





## INFORMAȚII PERSONALE

## ARSENE Cecilia

 Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică, Carol I, Nr. 11, 700506 Iași, România

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Sex Feminin Data nașteri 22/11/1970 Naționalitate Română

## POZIȚIA CURENTĂ

## Profesor universitar dr. habilitat

<sup>1</sup>Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică  
<sup>2</sup>Centrul Integrat de Studii în Știința Mediului pentru Regiunea de Dezvoltare Nord-Est (din România) / CERNESIM  
<sup>3</sup>Research Center with Integrated Techniques for Atmospheric Aerosol Investigation in Romania / RECENT AIR

## EXPERIENȚA PROFESIONALĂ

- 11/2020 - prezent **Director Centru de Cercetare cu Tehnici Integrate pentru Investigarea Aerosolilor din România / Integrated Techniques for Atmospheric Aerosol Investigation in Romania, RECENT AIR**  
Universitatea „Alexandru Ioan Cuza” din Iași, Programul Operațional Competitivitate 2014-2020, SMIS 127324, Contract nr. 322/04.09.2020, 04.09.2020 – 31.12.2023  
Management și coordonare
- 08/2017 - prezent **Director Școala Doctorală de Chimie**  
Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie  
<http://www.chem.uaic.ro/ro/doctoral/>  
Management, Conducător de doctorat
- 02/2015 - prezent **Profesor universitar doctor abilitat**  
Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică <http://www.uaic.ro/>  
Activitate didactică (cursuri, seminarii, lucrări practice de laborator); Activități de cercetare; Îndrumare lucrări licență și disertație. Conducător de doctorat  
Chimie analitică, Chimia mediului, Metode cromatografice, Management și asigurarea calității, Etică și integritate academică
- 07/2017-08/2017 **Profesor invitat**  
The Ecole Nationale Supérieure des Techniques Industrielles et des Mines de Douai, 941 rue Charles Bourseul, 59508 Douai, IMT Lille Douai, ULCO, CNES Cedex, France <http://www.labex-cappa.fr/>  
Seminar, Activitate de cercetare (Cinetică în fază gazoasă și studii de ozonoliză alcoolii nesaturați)  
<http://mailchi.mp/8f860d305cbf/newsletter-labex-cappa-juillet?e=b33d2aa12d>  
Chimia atmosferei
- 02/2013 – 02/2015 **Conferențiar universitar doctor**  
Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică <http://www.uaic.ro/>  
Activitate didactică (cursuri, seminarii, lucrări practice de laborator); Activități de cercetare; Îndrumare lucrări licență și disertație; Coordonare teze de doctorat  
Chimie analitică, Chimia mediului, Tehnici de separare și metode cromatografice
- 08/2011 - 09/2011 **Profesor invitat**  
The Ecole Nationale Supérieure des Techniques Industrielles et des Mines de Douai, 941 rue Charles Bourseul, 59508 Douai, Cedex, France  
Studiul produșilor de reacție din ozonoliza alchenelor  
Chimia atmosferei
- 10/2008 - prezent **Șef Laborator LAICA**  
Universitatea „Alexandru Ioan Cuza” din Iași, Laborator de Analiză Instrumentală și Chimie Analitică (LAICA); Carol I Nr. 11, 700506 Iași, România

Desemnată prin decizia Rectorului Universității „Alexandru Ioan Cuza” din Iași, cu nr. 19631/17.10.2008.

Responsabil pentru implementarea sistemului de management în acord cu cerințele referințialului SR EN ISO CEI 17025/2005 și a standardelor conexe aplicabile.

Certificat de Acreditare Nr. LI 820/05.10.2009

10/2007-09/2010 **Cercetător doctor**

Universitatea „Alexandru Ioan Cuza” din Iași; Carol I Nr. 11, 700506 Iași, România

Grant de reintegrare la Universitatea „Alexandru Ioan Cuza” din Iași, România, prin acțiunea Marie Curie MERG-CT în cadrul programului FP7 (proiect MERG-CT-2007-203934 ICAARUS, Intensive Characterisation of Atmospheric Aerosols in the North-Eastern Romania at Various Urban Sites).

Cercetător științific pe un subiect legat de estimarea distribuției spațiale și temporale a concentrației masice și a compoziției chimice a aerosolilor din aerul ambiental din Iași, nord-estul României. Activitate de cercetare dedicată cu precădere măsurătorilor în câmp și studiilor de laborator.

Chimia atmosferei

07/2005 - 07/2007 **Cercetător Postdoctorand**

Universitatea din Creta, Laboratorul de Investigarea Proceselor Chimice din Mediu, Heraklion, Grecia

Stagiu postdoctoral la Universitatea din Creta, Laboratorul de Investigarea Proceselor Chimice din Mediu

Tema de cercetare: Evaluarea impactului aerosolilor atmosferici asupra climei în zona Mediteraneană Marie Curie Intra-European Fellowship, FP6-MEIF-CT-2005-009578 ECITAMA

Activitate de cercetare dedicată măsurătorilor în câmp. Dezvoltarea și implementarea de metode pentru cuantificarea speciilor organice (poluanți organici și anorganici în urme din troposferă) și atribuire a surselor de emisie. Samplingul probelor de aer, apă, sol. Folosirea tehnicilor cromatografice de tip GC și GC-MS în diverse aplicații (calibrări, identificări și separări de compuși). Reactivitatea chimică a speciilor organice prezente în atmosferă. Analiză statistică multidimensională a datelor experimentale.

Chimia atmosferei

02/2003 -02/2013 **Lector universitar doctor**

Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică <http://www.uaic.ro/>

Activitate didactică (cursuri, seminarii, lucrări practice de laborator); Activități de cercetare; Îndrumare lucrări licență și disertație.

Chimie analitică, Chimia mediului

02/1999 -02/2003 **Asistent universitar**

Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică <http://www.uaic.ro/>

Activitate didactică (seminarii, lucrări practice de laborator); Activități de cercetare; Îndrumare lucrări licență și disertație.

Chimie analitică

03/1998 - 03/2002 **Cercetător doctorand**

Bergische Universität Gesamthochschule-Wuppertal; Departamentul de Chimie Fizică, Germania

Doctorat, Chimia Atmosferei

Tema de cercetare: Mecanisme de degradare atmosferică a compușilor organici cu sulf

Departamentul de Chimie Fizică, Bergische Universität GH-Wuppertal, Germania

Coordonator Prof. Dr. Karl-Heinz Becker

Activitate de cercetare dedicată investigațiilor de laborator în camere de reacție (investigații cinetice și de mecanisme de degradare în fază gazoasă a compușilor organici conținând sulf în moleculele lor.

Folosirea tehnicilor spectroanalitice (IR, UV-vis) cu drum optic mărit pentru determinarea și cuantificarea poluanților chimici gazoși în camerele de simulare a condițiilor atmosferice.

Utilizare tehnici analitice pentru măsurarea intensității radiației solare.

