



UNIVERSITATEA
BABEȘ-BOLYAI



100 de ani de la înființarea școlii de chimie cu predare în limba română la Cluj

„Chemia Napocensis – 100”

Cluj-Napoca, 9-12 Octombrie, 2019

100 Years from the Founding of the School of Chemistry taught in Romanian in Cluj

“Chemia Napocensis – 100”

Cluj-Napoca, October 9-12, 2019



Ședința omagială dedicată celebrării a 100 de ani de la înființarea școlii de chimie clujene cu predare în limba română

Miercuri, 9 Octombrie 2019

Locație: Parcul Sportiv Universitar "Prof. Dr. Iuliu Hațieganu", Facultatea de Educație Fizică și Sport
Amfiteatru
str. Pandurilor, nr. 7

10:00-10:40

Ceremonia de deschidere

Acad. Ioan Aurel POP, Rectorul Universității Babeș-Bolyai, Cluj-Napoca,
Președintele Academiei Române
Pr. Prof. Dr. Ioan CHIRILĂ, Președintele Senatului Universității Babeș-Bolyai,
Cluj-Napoca
Prof. Dr. Daniel DAVID, Prorector al Universității Babeș-Bolyai, Cluj-Napoca
Prof. Dr. Dan Tudor LAZĂR, Prorector al Universității Babeș-Bolyai, Cluj-Napoca
Conf. Dr. Gabriela Nicoleta NEMEȘ, Decanul Facultății de Chimie și Inginerie
Chimică

10:40-11:40

100 de ani de chimie la Cluj (1919 - 2019) – o scurtă istorie

Acad. Ionel HAIDUC, Acad. Cristian SILVESTRU
Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai,
Cluj-Napoca

11:40-12:10

Ecouri peste ani

12:30-14:00

Cocktail oferit de Facultatea de Chimie și Inginerie Chimică

14:00-18:00

Continuatorii Școlilor de Chimie și Inginerie Chimică de la Cluj - punte între trecut și prezent



Celebration Session Dedicated to 100 Years since the Establishment of the Romanian Chemistry School in Cluj

Wednesday, October 9, 2019

Place: University Sports Park "Prof. Dr. Iuliu Hațieganu", Faculty of Physical Education and Sport
Main hall
Pandurilor 7

10:00-10:40

Opening Ceremony

Acad. Ioan Aurel POP, Rector of Babeş-Bolyai University
Pr. Prof. Dr. Ioan CHIRILĂ, President of the Senate of Babeş-Bolyai University
Prof. Dr. Daniel DAVID, Vice-rector of Babeş-Bolyai University
Prof. Dr. Dan LAZĂR, Vice-rector of Babeş-Bolyai University
Assoc. Prof. Dr. Gabriela Nicoleta NEMEŞ, Dean of the Faculty of Chemistry and Chemical Engineering

10:40-11:40

100 Years of Chemistry in Cluj (1919 - 2019) – A Brief History

Acad. Ionel HAIDUC, Acad. Cristian SILVESTRU
Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University

11:40-12:10

Echoes over Years

12:30-14:00

Cocktail offered by the Faculty of Chemistry and Chemical Engineering

14:00-18:00

Followers of the Chemistry and Chemical Engineering Schools from Cluj - bridge between past and present



International Conference “*Chemia Napocensis – 100*” Section I

Thursday, October 10, 2019

Place: Babeş-Bolyai University, main building
Aula Magna Hall
Mihail Kogălniceanu 1

9:00-9:10

Welcome speech

Acad. Ionel HAIDUC, Professor Emeritus
Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University

Chairman: Prof. Ion GROSU, Correspondent Member of Romanian Academy

9:10-09:45

Pathways into the Unknown: Innovation in Chemistry

Prof. Henning HOPF, DHC of Babeş-Bolyai University
Institut für Organische Chemie
Universität Braunschweig, Germany

9:45-10:20

Chromacarboranes: Metal-metal Multiple Bonding and Paramagnetic Clusters

Prof. Robert Bruce KING, DHC of Babeş-Bolyai University
Department of Chemistry
University of Georgia, Athens, GA, USA

10:20-10:55

Functionalized Carbon Nanotubes for Hydrocarbon Removal from Water

Prof. ÁKOS Rédey, Professor HC of Babeş-Bolyai University
Institute of Environmental Engineering
University of Pannonia, Veszprém, Hungary



Chairman: Acad. Cristian SILVESTRU

10:55-11:30

Aspects of the History of Antimony - an Appetizer?

