studies - Paul Philp - University of Oklahoma-USA

Rapid development of the analytical instrumentation and its influence on the environmental science- Alexander Stamatovic University of Belgrade

Assessment of air quality in the Cologne conurbation using pine needles as passive samples - Lorenz Schwark from University of Cologne – Germany

Sources and feature of atmospheric particulate matter in the Mediterranean-consequences for the air quality monitoring - Sergio Rodriguez Gonzalez - Izana Atmospheric Observatory - Spain

From our faculty at this prestigious event has participated lecturer dr. V. Chiosa with the paper: *Acute toxicity evaluation of some pollutants with the small molecular weight*.

Prof. Dr. Cristina Mandravel