Utilizarea unor echipamente analitice de măsurare a intensității radiației solare și de monitorizare a concentrațiilor compușilor de tipul, CO, NO<sub>x</sub>, și O<sub>3</sub>.

Folosirea instrumentelor de contorizare și urmărirea distribuției numărului, suprafeței și volumului particulelor de aerosoli.

Utilizarea cromatografiei ionice pentru punerea în evidență a unor intermediari instabili de reacție în fază gazoasă.

Chimia fizică a atmosferei

10/1996 – 02/1999 **Preparator universitar**

Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, Departamentul de Chimie, Laborator de Chimie Analitică <http://www.uaic.ro/>

Activitate didactică (seminarii, lucrări practice de laborator); Activități de cercetare.

Chimie analitică

**EDUCAȚIE ȘI FORMARE**

07/04/2014	<b>Atestat de abilitare</b> Universitatea „Alexandru Ioan Cuza” din Iași; Școala doctorală de Chimie și Științe ale Vieții și Pământului; Teză de abilitare "Progress in Environmental Chemistry. Laboratory and Field Interrelated Studies"; Decizie de obținere a atestatului de abilitare și a calității de conducător de doctorat prin Ordinul Ministrului Nr. 166/07.04.2014, Direcția Generală Învățământ Superior, din cadrul Ministerului Educației Naționale
07/2005 - 07/2007	<b>Studii postdoctorale</b> Universitatea din Creta, Laboratorul de Investigarea Proceselor Chimice din Mediu, Heraklion, Grecia; Tema de cercetare: Evaluarea impactului aerosolilor atmosferici asupra climei în zona Mediteraneană, Marie Curie Intra-European Fellowship, FP6-MEIF-CT-2005-009578 ECITAMA
03/1998 – 03/2002	<b>Studii doctorale / Diplomă de doctor</b> Bergische Universität Gesamthochschule-Wuppertal; Departamentul de Chimie Fizică; Germania; Titlul „Doktors der Naturwissenschaften” (Dr. Rer. Nat.) eliberat la 14 Decembrie 2001 de către Bergische Universität Gesamthochschule Wuppertal, Germania. Echivalare prin Atestat Nr. 2921/11.11.2002 cu Diplomă de Doctor în Domeniul Chimiei de către Ministerul Educației și Cercetării, România
10/1995 - 06/1996	<b>Studii aprofundate / Diplomă de Studii Aprofundate</b> Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie; Masterat în Chimie Anorganică – Sinteză, Structura și Reactivitatea Compușilor Anorganici, Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, România. Diplomă de Studii Aprofundate Seria B Nr. 0001927, eliberată pe baza susținerii dizertației în sesiunea iunie 1996. Document eliberat cu Nr. 127/28.01.1998
10/1990-06/1995	<b>Studii universitare / Diplomă de Licență (licențiat în chimie)</b> Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie; Licență în Chimie, Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie, România. Titlul de licențiat în chimie, profilul chimie universitari, specializarea Chimie. Diplomă de Licență Seria N Nr. 004327, eliberată în baza hotărârii comisiei pentru examenul de licență din sesiunea iunie 1995. Document eliberat cu Nr. 1604/06.03.1997
09/1985-06/1989	<b>Studii liceale / Diplomă de Bacalaureat</b> Liceul de Matematică-Fizică, Petru Rareș, Piatra Neamț, Neamț, România; Bacalaureat, Liceul de Matematică-Fizică, Petru Rareș, Piatra Neamț, Neamț, România. Diplomă de Bacalaureat Seria G Nr. 47052, eliberată pe baza rezultatelor examenului de bacalaureat din sesiunea iunie 1989. Document eliberat cu Nr. 152/01.07.1989

**COMPETENȚE PERSONALE**

Limba maternă Română

Alte limbi străine cunoscute	Înțelegere		Vorbire		Scriere
	Ascultare	Citire	Participare la conversație	Discurs oral	
Limba engleză	C2	C2	C2	C2	C2
Limba germană	B2	B2	B2	B2	B2

Levels: A1/2 Basic user - B1/2 Independent user - C1/2 Proficient user, Common European Framework of Reference for Languages