Prof. Hans Joachim BREUNIG, DHC of Babeş-Bolyai University
Institut für Anorganische und Physikalische Chemie
Universität Bremen, Germany

11:30-12:05

Phosphorus - The Devil's Element?

Prof. Evamarie HEY-HAWKINS, DHC of Babeş-Bolyai University
Institut für Anorganische Chemie, Fakultät für Chemie und Mineralogie
Universität Leipzig, Germany

12:05-12:40

Homo- and Heterometallic Clusters: Synthetic Strategies and Magnetic Properties

Prof. Marius ANDRUH, DHC of Babeş-Bolyai University
Departamentul de Chimie Anorganică, Facultatea de Chimie
Universitatea din Bucureşti, Romania

13:00-14:45

Lunch offered by the Faculty of Chemistry and Chemical Engineering

Chairman: Prof. Csaba PAIZS

15:00-15:30

Shining Gold Chemistry between Babeş-Bolyai and Zaragoza Universities

Prof. Antonio LAGUNA - invited guest
Departamento de Química Inorgánica – ISQCH
Universidad de Zaragoza – CSIC, Spain

15:30-16:00

Biocatalysis for Sustainable Biobased Products by Green Chemistry Tools

Prof. PETER Francisc - invited guest
Facultatea de Chimie Industrială și Ingineria Mediului
Universitatea Politehnica din Timișoara, Romania



16:00-16:30

Exotic Main Group Metal Complexes: Structural and Reactivity Features

Dr. Yann SARAZIN, Adjunct Research Fellow of Babeş-Bolyai University - invited guest

Institut des Sciences Chimiques de Rennes - CNRS
Université Rennes 1, France

Chairman: Prof. Călin CORMOȘ

16:30-17:00

Thermodynamic Aspects in Liquid Chromatography

Prof. Victor DAVID - invited guest

Departamentul de Chimie Analitică, Facultatea de Chimie
Universitatea din București, Romania

17:00-17:30

Radicals, Renewables, Reactions, and Romanians! A Tribute to UBB

Prof. James E. ('Ned') JACKSON - invited guest

Department of Chemistry
Michigan State University, East Lansing, MI, USA

Chairman: Acad. Ionel HAIDUC

17:30-18:00

How Can We Attract Young People and How They Are Becoming Fans of Chemistry

Prof. Herbert W. ROESKY - invited guest

Institut für Anorganische Chemie
Universität Göttingen, Germany

18:10-19:00

Steps Towards Life: Chemistry!

Prof. Jean-Marie LEHN, DHC of Babeş-Bolyai University (video conference)

Nobel Prize in Chemistry (1987)

Institut d'Études Avancées
Université de Strasbourg, France



International Conference “*Chemia Napocensis – 100*” Section II

Friday, October 11, 2019

Place: Faculty of Chemistry and Chemical Engineering
"Ioan Silaghi-Dumitrescu" Hall
Arany Janos 11

Chairman: Prof. Dr. Ing. Anca SILVESTRU

09:00-09:20

An Unexpected Journey through the Realm of Chemistry

Prof. Dr. Dalila KOVACS (BSc in Chemistry, 1980)
Grand Valley State University, Allendale, MI, USA

09:20-09:40

Development Continuum - Process Variables and Constants

Dr. Ing. Mihaela Carmen SIMIANU (BSc in Chemical Engineering, 1983)
Executive Director, Head of Sterile Liquids Commercialization
Merck & Co., Inc., Kenilworth, NJ, USA

09:40-10:00

Mixing Pot Results of Science, Engineering and Entrepreneurship

Dr. Ing. Valerian SIMIANU (BSc in Chemical Engineering, 1983)
Vice President of m3v (www.m3v.com), Indianapolis, IN, USA

