

INTERNATIONAL CONFERENCE ON  
DYNAMICS OF EXOTIC PHENOMENA IN CHEMISTRY

Hajdúszoboszló, Hungary  
August 22-25, 1989

Sponsored by

The Hungarian Academy of Sciences  
The Hungarian Chemical Society

2nd Circular

### Chairmen of the Conference

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### Organizing Committee

**Secretary:** Dr. Vilmos Gáspár, Kossuth L. Univ., Debrecen, Hungary

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Prof. Miklós Orbán, Eötvös L. Univ., Budapest, Hungary  
István Lengyel, Kossuth L. Univ., Debrecen, Hungary

## INTRODUCTION

This international conference is intended to fit in the series of conferences on nonlinearities in chemical kinetics, e.g. the conference on "Spatial Inhomogeneities and Transient Behavior in Chemical Kinetics" held in Brussels, 1987, and the series of Gordon Conferences in years of 1982, 1985 and 1988.

## TOPICS

Thermodynamic, kinetic, mechanistic and dynamic aspects of both open and closed systems that show spontaneous evolution of dissipative structures in time and space.

## DATE AND LOCATION

The conference will take place at an Educational Center, Hajdúszoboszló, Hungary (a spa, 200 km East of Budapest, 20 km West of Debrecen), August 22-25, 1989.

## SCIENTIFIC PROGRAM

Lectures of 30 minutes each - followed by 15 minutes of discussions - will be given by the following invited speakers:

- I.R. Epstein (*Brandeis University, USA*):  
Experimental and Theoretical Studies of Complex Chemical Oscillators.
- R.J. Field (*University of Montana, USA*):  
Mechanism of the Methylene-Blue - Sulfide - Oxygen Oscillator.
- H.D. Försterling (*University of Marburg, FRG*):  
The Role of Radicals in the Belousov-Zhabotinskii Reaction
- P. Gray (*University of Leeds, UK*):  
To be announced
- P. deKepper (*CNRS, Talence, France*):  
Sustained Coherent Spatial Structures in a Quasi-1D Reaction-Diffusion System
- G. Nicolis (*University of Brussels, Belgium*):  
To be announced
- R.M. Noyes (*University of Oregon, USA*):  
Mechanism of Chemical Oscillators: Status in 1989
- J. Ross (*Stanford University, USA*):  
Thermodynamics and Experiments for Systems with Multiple Stationary States
- K.C. Showalter (*West Virginia University, USA*):  
Chemical Waves in Immobilized Catalyst Systems
- H. Swinney (*University of Texas, USA*):  
Experiments on Spatio-Temporal Chemical Patterns
- L. Treindl (*Comenius University, Czech.*):  
Permanganate Oscillators in a CSTR
- A.M. Zhabotinskii (*Inst. of Biol. Tests, USSR*):  
Chemical Oscillations and Waves

Short talks of 15 minutes each - followed by 5 minutes of discussions - will be given by the following speakers who were selected by the applications sent in:

- K. Bar-Eli (*School of Chemistry, Tel-Aviv, Israel*):  
Coupling of Identical Chemical Oscillators
- G. Bazsa (*Kossuth L. University, Debrecen, Hungary*):  
Exotic Phenomena in Nitric Acid Oxidations
- M.T. Beck (*Kossuth L. University, Debrecen, Hungary*):  
Mechanistic and Parametric Conditions of Exotic Chemical Kinetics
- I. Das (*University of Gorakhpur, India*):  
Novel Experiments on Periodic Precipitation Processes
- G.C. Davidson (*University of Norwich, U.K.*):  
Pulsed Systems - Systems which are both Open and Closed
- H. Farkas (*Technical University, Budapest, Hungary*):  
Hopf Bifurcations in some Chemical Models
- A.S. Kovalenko (*LVPI of Phys. Chem. Ukr. Ac. Sci., Kiev, USSR*):  
Concentration Oscillations and Waves in the Reactions with Bromate and Iodate Oxidations
- E. Körös (*Eötvös L. University, Budapest, Hungary*):  
Structure-Reactivity Relationship in Aromatic Bromate Oscillators
- V. Krynsky (*Inst. Biol. Phys. Acad. Sci., Puchino, USSR*):  
New Methods for Obtaining Three-Dimensional Structures in Chemically Active Medium
- J.P. Laplante (*RMC, Ontario, Canada*):  
The Stabilization of Unstable States in the Bistable Iodate-Arsenous Acid Reaction in a CSTR
- R. Larter (*Indiana University, Indianapolis, USA*):  
Complex Oscillation and Chaos in the Peroxidase Reaction
- Ru-Sheng Li (*Tsinghua University, Beijing, China*):  
Exotic Stationary-State Patterns and Oscillation in Bimolecular Reaction Systems
- N.A. Makszimenko (*Moscow State University, Moscow, USSR*):  
Influence of Acoustic Field on Belousov-Zhabotinskii Reaction
- M. Menzinger (*University of Toronto, Canada*):  
Heterogeneities and Stirring Effects in a CSTR
- S. Müller (*MPI, Dortmund, FRG*):  
Relationship between the Chemical Mechanism and Macroscopic Pattern Formation in the BZ Reaction
- J.C. Micheau (*INRCP, Toulouse, France*):  
Nonlinear Phenomena in Photochemical Processes
- I. Nagypál (*József A. University, Szeged, Hungary*):  
Effect of Magnetic Field on a 1D Chemical Wave
- M. Orbán (*Eötvös L. University, Budapest, Hungary*):  
Copper(II)-Catalyzed Chemical Oscillators