<b>Competențe organizatorice/manageriale</b>	<ul style="list-style-type: none"> <li>○ Director Proiect "Research Center with Integrated Techniques for Atmospheric Aerosol Investigation in Romania", acronim RECENT AIR, MySMIS 127324, Programul Operațional Competitivitate 2014-2020, Contract 322/04.09.2020, 04.09.2020 – 03.09.2023, Valoare contract 89.570,958.10 lei (valoarea totală), 89,490,216.60 lei (valoarea totală eligibilă).</li> <li>○ Director Școală Doctorală de Chimie de la Instituția Organizatoare de Studii Universitare de Doctorat Universitatea „Alexandru Ioan Cuza” din Iași</li> <li>○ Șef Laborator LAICA, laborator acreditat RENAR, încercări metale grele</li> <li>○ Responsabil Laborator Chimie CERNESIM, Centru Integrat de Studii în Știința Mediului pentru Regiunea de Dezvoltare Nord-Est (CERNESIM), centru nou înființat în cadrul Universității „Alexandru Ioan Cuza” din Iași prin proiectul POSCCE-A2-O2.2.1-2009-4, ID 901, SMIS 13984, Nr. contract: 257 / 28.09.2010, <a href="https://www.erris.gov.ro/cernesim.uaic.ro">https://www.erris.gov.ro/cernesim.uaic.ro</a></li> <li>○ Responsabil stație AMOS (Air Quality Monitoring Station of CERNESIM, UAIC), site unde parte din echipamentele de la CERNESIM rulează pentru a genera rezultate de încredere și pentru a înregistra parametri de mediu. Inițiator al ideii de implementare și dezvoltare a site-ului AMOS.</li> <li>○ Director de proiect/coordonator proiecte naționale și internaționale.</li> </ul>
<b>Competențe administrative</b>	<ul style="list-style-type: none"> <li>○ Membru în Comisia de Etică pentru Educație și Cercetare, Universitatea "Alexandru Ioan Cuza" din Iași, România, 02/2014-prezent.</li> <li>○ Membru în Comitetul Științific de la Centru Integrat de Studii în Știința Mediului pentru Regiunea de Dezvoltare Nord-Est, Universitatea "Alexandru Ioan Cuza" din Iași, România, 10/2014-prezent.</li> <li>○ Membru în Consiliul Facultății de Chimie, Universitatea "Alexandru Ioan Cuza" din Iași, România, 01/2012-12/2015.</li> </ul>
<b>Competențe dobândite la locul de muncă</b>	Responsabilitate, capacitate de a lucra cu termene fixe, experiență în coordonare echipe multidisciplinară și multifuncțională.
<b>Competențe didactice</b>	<p>Prelegeri, seminarii, activități de coordonare a lucrărilor de laborator la Universitatea "Alexandru Ioan Cuza" din Iași pentru:</p> <ul style="list-style-type: none"> <li>○ Etică și integritate academică (2018 – prezent, trunchi comun master, an I)</li> <li>○ Management și asigurarea calității (2021 – prezent, trunchi comun master, an I)</li> <li>○ Managementul calității în analiza chimică. Reglementări ISO (2013-2018, Master Chimia mediului și siguranță alimentară (CMSA), an II)</li> <li>○ Analiză de urme (2010 – prezent, Chimie, anul III)</li> <li>○ Metode de separare (2010 – prezent, trunchi comun, anul II)</li> <li>○ Metode de separare și analiză de urme (2010-prezent, Chimie, anul III)</li> <li>○ Metode de chimie analitică aplicate în cercetarea criminalistică (2011-2016, Facultatea de Drept, Master Criminalistică, anul I)</li> <li>○ Tehnici cromatografice în analiza medicamentelor și produselor cosmetice (2009-2012, Master Chimia produselor cosmetice și farmaceutice (CPCF), anul I)</li> <li>○ Sampling și metodologii în investigarea mediului (2008-2009, Master CMSA)</li> <li>○ Practici instrumentale aplicate în analiza sistemelor chimice (2008-2009, Master, CMSA)</li> <li>○ Environmetrie / chemometrie (2007-2009, Master)</li> <li>○ Controlul calității în analiza chimică (2007-2009, Chimie, anul III)</li> <li>○ Controlul analitic al materialelor (2003-2004, Master)</li> <li>○ Metode spectroanalitice (2003-2004, Master), Sampling and strategies of environment monitoring (2002-2003, Master (modul limba engleză))</li> <li>○ Chemometry applied in environmental investigation (2002-2003, Master (modul limba engleză))</li> </ul> <p>Laboratoare și seminarii desfășurate cu studenții Facultății de Chimie sau Drept, la disciplinele:</p> <ul style="list-style-type: none"> <li>○ Managementul calității în analiza chimică. Reglementări ISO</li> <li>○ Metode de separare și analiză de urme (propus set lucrări practice)</li> <li>○ Tehnici cromatografice aplicate în analiza medicamentelor și produselor cosmetice (propus set lucrări practice în colaborare)</li> <li>○ Metode de chimie analitică aplicate în cercetarea criminalistică (propus set lucrări practice)</li> <li>○ Practici instrumentale aplicate în analiza sistemelor chimice (propus set complet lucrări practice)</li> <li>○ Sampling și metodologii în investigarea mediului (propus set complet lucrări practice)</li> <li>○ Environmetrie/chemometrie (seminarii)</li> <li>○ Controlul calității în analiza chimică (propus set lucrări practice în colaborare)</li> <li>○ Controlul analitic al proceselor biotehnologice (dezvoltat set lucrări practice)</li> <li>○ Chimie Analitică (anul I, desfășurat lucrări practice la secția chimie)</li> <li>○ Analiză Instrumentală (anul II, desfășurat lucrări practice la secția chimie).</li> <li>○ Activități de coordonare a lucrărilor de laborator la Bergische Universität Gesamthochschule Wuppertal, Germany.</li> </ul>
<b>Competențe de coordonare teze/lucrări</b>	<p>Coordonare teze doctorat: 5 studenți doctoranzi (1 cotutelă), 2 doctori</p> <p>Coordonare lucrări disertație: 18</p> <p>Coordonare lucrări licență: 22</p>

**Domenii de interes pentru cercetare**

**Mediu** (Chimia aerosolilor atmosferici, Chimia analitică a mediului, Chimia atmosferei axată pe compoziția chimică a troposferei și modificările climatice induse de activitățile umane și interacțiile gaz/particule. Poluanți organici și anorganici prezenți în aer, apă, sol, Cinetică, reactivitate și mecanisme de reacție pentru procesele fotochimice induse de speciile radicalice și atomice (OH, Cl, NO<sub>3</sub>, etc) asupra compușilor organici din aer și apă)

**Metode instrumentale de analiză** (Tehnici instrumentale adecvate (spectroscopice și cromatografice) pentru identificarea și cuantificarea unor analiți specifici din diverse matrici naturale (aer, apă, sol, matrici biologice; tehnici microscopice și spectrofotometrice)

**Materiale noi pentru procese de decontaminare** (Dezvoltarea și caracterizarea unor materiale noi pentru extracție în fază solidă sub formă de faze staționare (polioxometalați) și membrane cu incluziuni polimerice)

**Rolul tehnicilor instrumentale și preparative în investigarea stării de sănătate a omului și mediului** (Constituenții chimici din atmosferă și posibile implicații supra sănătății umane, Metode preparative și de analiză în studiul interdependenței dintre acțiunea terapeutică și manifestarea unor boli infecțioase (tuberculoza pulmonară, etc.)

**Experiență în cercetare/Abilități tehnice**

- o Experiență în discriminarea clară a compoziției chimice a aerosolilor.
- o Experiență în dezvoltarea/optimizarea metodelor potrivite pentru măsurarea speciilor organice din troposferă.
- o Experiență pentru măsurătorile în teren ale poluanților organici și anorganici cu o discriminare adecvată a surselor de emisie.
- o Experiență în utilizarea în diverse aplicații (calibrare, identificare și separare) a tehnicilor cromatografice cum ar fi IC, GC-FID-MS, GC-FID-MS-TDS, GC-ECD, GC-GC-MS, HPLC.
- o Experiență în utilizarea tehnicilor spectroscopice *in situ* cu drum optic mărit (FT-IR) pentru determinarea și cuantificarea poluanților chimici gazoși din camere de reacție adecvate pentru simularea atmosferei.
- o Experiență în utilizarea tehnicilor spectrofotometrice (UV-vis), tehnicilor spectroscopice de absorbție atomică (ContraAA 700 cu flacără și cuptor de grafit) pentru caracterizarea diferitelor matrici.
- o Experiență în utilizarea instrumentelor de caracterizare a aerosolilor, cum ar fi analizorul de discriminare a particulelor funcție de dimensiune și analizorul termo-optic pentru discriminarea componentelor carbon organic și carbon elemental.
- o Experiență în exploatarea unor fotoreactoare de mare capacitate (exploatarea unui fotoreactor European, EUPHORE, Spania, și a unor reactoare de cuarț de până la 1000 L.
- o Experiență în manipularea echipamentelor analitice pentru măsurarea radiației solare, monitoare de SO<sub>2</sub>, CO, NO<sub>x</sub> și O<sub>3</sub>.

**Competențe informatice**

- o Folosirea avansată a software-lor pentru calculatoarele tip Personal Computer (PC) (Windows, MS Word, MS Excel, Sigma Plot, Page Maker, Chem-Draw, Microsoft Power Point).
- o Utilizarea unor software diferite pentru analiza datelor obținute din spectroscopia FT-IR (OPUS, OMNIC) și UV-vis (Spectral 1.70), cromatografice (Agilent, Hewlett-Packard, Fison, Chromeleon, NIST Data Base).
- o Experiență în exploatarea programului Statistică analiza statistică a bazelor mari de date.