10:00-10:20

A Career in Chemistry: from Reactive Intermediates and Absurdly Twisted Aromatics to the Complex World of Ubiquitous Polymers from our Everyday Life

Dr. Ing. Liliana CRĂCIUN (BSc in Chemical Engineering, 1985)
BASF Corporation, Budd Lake, NJ, USA

10:20-10:40

Developing Catalysts for a Sustainable Chemical Industry

Dr. Ing. Florina Corina PĂTCAȘ (BSc in Chemical Engineering, 1986)
Senior Principal Scientist, BASF, Ludwigshafen, Germany



10:40-11:00

Coffee break

Chairman: Prof. Dr. Ing. Graziella Liana TURDEAN

11:00-11:20

*The Wonderful Journey in the World of Science at the Millennia Crossroad
– The Challenging Road from a Dream to Reality –*

Dr. Ing. Radu CRĂCIUN (BSc in Chemical Engineering, 1986)

Technology Manager Americas, BASF Corp., Chemical Catalysts, Iselin, NJ, USA

11:20-11:40

Color Adventures in Chemistry

Dr. Ing. Mihaela MĂDĂRAȘ (BSc in Chemical Engineering, 1988)

R&D Manager, Sun Chemical, Performance Pigments Division, Cincinnati, OH, USA

11:40-12:00

Dinuclear Copper(II) Bioinspired Complexes: Investigations of their Catecholase Activity

Prof. Dr. Radu Florin SEMENIUC (BSc in Chemistry-Physics, 1990)

Department of Chemistry and Biochemistry, Eastern Illinois University, Charleston, IL, USA

12:00-12:20

Chemoinformatics and (Artificial) Intelligence

Dr. Dragoș HORVATH (BSc in Chemical Engineering, 1991)

Directeur de Recherche, Laboratoire de Chemoinformatique, Université de Strasbourg/CNRS, France

12:20-12:40

Paradigm Shift in Chemical and Pharmaceutical Engineering

Prof. Dr. NAGY Zoltan K. (BSc in Chemical Engineering, 1993)

Chemical Engineering Department, Loughborough University, UK
and Davidson School of Chemical Engineering, Purdue University, West Lafayette, IN, USA

13:00-14:30

Lunch break



Chairman: Prof. Dr. Ing. Mircea DĂRĂBANȚU

14:40-15:00

The Symbiosis between Chemistry and Business

Dr. Gabriela BRUEGGEMAN (BSc in Chemical Engineering, 1993)

Product and Pricing Manager, Eastman Chemical Company, Kingsport, TN, USA

15:00-15:20

Interdisciplinarity Everyday – Teaching and Research

Assoc. Prof. Dr. Simona MĂRINCEAN (BSc in Chemical Engineering, 1993)

College of Arts, Sciences, and Letters, University of Michigan-Dearborn,
Dearborn, MI, USA

15:20-15:40

From Cluj to Oak Ridge: Solving Energy and Environmental Problems with Crystal Engineering

Dr. Radu CUSTELCEAN (BSc in Chemistry, 1995)

Chemical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN, USA

15:40-16:00

Activation of Main Group Substrates on a Nickel(0) Dicarbene Complex

Assoc. Prof. Dr. Roland ROESLER (BSc in Chemistry, 1995)

and Chris Gendy, Braulio Puerta Lombardi

Department of Chemistry, Faculty of Sciences, University of Calgary, Canada

16:00-16:20

Complexes Containing M–E (M = W and U; E = P, As and Sb) Multiple Bond Stabilized by Trisamidoamine Ligands

Dr. BALÁZS Gábor (BSc in Chemistry, 1998)

Institut für Anorganische Chemie, Fakultät für Chemie und Pharmazie,
Regensburg Universität, Germany

Chairman: Prof. Dr. Ing. Mircea CRISTEA

16:20-16:40

Rethinking Energy Use for a Sustainable Chemical Industry

Prof. Dr. Anton KISS (BSc in Chemical Engineering, 1997)