- A. Rovinsky (*Inst. of Biol. Phys., Puschino, USSR*):  
Diffusive Instabilities and Nonlinear Dynamics of the BZ Reaction
- F. Sagués (*Universitat de Barcelona, Spain*):  
Macroscopic Stochasticity in the Chlorite-Iodide Reaction
- Z.A. Schelly (*University of Texas at Arlington, Texas, USA*):  
Chaotic Behaviour of Chemical Systems
- P.A. Sørensen (*University of Copenhagen, Denmark*):  
Experimental Study of the Embedding of Attractors in Concentration Space
- L.P. Tikhonova (*LVPI of Phys. Chem. Ukr. Ac. Sci., Kiev, USSR*):  
The Role of Metal Complexes as Catalysts for BZ Reactions
- K. Yoshikawa (*Nagoya University, Japan*):  
Rhythmic Phenomena at Interface and Membrane - Self Organization of Spatio-Temporal Structure

Titles of the approximately 50 Posters will be given in the program. Posters will be on exhibit during the Conference. Two group-discussions of the posters are scheduled.

#### TENTATIVE SCHEDULE

Hour	Aug. 21. Mo	Aug. 22. Tu	Aug. 23. We	Aug. 24. Th	Aug. 25. Fr
a. m. 8		<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>
9		<i>Opening</i>	<i>Lecture</i>	<i>Lecture</i>	<i>Lecture</i>
10		<i>Lecture</i>	<i>Lecture</i>	<i>Lecture</i>	<i>Lecture</i>
11		<i>Short talks</i>	<i>Short talks</i>	<i>Poster disc.</i>	<i>Poster disc.</i>
12		<i>Short talks</i>	<i>Short talks</i>	<i>Poster disc.</i>	<i>Lecture</i>
p. m. 1	<i>Registra- tion</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
2		<i>Free progr.</i>		<i>Free progr.</i>	<i>Closing</i>
3			<i>Excursion</i>		
4		<i>Short talks</i>		<i>Short talks</i>	
5		<i>Short talks</i>	<i>to Debrecen</i>	<i>Short talks</i>	
6	<i>Dinner</i>	<i>Dinner</i>	<i>and</i>	<i>Dinner</i>	
7		<i>Lecture</i>		<i>Lecture</i>	
8	<i>Reception</i>	<i>Lecture</i>	<i>Hortobágy</i>	<i>Lecture</i>	

The language of the Conference is English. No translation facilities will be available.

#### PUBLICATIONS

Registered participants will be provided with the preprints of the manuscripts of lectures, short talks and posters without extra charge. Proceedings of the conference containing the lectures, short talks, posters and full text of discussions will be published in a special issue of Reaction Kinetics and Catalysis Letters. Registered participants are qualified for a major discount. For preparing the manuscripts, please follow the instructions on the enclosed sheet.

## FINANCE

By now, you should have received the Final Application Form together with a letter of informations on finances and directions towards payments. If such a letter has not reached you, please follow the instructions below and send us a telex or telefax note simultaneously, in order to confirm your participation at the Conference. If the final application (or such a note) has not been submitted by May 15, your name might be removed from the list of the tentative participants so that other applicants can be accommodated.