**Certificate deținute**

- o Certificat Analytik Jena to DIN ISO 9001:2008; "Application training session on the contraAA 700 and novaAA 350", by Analytik Jena certified to DIN EN ISO 9001:2008, 2014.
- o Certificat Analytik Jena to DIN EN ISO 9001:2000, "Application training session on the multi N/C 3100 and selected accessory modules", by Analytik Jena certified to DIN EN ISO 9001:2000, 2013.
- o Certificat de participare la schema de comparare interlaborator "Water Analysis-2011, The 7th South-Eastern European Interlaboratory Study", Iunie 2011-Decembrie 2011.
- o Certificat cu nr. de înregistrare TRRO AK-32-2010 prin care TUV Rheinland România confirmă participarea și promovarea cursului de instruire „Specialist pentru sisteme de management al laboratoarelor de încercări și etalonări”, (32 ore), conform standardului național SR EN ISO/CEI 17025:2005 identic cu standardul european EN ISO/IEC 17025:2005, 2010.
- o Certificat cu nr. de înregistrare TAR AK-58-2010 prin care TUV Austria România confirmă participarea și promovarea cursului de instruire „Auditor intern pentru laboratoare de încercări și etalonări conform standardelor ISO 17025:2005 și ISO 19011:2002”, 2010.

**Competențe de comunicare**

Competențe de comunicare, informare, argumentare, transmitere a informațiilor științifice; Competențe de a susține prelegeri în fața studenților și a unei largi audiențe.

**Alte competențe**

Flexibilitate în gândire, Onestitate

**Permisi de conducere**

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**INFORMAȚII SUPLIMENTARE**

- Publicații**
- 64 articole/studii publicate în jurnale peer-reviewed cu factor de impact (Web of Science)
  - 23 articole/studii publicate în jurnale non-peer-reviewed
  - 6 cărți și 3 monografii
- Prezentări**
- 22 conferințe/plenare invitate
- Conferințe**
- 229 contribuții științifice la conferințe internaționale organizate în țară și străinătate (66 în străinătate și 166 organizate în România)
  - 219 diseminări cu abstract și 10 cu proceeding-uri
- Proiecte**
- 5 proiecte internaționale (director proiect)
  - 3 proiect naționale (director proiect)
  - 7 proiecte internaționale (membru)
  - 14 proiecte naționale (membru)
- Recunoaștere științifică**
- Recunoaștere internațională**
- Referent de specialitate la mai mult de 20 jurnale științifice internaționale (Atmospheric Chemistry and Physics, Atmospheric Environment, Chemosphere, Atmospheric Research, Journal of Environmental Analytical Chemistry, Environmental Chemistry Letters, etc) pentru mai mult de 80 articole științifice
  - h-index-17 (Scopus) (cu opțiune activată „self citation of all authors excluded”), 1488 citări
  - h-index-18 (Wos), 1479 citări
- [https://apps.webofknowledge.com/CitationReport.do?product=WOS&search\\_mode=CitationReport&SID=E2E4D9b1pqqpDoOv3gN&page=1&cr\\_pqid=1&viewType=summary&colName=WOS](https://apps.webofknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=E2E4D9b1pqqpDoOv3gN&page=1&cr_pqid=1&viewType=summary&colName=WOS)
- Recunoaștere științifică**
- Member in the Editorial Board Journal of Liquid Chromatography&Related Technologies <https://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=ljlc20>
  - Editor pentru 3 numere cu ediție specială din Acta Chemica Iasi
- Referent/expert în procesul de evaluare a propunerilor de proiecte trimise sub programele**
- PN-III-P1-1-2-PCCDI-2017 (peer review activity in 2017)
  - PE-PN-III-P1-1.1-TE-2016 (peer review activity in 2017)
  - PE-PN-III-P1-1.1-PD-2016 (peer review activity in 2017)
  - Nucleu Core Program (activitate peer review în 2016)
  - PN-II-RU-TE-2011-3 Action (activitate peer review în 2014)
  - PN-II-PT-PCCA-2013-4 Action (activitate peer review în 2013)
- Membru comisii de doctorat în alte Universități**
- Universitatea Tehnică Gheorghe Asachi din Iasi
  - Universitatea de Medicină și Farmacie Grigore T. Popa din Iasi
  - Universitatea Babeș-Bolyai din Cluj
- Membru comisii de abilitare**
- Institutul de Chimie Macromoleculară Petru Poni din Iasi
- Membru comisii de promovare**
- Universitatea Tehnică Gheorghe Asachi din Iasi
- Membru în comitetul științific sau de organizare pentru câteva conferințe naționale sau internaționale**
- Conferința Facultății de Chimie, Iasi, Romania (2012-2022)
  - Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor (2014-2022)
  - Conferința Națională a Școlilor Doctorale din Consorțiul Universitar (2018-2020)
  - Conferința Națională de Criminalistică, Iasi, Romania (2016-2017)
  - Conferința de fizică medicală, Birmingham, UK (2015)
  - Congresul Internațional de Chimie și Știința materialelor (ANCON), Ankara, Turkey (2017)
  - 1st SCIENVIR International Conference, Scientific Convergence and Interdisciplinarity in EU Environmental Research, Iasi, Romania, (2017)
- Distincții**
- Bougiatioti, A., Arsen, C., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, Protection and Restoration of the Environment IX (Pre-IX), Kefalonia, Greece, 2008. BEST POSTER AWARD
- Anexă**
- Lista publicațiilor și diseminărilor științifice

Prof. univ. dr. habil. Cecilia ARSENE



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## 1 Lista publicațiilor (\* - autor corespondent)