School of Chemical Engineering & Analytical Science, University of Manchester,
UK



16:40-17:00

Dynamic Process Intensification

Assoc. Prof. Dr. Michael BALDEA (BSc in Chemical Engineering, 2000)

McKetta Department of Chemical Engineering, The University of Texas at Austin,
Austin, TX, USA

17:00-17:20

Methylated EDT and BEDT-TTF Chiral Conductors

Dr. Flavia POP (BSc in Chemistry, 2004)

CNRS Laboratoire MOLTECH-Anjou, Université d'Angers, France

17:20-17:40

*The Importance of Isolating Intermediates in Transition Metal-Catalysed
Homogenous Reactions*

Dr. Dragoş-Adrian ROŞCA (BSc in Chemistry, 2009)

Anorganisch-Chemisches Institut, Ruprecht-Karls-Universität Heidelberg,
Germany

17:40-18:00

From Passion for Chemistry to International Leadership

Msc. Alina NEGRU (BSc in Chemical Engineering, 2003)

General Manager, Emerson Automation Solutions, Cluj-Napoca, Romania

18:00-18:20

Infinity, Time, Trinity

Teofil CÂMPEAN

S.C. Rondocarton SRL, Apahida, Cluj, Romania

18:30

Dinner offered by the Faculty of Chemistry and Chemical Engineering

Piramida Restaurant



Ateliere

“Studenti și Alunni – punte peste timp”

Sâmbătă, 12 Octombrie 2019

Locație:

Facultatea de Chimie și Inginerie Chimică
Amfiteatrul “Ioan Silaghi-Dumitrescu”
str. Arany Janos, nr. 11

Chairman: Conf. Dr. Gabriela Nicoleta NEMEȘ, Decanul Facultății de Chimie și
Inginerie Chimică

09:00-09:50

*Oportunitățile unei cariere într-o corporație multinațională - Camera Academică de
Industrie*

Moderatori:

Dr. Ing. Radu CRĂCIUN
Technology Manager Americas
BASF Corp., Chemical Catalysts, Iselin, NJ, USA

Conf. Dr. Gabriela Nicoleta NEMEȘ
Departamentul de Chimie, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai

Conf. Dr. Ing. BARABÁS Réka
Departamentul de Chimie și Inginerie Chimică al Liniei Maghiare,
Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai

09:50-10:40

*Viitorul chimiei / inovații în chimie, în contextul creșterii populației, urbanizării,
globalizării - automatizare și inteligență artificială etc.*

Moderatori:

Dr. Ing. Liliana CRĂCIUN
BASF Corporation, Budd Lake, NJ, USA



Conf. Dr. Ing. IMRE Arpad
Departamentul de Inginerie Chimică, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai

10:40-11:30

*Rolul chimiștilor în înlocuirea țițeiului cu materii prime eficiente și ecologice
obținute din resurse bioregenerabile, pentru o dezvoltare durabilă*

Moderatori:

Dr. Ing. Mihaela MĂDĂRAȘ

R&D Manager

Sun Chemical, Performance Pigments Division, Cincinnati, OH, USA

Lector Dr. Ing. Letiția PETRESCU

Departamentul de Inginerie Chimică, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai

Lector Dr. GÁL Emese

Departamentul de Chimie și Inginerie Chimică al Liniei Maghiare,
Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai

11:30-12:20

Competențe critice pentru o carieră de succes

Moderatori:

Msc. Emilia GHEORGHIU

Director Quality Europe

Emerson Automation Solutions, Cluj-Napoca

Prof. Dr. Ing. Tiberiu FRENȚIU

Departamentul de Chimie, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai din Cluj-Napoca

Prof. Dr. Ing. Mircea CRISTEA

Departamentul de Inginerie Chimică, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai

12:20-13:10

*De la statutul de „Student” la cel de „Specialist în Chimie sau Inginerie Chimică”.
Așteptări vs. realitate!*



Moderatori:

Reprezențați ai studenților din Facultatea de Chimie și Inginerie Chimică și
Organizația Studenților Chimiști (OSC)