Early payment would help the Organizing Committee a great deal. Conference fees are the followings

	If paid before Jun. 30, 1989.	On-site fee
Participant	US\$ 250	US\$ 325
Accompanying person	US\$ 150	US\$ 200

The fixed fee will cover registration, accommodation within the Educational Center (in two-bed rooms with bath), free copies of preprints and abstracts, meals and all other expenses (reception, excursion to Debrecen and Hortobágy).

All but US\$ 50 for conferees and US\$ 30 for accompanying persons will be refunded if an approved application is canceled not later than July 31, 1989.

Payment in advance should be made to "International Conference, Hajdúszoboszló" through Hungarian National Bank, Account No.: 349-90142-6918. Please, send only international money order. Cash, personal or traveller's cheques and major credit cards are accepted only when payment is made at the site.

## USEFUL INFORMATIONS

### Visa, passport

To enter Hungary you need a valid travel document (passport) showing your nationality and identity, and a visa. Citizens of Austria, Bulgaria, Czechoslovakia, Finland, GDR, Poland, Sweden, Soviet Union, Yugoslavia can enter Hungary without a visa.

### Where to apply for a visa

*Abroad:* Personally or by post at the foreign diplomatic mission of the Hungarian People's Republic. Enclose two photos with the application form. Visas are issued within 24 hours.

*At border-crossing points:* highway border-crossing stations, Budapest Ferihegy Airport, International Boat Stations. Visas are issued within 1-2 hours depending on the volume of traffic.

### How to get to Hungary

*By air:* The following major airlines operate flights to Budapest: Aeroflot, Air France, British Airways, CSA, Finnair, Interflug, JAT, KLM, LOT, Lufthansa, MALÉV, Pan Am, SAS, Swissair.

*Airport bus service:* A VOLÁN bus service operates between Downtown of Budapest and the airport in every half hour from 5 a.m. to 11 p.m. Duration of trip: 30-40 minutes. Tickets can be purchased on the bus.

**By rail:** 30 international trains assure a direct link between Budapest and the big cities of Europe. Please note: Railway passengers cannot obtain a visa at the border, so they must do so before they leave for Hungary.

**By boat:** With a valid passport and visa you can enter Hungary on the Danube at Komárom and Mohács and on the Tisza at Szeged. There is a hydrofoil service operating between Budapest and Vienna.

**By car:** You can enter Hungary at any of the highway border-crossing stations. Issuing of visas, currency exchange and sale of diesel coupons at the IBUSZ offices at border-crossing stations, day and night. Third-party insurance is compulsory in Hungary. Three-point belts must be buckled up in the front seats for your safety. Lead-free fuel is available in major cities. Traffic regulations are generally the same as in other European countries.

Speed limits: in cities 60 km/h  
on main roads 80 km/h  
on highways 100 km/h  
on motorways 120 km/h

#### Customs and currency regulations

Please contact the foreign diplomatic mission of Hungary in your own country or call TOURINFORM in Hungary (36-1-179-800), where you can get the most updated informations in English, French, German and Russian.

#### How to get to Hajdúszoboszló

By car: From Budapest - Road 4 (Budapest-Szolnok-Hajdúszoboszló)

From Hegyeshalom (border-crossing point) - Road 1 (Hegyeshalom - Győr-Tatabánya-Budapest) then Road 4.

**By train:** An express train service operates between Budapest and Debrecen (through Hajdúszoboszló). Train leaves for Debrecen at the Budapest Nyugati (West) Railway Station by the following schedule (Local time: GMT + 2, in summer):

Budapest Nyugati		Hajdúszoboszló
6.05	—————>	8.43
7.05	—————>	9.30 [R]
10.00	—————>	12.35
11.50	—————>	14.17
13.25	—————>	16.04
15.00	—————>	17.35
17.00	—————>	19.15 [R]
19.00	—————>	21.40

[R] indicates that seat reservation is compulsory in advance.

#### Rent-a-car service in Hungary

You can order a car in Hungary anywhere in the world from AVIS, HERTZ, EUROCAR and BUDGET and in EUROPE from INTER-RENT. Western citizens can rent cars only for foreign currency. They can also pay with credit cards (Amex, Bymex, Visa, Eurocard, Mastercard) and travellers's cheques.

#### Electric current

In Hungary the voltage is 220 V.

#### What to wear

Clothing in Hungary is roughly the same as in other European countries. In summer all you need is light clothes, a pullover and maybe an umbrella. Mean temperature in August is around 25 °C.

**CORRESPONDENCE**

All correspondence relating to the Conference should be addressed to:

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International Conference on Dynamics of  
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HUNGARY

Should you have any question, please call us or send us a note:

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