## 1.1 Publicații în jurnale cu factor de impact

1. Amarandei, C., Olariu, R.I., [Arsene, C.\\*](#), Offline analysis of secondary formation markers in ambient organic aerosols by liquid chromatography coupled with time-of-flight mass spectrometry, *Journal of Chromatography A*, 1702, 464092, 2023. <https://doi.org/10.1016/j.chroma.2023.464092>
2. Amarandei, C., Olariu, R.I., [Arsene, C.\\*](#), First insights into the molecular characteristics of atmospheric organic aerosols from Iasi, Romania: Behavior of biogenic versus anthropogenic contributions and potential implications, *Science of the Total Environment*, 877, 162830, 2023. [10.1016/j.scitotenv.2023.162830](https://doi.org/10.1016/j.scitotenv.2023.162830)
3. [Arsene, C.](#), Bejan, I.G., Roman, C., Olariu, R.I., Minella, M., Passananti, M., Vione, V., Evaluation of the environmental fate of a semivolatile transformation product of ibuprofen based on a simple two-media fate model, *Environmental Science and Technology*, 2022. <https://doi.org/10.1021/acs.est.2c04867>
4. Mapelli, C., Schleiher, J.V., Hawtin, A., Rankine, C.D., Whiting, F.C., Byrne, F., McElroy, C.R., Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Dillon, T.J., Atmospheric breakdown chemistry of the new "green" solvent 2,2,5,5-tetramethylololane via gas-phase reactions with OH and Cl radicals, *Atmospheric Chemistry and Physics*, 22, 14589-14602, 2022. <https://doi.org/10.5194/acp-22-14589-2022>
5. Soroaga, L.V., [Arsene, C.](#), Borcia, C., Pintilei, M., Olariu, R.I., Development and application of an analysis method for the determination of rare earth elements in silicate-rich samples by  $N_2O_2$  sintering and ICP-MS analysis, *Analytical Sciences*, 2022. <https://doi.org/10.1007/s44211-022-00172-w>
6. Grîra, A., Amarandei, C., Roman, C., Bejaoui, O., Aloui, N., El Dib, G., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Canosa, C., Tomas, A., Gas-phase ozone reaction kinetics of C5–C8 unsaturated alcohols of biogenic interest, *Journal of Physical Chemistry A*, 126, 4413-4423, 2022. <https://doi.org/10.1021/acs.jpca.2c02805>
7. Roman, C., [Arsene, C.](#), Bejan, G.I., Olariu, R.I., Investigations on the gas-phase photolysis and OH radical kinetics of nitrocatechols: implications of intramolecular interactions on their atmospheric behaviour, *Atmospheric Chemistry and Physics*, 22, 2203-2219, 2022. <https://doi.org/10.5194/acp-22-2203-2022>
8. Soroaga, L.V., Amarandei, C., Negru, A.G., Olariu, R.I., [Arsene, C.\\*](#), Assessment of the anthropogenic impact and distribution of potentially toxic and rare earth elements in lake sediments from north-eastern Romania, *Toxics*, 10(5), 242, 2022. <https://doi.org/10.3390/toxics10050242>
9. Roman, C., Roman, T., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Gas-phase IR cross-sections and single crystal structures data for atmospheric relevant nitrocatechols, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 265, 120379, 2022. <https://doi.org/10.1016/j.saa.2021.120379>
10. Amarandei, C., Negru, A.G., Soroaga, L.V., Cucu-Man, S.M., Olariu, R.I., [Arsene, C.\\*](#), Assessment of surface water quality in the Podu Iloaiei Dam Lake (North-Eastern Romania): Potential implications for aquaculture activities in the area, *Water* 2021, 13, 2395. <https://doi.org/10.3390/w13172395>
11. Sandu, M.C., Soroaga, L.V., Balaban, S.I., Chelariu, C., Chiscan, O., Iancu, G.O., [Arsene, C.](#), Olariu, R.I., Trace elements distribution in stream sediments of an abandoned U mining site in the Eastern Carpathians, Romania, with particular focus on REEs, *Geochemistry* 81(2021)125761, <https://doi.org/10.1016/j.chemer.2021.125761>
12. Grîra, A., Amarandei, C., Romanias, M.N., El Dib, G., Canosa, A., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Coddeville, P., Tomas, A., Kinetic measurements of Cl atom reactions with C5–C8 unsaturated alcohols, *Atmosphere*, 11, 256; doi:10.3390/atmos11030256, 2020.
13. Galon-Negru, A.G., Olariu, R.I., [Arsene, C.\\*](#), Size-resolved measurements of PM2.5 water-soluble elements in Iasi, north-eastern Romania: Seasonality, source apportionment and potential implications for human health, *Science of the Total Environment*, 695, 133839, 2019. <https://doi.org/10.1016/j.scitotenv.2019.133839>
14. Coman-Babusanu, A.C., Olariu, R.I., Butnaru, E., [Arsene, C.\\*](#), Dissipation kinetics of tebuconazole on *Malus domestica* (Golden Delicious and Jonathan) in an apple orchard from north-eastern Romania, *Journal of Liquid Chromatography and Related Technologies*, 42, 582-592, 2019. <https://doi.org/10.1080/10826076.2019.1642918>
15. Humelnicu, D., Soroaga, L.V., [Arsene, C.](#), Humelnicu, I., Olariu, R.I., Adsorptive performance of soy bran and mustard husk towards arsenic (V) ions from synthetic aqueous solutions, *Acta Chimica Slovaca*, 66, 326-336, 2019. DOI: 10.17344/acsi.2018.4821
16. Negru-Galon A.G., Olariu, R.I., [Arsene, C.\\*](#), Chemical characteristics of size-resolved atmospheric aerosols in Iasi, north-eastern Romania: nitrogen-containing inorganic compounds control aerosol chemistry in the area, *Atmospheric Chemistry and Physics*, 18, 5879-5904, 2018.
17. Bibire, N., Olariu, R.I., Agoroaei, L., Vieriu, M., Panainte, A.D., Cernat, R.I., [Arsene, C.\\*](#), Reversed-phase high performance liquid chromatographic analysis of three first line anti-tuberculostatic drugs, *Revista de Chimie Bucharest*, 69, 3590-3592, 2018.
18. Marin, S.L., Mardare (Balutescu), G., Padurar, M., Roman, C., Sandu, I.G., Olariu, R.I., [Arsene, C.](#), Vasilache, V., Authentication and evaluation of the technique of minting Romanian coins of the 20<sup>th</sup> century. I, *Revista de Chimie*, 68(9), 2155-2159, 2017.
19. Potolincă, D., Negru, I.C., Vasilache, V., [Arsene, C.](#), Padurar, M., Sandu, I., Forensic expertise of the paper support of counterfeit documents, *Materiale Plastice*, 54, 186-189, 2017.
20. Sandu, I., Olariu, R.I., Sandu, I.G., Stirbu, C., Pascu, C., Vasilache, V., Vione, D., [Arsene, C.\\*](#), Investigation of the dynamics and kinetics involved in saline aerosol generation under air erosion of pure and contaminated halide salts, *Journal of Aerosol Sciences*, 81, 100-109, 2015.
21. Olariu, R.I., Vione, D., Grinberg, N., [Arsene, C.\\*](#), Applications of liquid chromatographic techniques in the chemical characterization of atmospheric aerosols, *Journal of Liquid Chromatography and Related Technologies*, 38, 322-348, 2015.
22. Braure, T., Riffault, V., Tomas, A., Olariu, R.I., [Arsene, C.](#), Bedjanian, Y., Coddeville, P., Ozonolysis of a series of methylated alkenes. Reaction rate coefficients and gas-phase products, *International Journal of Chemical Kinetics*, 47, 596-605, 2015.
23. Negru, A.G., [Arsene, C.](#), Zbancioc, A.M., Mangalagiu, I.I., Olariu, R.I., Physico-chemical behaviour of newly synthesised macrocyclic compounds. A reality between expectations and experimental evidences, *Revista de Chimie Bucharest*, 66, 1339-1342, 2015.
24. Pindaru, D.M., Tanase, C., Olariu, R.I., [Arsene, C.\\*](#), Chemical composition and ions concentrations in *Xanthoria Parietina* and *Phaeosphyscia orbicularis* lichenised fungi species from Iasi, north-eastern Romania, *Revista de Chimie, Bucharest*, 64, 808-814, 2013.