Lector Dr. Ing. Julieta Dana CHELARU

Departamentul de Inginerie Chimică, Facultatea de Chimie și Inginerie Chimică
Universitatea Babeș-Bolyai

13:10-13:20

Concluzii

Conf. Dr. Gabriela Nicoleta NEMEȘ

Decanul Facultății de Chimie și Inginerie Chimică

13:30

Cocktail oferit de Facultatea de Chimie și Inginerie Chimică

Vizita standurilor de prezentare ale partenerilor din mediul de afaceri

Sâmbătă, 12 Octombrie 2019

Standurile partenerilor din mediul de afaceri vor fi deschise pe durata întregului program.



Workshops
“Students & Alumni – bridge over time”

Saturday, October 12, 2019

Place: Faculty of Chemistry and Chemical Engineering
“Ioan Silaghi-Dumitrescu” hall
Arany Janos 11

Chairman:

Assoc. Prof. Dr. Gabriela Nicoleta NEMEȘ, Dean of the Faculty of Chemistry and Chemical Engineering

09:00-09:50

Career Opportunities in a Multinational Corporation - Academic Chamber of Industry

Moderators:

Dr. Ing. Radu CRĂCIUN
Technology Manager Americas
BASF Corp., Chemical Catalysts, Iselin, NJ, USA

Assoc. Prof. Dr. Gabriela Nicoleta NEMEȘ
Department of Chemistry, Faculty of Chemistry and Chemical Engineering
Babeș-Bolyai University

Assoc. Prof. Dr. Ing. BARABÁS Réka
Department of Chemistry and Chemical Engineering, Hungarian Line of Study
Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University

09:50-10:40

Future of Chemistry / Innovation in Chemistry in the Context of Population Growth, Urbanization, Globalization - Automation and Artificial Intelligence etc.

Moderators:

Dr. Ing. Liliana CRĂCIUN
BASF Corporation, Budd Lake, NJ, USA



Assoc. Prof. Dr. Ing. IMRE Arpad
Department of Chemical Engineering, Faculty of Chemistry and Chemical
Engineering, Babeş-Bolyai University

10:40-11:30

*Sustainability Beyond Oil/Petroleum Resources - Chemists' Role in Finding Reliable
and Cost Effective Raw Material from Bio-renewable Sources*

Moderators:

Dr. Ing. Mihaela MĂDĂRAŞ

R&D Manager

Sun Chemical, Performance Pigments Division, Cincinnati, OH, USA

Lector Dr. Ing. Letiția PETRESCU

Department of Chemical Engineering, Faculty of Chemistry and Chemical
Engineering, Babeş-Bolyai University

Lector Dr. GÁL Emese

Department of Chemistry and Chemical Engineering, Hungarian Line of Study
Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University

11:30-12:20

Critical Skills for a Successful Career

Moderators:

Msc. Emilia GHEORGHIU

Director Quality Europe

Emerson Automation Solutions, Cluj-Napoca, Romania

Prof. Dr. Ing. Tiberiu FRENȚIU

Department of Chemistry, Faculty of Chemistry and Chemical Engineering
Babeş-Bolyai University

Prof. Dr. Ing. Mircea CRISTEA

Department of Chemical Engineering, Faculty of Chemistry and Chemical
Engineering, Babeş-Bolyai University



12:20-13:10

*From Student Status to Specialist in Chemistry or Chemical Engineering.
Expectations vs. Reality!*

Moderators:

Representatives of the students of Faculty of Chemistry and Chemical Engineering and of Chemistry Students Organization (OSC)

Lector Dr. Ing. Julieta Dana CHELARU

Department of Chemical Engineering, Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University

13:10-13:20

Closing remarks

Assoc. Prof. Dr. Gabriela Nicoleta NEMEŞ

Dean of the Faculty of Chemistry and Chemical Engineering

13:30

Cocktail offered by the Faculty of Chemistry and Chemical Engineering

Visit of the Presentation Stands of the Business Partners

Saturday, October 12, 2019

The stands of the business partners will be opened during the workshops program.