25. Pindaru, D.M., Tanase, C., Olariu, R.I., [Arsene, C.](#): Extra and intercellular concentrations of water soluble cations from *Xanthoria Parietina* and *Phaeosporiscia orbicularis* lichenised fungi species, *Revista de Chimie, Bucharest*, 64, 715-719, 2013.
26. Olariu, R.I., Barnes, I., Bejan, I., [Arsene, C.](#), Vione, D., Klotz, B., Becker, K.H., FTIR product study of the reactions of NO<sub>3</sub> radicals with ortho-, meta-, and para-cresol, *Environmental Science and Technology*, 47, 7729-7738, 2013.
27. [Arsene, C.](#), Vione, D., Grinberg, N., Olariu, R.I., GCxGC-MS hyphenated techniques for the analysis, of volatile organic compounds in air, *Journal of Liquid Chromatography & Related Technologies*, 34, 1077-1111, 2011.
28. Cernat, R.I., Mihaescu, T., Vornicu, M., Vione, D., Olariu, R.I., [Arsene, C.](#): Serum trace metal and ceruloplasmin variability in individuals treated for pulmonary tuberculosis, *International Journal of Tuberculosis and Lung Diseases*, 15, 1239-1245, 2011.
29. [Arsene, C.](#), Olariu, R.I., Zampas, P., Kanakidou, M., Mihalopoulos, N., Ion composition of coarse and fine particles in Iasi, north-eastern Romania. Implications for aerosols chemistry in the area, *Atmospheric Environment*, 45, 906-916, 2011.
30. Gherasim, C.V., Bourceanu, G., Olariu, R.I., [Arsene, C.](#), A novel polymer inclusion membrane applied in chromium (VI) separation from aqueous solutions, *Journal of Hazardous Materials*, 197, 244-253, 2011.
31. Gherasim, C.V.I., Bourceanu, G., Olariu, R.I., [Arsene, C.](#), Removal of lead(II) from aqueous solutions by a polyvinyl-chloride inclusion membrane without added plasticizer, *Journal of Membrane Science*, 377(1-2), 167-174, 2011.
32. Stefanescu, I.A., Gavrilă, L., Mocanu, R.D., Olariu, R.I., [Arsene, C.](#): Bioremediation perspective of *Bacillus Megaterium* towards heavy metals in environments enriched with phosphogypsum, *Revista de Chimie*, 62, 245-249, 2011.
33. Olariu, R.I., Vione, D., Grinberg, N., [Arsene, C.](#), Sample preparation for trace analysis by chromatographic methods, *Journal of Liquid Chromatography & Related Technologies*, 33, 1174-1207, 2010.
34. Olariu, R.I., [Arsene, C.](#), Humelnicu, D., Duncianu, M., Mantu, D., Investigation on environmental radionuclide retention on heteropoloxo-metallic sorbents for radionuclide analysis by ionic chromatography, *International Journal of Conservation Science*, 1, 248, 2010.
35. Cernat, R.I., Mocanu, R.D., Popa, E., Sandu, I., Olariu, R.I., [Arsene, C.](#), Investigation of chemical parameters in biological systems, *Revista de Chimie*, 61, 1130-1135, 2010.
36. Humelnicu, D., [Arsene, C.](#), Burghelă, B., Bertescu, M., Humelnicu, I., Sandu, I., Mantu, D., Olariu, R.I., Interaction of actinide cations with heteropolytungstate ions [SiW<sub>11</sub>O<sub>38</sub>]<sup>6-</sup> and [SiW<sub>12</sub>O<sub>40</sub>]<sup>4-</sup>, *Revista de Chimie*, 61, 841-844, 2010.
37. [Arsene, C.](#), Bougiatioti, A., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, *Global NEST Journal*, 11, 333-340, 2009.
38. Vione, D., Khanra, S., Cucu Man, S., Maddigapu, P.R., Das, R., [Arsene, C.](#), Olariu, R.I., Maurino, V., Minero, C., Inhibition vs. enhancement of the nitrate-induced phototransformation of organic substrates by the OH scavengers bicarbonate and carbonate, *Water Research*, 43, 4718 - 4728, 2009.
39. Vione, D., Maurino, V., Minero, C., Duncianu, M., Olariu, R.I., [Arsene, C.](#), Sarakha, M., Mailhot, G., Assessing the transformation kinetics of 2- and 4-nitrophenol in the atmospheric aqueous phase. Implications for the distribution of both nitroisomers in the atmosphere, *Atmospheric Environment*, 43, 2321-2327, 2009.
40. Vione, D., Lauri, V., Minero, C., Maurino, V., Malandrino, M., Carlotti, M.E., Olariu, R.I., [Arsene, C.](#), Photostability and photolability of dissolved organic matter upon irradiation of natural water samples under simulated sunlight, *Aquatic Sciences*, 71, 34-45, 2009.
41. Humelnicu, D., Olariu, R.I., Sandu, I., Humelnicu, I., Sandu, A.V., [Arsene, C.](#), Studies on chemical interferences on uranium (VI) and thorium (IV) reaction with (iso)polyoxometalates, *Revista de Chimie*, 60, 1264-1269, 2009.
42. Olariu, R.I., Humelnicu, D., Sandu, I., Humelnicu, I., [Arsene, C.](#), Physico-chemical characterization of a new silica-polyoxometalate thermally modified unit, *Revista de Chimie*, 60, 1216-1219, 2009.
43. Vione, D., Rinaldi, E., Minero, C., Maurino, V., Olariu, R.I., [Arsene, C.](#), Studies regarding groundwater quality at rural sites. 2. Photochemical generation of OH and NO<sub>2</sub> radicals upon UV-A irradiation of nitrate-rich groundwater, *Revista de Chimie*, 60, 551-554, 2009.
44. Vione, D., Ravizzoli, B., Rinaldi, E., Pettinato, F., [Arsene, C.](#), Olariu, R.I., Studies regarding groundwater quality at rural sites: 1. Estimation of the anthropic factor impact by complementary chemical analyses, *Revista de Chimie*, 60, 237-240, 2009.
45. Vione, D., Casanova, I., Minero, C., Duncianu, M., Olariu, R. I., [Arsene, C.](#), Assessing the potentiality of Romanian surface waters to produce hydroxyl and nitrite radicals, *Revista de Chimie*, 60, 123-126, 2009.
46. Vione, D., Maurino, V., Cucu-Man, S., Khanra, S., [Arsene, C.](#), Olariu, R., Minero, C., Formation of organobrominated compounds in the presence of bromide under simulated atmospheric aerosol conditions, *Chemistry Sustainable Chemistry*, 1, 197-204, 2008.
47. Drochioiu, G., [Arsene, C.](#), Murariu, M., Oniscu, C., Analysis of cyanogens with resorcinol and picrate, *Food and Chemical Toxicology*, 46, 3540-3545, 2008.
48. Olariu, R.I., Humelnicu, D., [Arsene, C.](#), Sandu, I., Carja, G., Synthesis and chemical characterisation of new derivative complexes from UO<sub>2</sub><sup>2+</sup> and Th<sup>4+</sup> ions with (iso)polyoxomolybdate and (iso)polyoxotungstate clusters, *Revista de Chimie*, 59, 1052-1056, 2008.
49. Humelnicu, D., Olariu, R.I., Sandu, I., Apostolescu, N., Sandu, A.V., [Arsene, C.](#), New heteropolyoxotungstates and heteropolyoxomolybdates containing radioactive ions (uranyl and thorium) in their structure, *Revista de Chimie*, 59, 920-925, 2008.
50. [Arsene, C.](#), Olariu, R.I., Mihalopoulos, N., Chemical composition of rainwater in the north-eastern Romania, Iasi region (2003-2006), *Atmospheric Environment*, 41, 9452-9467, 2007.
51. [Arsene, C.](#), Bougiatioti, A., Kanakidou, M., Bonsang, B., Mihalopoulos, N., Tropospheric OH and Cl levels deduced from non-methane hydrocarbon measurements in a marine site, *Atmospheric Chemistry and Physics*, 7, 4661-4673, 2007.
52. Vione, D., Maurino, V., Minero, C., Pelizzetti, E., Harrison, M.A.J., Olariu, R.I., [Arsene, C.](#), Photochemical reactions in the tropospheric aqueous phase and on particulate matter, *Chemical Society Reviews*, 35, 441-453, 2006.
53. Vione, D., Falletti, G., Maurino, V., Minero, C., Pelizzetti, E., Malandrino, M., Ajassa, R., Olariu, R.I., [Arsene, C.](#), Sources and sinks of hydroxyl radical upon irradiation of natural water samples, *Environmental Science and Technology*, 40, 3775-3781, 2006.
54. [Arsene, C.](#), Barnes, I., Becker, K.H., Benter, Th., Gas phase reaction of Cl with dimethyl sulphide. Temperature and oxygen partial pressure dependence of the rate constant, *International Journal of Chemical Kinetics*, 36, 66-73, 2005.
55. Harrison, M.A.J., Barra, S., Borghesi, D., Vione, D., [Arsene, C.](#), Olariu, R.I., Nitrated phenols in the atmosphere. A review, *Atmospheric Environment*, 39, 231-248, 2005.
56. [Arsene, C.](#), Olariu, R.I., Barnes, I., Dimethyl sulphide photo-oxidation at various NO<sub>2</sub> concentrations. 2. Investigation on particle formation, *Revue Roumanie de Chimie*, 50, 485-490, 2005.

57. [Arsene, C.](#), Barnes, I., Olariu, R.I., Becker, K.H., Dimethyl sulphide photo-oxidation at various NO<sub>2</sub> concentrations. 1. Product study and mechanistic investigations, *Revue Roumanie de Chimie*, 50, 359-369, 2005.
58. [Arsene, C.](#), Barnes, I., Becker, K.H., Schneider, W., Wallington, T., Mihalopoulos, N., Patroescu-Klotz, I., Formation of methane sulphonic acid in the gas phase OH-radical initiated oxidation of dimethyl sulphoxide, *Environmental Science and Technology*, 36, 5155-5163, 2002.
59. Onofrei, T., [Arsene, C.](#), Hurduc, N., A non-isothermal kinetic study upon the Pb(II) sorption on chemically-modified celluloses, *Cellulose Chemistry and Technology*, 36, 507-514, 2002.
60. [Arsene, C.](#), Barnes, I., Becker, K.H., Mocanu, R., FT-IR product study in the photo-oxidation of dimethyl sulphide in the presence of NO<sub>x</sub>. Temperature dependence, *Atmospheric Environment*, 35, 3769-3780, 2001.
61. Onofrei, T., Hurduc, N., [Arsene, C.](#), A non-isothermal kinetic study on the sorption of elements from group IIA on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, *Cellulose Chemistry and Technology*, 35, 235-241, 2001.
62. Onofrei, T., [Arsene, C.](#), Mita, C., Agache, C., Sorption of elements from group IIA on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, *Cellulose Chemistry and Technology*, 35, 15-23, 2001.
63. Onofrei, T., Hurduc, N., [Arsene, C.](#), Ionescu, D., Sorption of Cu(II), Co(II) and Ni(II) on 1-(4'-azobenzylcellulose)-2-naphthol. Thermogravimetric characterisation, *Cellulose Chemistry and Technology*, 34, 261-268, 2000.
64. [Arsene, C.](#), Barnes, I., Becker, K.H., FT-IR product study of the photo-oxidation of dimethyl sulphide. Temperature and O<sub>2</sub> partial pressure dependence, *Physical Chemistry Chemical Physics*, 1, 5463-5470, 1999.

#### 1.2 Publicații în non-peer reviewed jurnale (\* - autor corespondent)

1. [Arsene, C.](#), Cucu Man, S.M., Olariu, R.I., The importance of the laboratory quality management system in the academic curriculum in developing appropriate student competences for our current societal needs, *Proceedings 2020*, 55, 7; doi:10.3390/proceedings2020055007. Article which belongs to the Proceedings of The Virtual Eurachem Workshop 2020—"Quality Assurance for Analytical Laboratories in the University Curriculum" <https://www.mdpi.com/2504.3900/55/1/7>
2. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Implications of matrix effects in quantitative HPLC/ESI-ToF-MS analyses of atmospheric organic aerosol, *Proceedings 2020*, 55, 6; doi:10.3390/proceedings2020055006. Article which belongs to the Proceedings of The Virtual Eurachem Workshop 2020—"Quality Assurance for Analytical Laboratories in the University Curriculum" <https://www.mdpi.com/2504.3900/55/1/6>
3. Amarandei, C., Galon-Negru, A.G., Olariu, R.I., [Arsene, C.](#), Investigation of organic molecular markers in the urban atmosphere by HPLC-ESI-ToF-MS. Method development, *New Frontiers in Chemistry*, 28, 90-93, 2019.
4. Roman, C., [Arsene, C.](#), Olariu, R.I., Study on the formation of secondary organic aerosols from atmospheric photooxidation of 1,2 dihydroxy (alkyl) benzenes initiated by OH radicals in NO<sub>x</sub> controlled conditions, *New Frontiers in Chemistry*, 28, 95-97, 2019.
5. Coman (Babusanu), A.C., Butnaru, E., Mardare (Balutescu), G., Olariu, R.I., [Arsene, C.](#), GC-MS analysis of Malus domestica bark and leaf extracts in pesticide non-exposed and exposed matrices, *Rev. Med. Chir. Soc. Med. Nat.*, 122, 198-206, 2018.
6. [Arsene, C.](#), Chemical composition of aerosols, a fragile barrier between healing and wounding, *Journal of Nuclear Medicine and Radiation Therapy*, 6:4, 2015.
7. Pindaru D.M., Tanase C., [Arsene, C.](#), Olariu R.I., Micromorphological and chemical aspects of some lichenized fungi species, *Journal of Plant Development*, 19, 73-82, 2012.
8. Olariu, R.I., [Arsene, C.](#), Humelnicu, D., Vasilache, V., Solid-phase extraction and spectrophotometric determination of ultra trace thorium (IV) in water samples, *International Journal of Criminal Investigation*, 1, 25-30, 2011.
9. Cernat, R.I., Butnaru, L., Mihaescu, T., Olariu, R.I., [Arsene, C.](#), Ceruloplasmin and copper concentrations in patients with active pulmonary tuberculosis, *Romanian Review of Laboratory Medicine*, ISSN 1841-6624, 18,13-14, 2010.
10. Costica, N., Olariu, R.I., Mihai, C., Breaban, I.G., Rusu, A.I., [Arsene, C.](#), Ciumasu, I.M., Update environmental research infrastructure at „Alexandru Ioan Cuza” University of Iasi. The CERNESIM project, *Analele Stiintifice ale Universitatii „Alexandru Ioan Cuza” Iasi, Biologie, LVI, Fasc. 2*, 85-89, 2010.
11. Humelnicu, D., Olariu, R.I., [Arsene, C.](#), Bertescu, M., Burgehele, B.D., A comparative study on the removal of uranyl ions from artificially enriched radioactive waters using clays from Romania, *Analele Stiintifice ale Universitatii „Alexandru Ioan Cuza” Iasi, Geologie, LVI, 1*, 85-93, 2010.
12. Humelnicu, D., Olariu, R.I., [Arsene, C.](#), Humelnicu, I., New isopolyoxomolybdates derived from heptamolybdate with UO<sub>2</sub><sup>2+</sup> and Th<sup>4+</sup> ions, *Ovidius University Annals of Chemistry*, 20, 227-231, 2009.
13. Duncianu, M., Olariu, R.I., [Arsene, C.](#), Mocanu, R., Wirtz, K., Reviejo, M.M., Spectro-radiometric determination of the photolysis frequency of NO<sub>2</sub> in Euphore chamber, ISSN 1221-5341, *Analele Stiintifice ale Universitatii „Alexandru Ioan Cuza” Iasi, Chimie*, 12, 17-24, 2004.
14. [Arsene, C.](#), Barnes, I., Albu, M., Olariu, R.I., Becker, K.H., Wirtz, K., Mechanistic studies on the atmospheric oxidation of organic sulphur compounds, in *The European Photoreactor EUPHORE, 4<sup>th</sup> REPORT 2001*, Barnes, I., Wirtz, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany and Fundacion Centro de Estudios del Mediterraneo, ISBN 84-921259, Valencia, Spain, pp. 152-165, 2004.
15. Bossoutrot, V., LeBras, G., [Arsene, C.](#), Albu, M., Barnes, I., OH-initiated oxidation of dimethyl sulphoxide, in *The European Photoreactor EUPHORE 4<sup>th</sup> REPORT 2001*, Barnes, I., Wirtz, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany and Fundacion Centro de Estudios del Mediterraneo, ISBN 84-921259, Valencia, Spain, pp. 171-174, 2004.
16. Onofrei, T., [Arsene, C.](#), Agache, C., Sorption of Cu(II), Cd(II) and Zn(II) on 4-(benzylcellulose)-5-azo-8-hydroxyquinoline, ISSN 1221-5341, *Analele Stiintifice ale Universitatii „Alexandru Ioan Cuza” Iasi, Chimie*, 11, 69-74, 2003.
17. [Arsene, C.](#), Barnes, I., Olariu, I., Becker, K.H., Wirtz, K., Maldonado, C., OH-radical initiated oxidation of dimethyl sulphide and its impact on particle formation, in *The European Photoreactor EUPHORE, 3<sup>rd</sup> REPORT 2000*, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 82-98, 2001.
18. Olariu, R.I., Barnes, I., [Arsene, C.](#), Becker, K.H., Wirtz, K., Studies on the atmospheric oxidation of phenol: II. Secondary organic aerosol formation, in *The European Photoreactor EUPHORE, 3<sup>rd</sup> REPORT 2000*, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 27-38, 2001.

19. Olariu, R.I., Barnes, I., [Arsene, C.](#), Becker, K.H., Wirtz, K., Maldonado, C., Ponds, M., Studies on the atmospheric oxidation of phenol: I. Gas-phase product analysis, in The European Photoreactor EUPHORE, 3<sup>RD</sup> REPORT 2000, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 16-26, 2001.
20. Onofrei, T., [Arsene, C.](#), Abu, M., Mita, C., Sorption of Pb(II) on chemically modified celluloses, Analele Științifice ale Universității "Alexandru Ioan Cuza" Iași, Chimie, VIII, 275-280, 2000.
21. [Arsene, C.](#), Barnes, I., Becker, K.H., Studies on the atmospheric oxidation of dimethyl sulphide and dimethyl sulphoxide, in The European Photoreactor EUPHORE, 2<sup>ND</sup> REPORT 1998 - 1999, Barnes, I., Brockmann, K., eds., Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, pp. 225-236, 2000.
22. Barnes, I., Beyer, H., [Arsene, C.](#), Patroescu, I., Individual contributions, University of Wuppertal, in Dimethyl sulphide (DMS). Oxidation mechanism in relation to aerosols and climate, Contribution to Project ENV 4 - CT97 - 0410. 1998-1999, DOMAC, EUR 19569 EN, European Communities, pp. 28-42, 2000.
23. Onofrei, T., [Arsene, C.](#), Mita, C., Sorption and separation of Cu(II), Co(II) and Ni(II) on 1,4'-azobenzylcellulose-2-naphthol, Southern Brazilian Journal of Chemistry, 5, 79-85, 1997.

### 1.3 Cărți/monografii

#### 1.3.1 Cărți

1. [Cecilia Arsene](#), Romeo Iulian Olariu, Cercetarea criminalistica a microamelor, ISBN: 978-606-8363-09-7×1, AIT Laboratories, 2011.
2. [Cecilia Arsene](#), Romeo Iulian Olariu, Metode analitico-statistice in investigarea sistemelor chimice, ISBN: 978-973-730-606-7, PERFORMANTICA, Iasi, 2009.
3. [Cecilia Arsene](#), Romeo Iulian Olariu, Understanding atmospheric chemistry of hydrocarbons. An introductory approach, ISBN: 978-973-702-657-6, TEHNOPRESS, Iasi, 2009.
4. [Cecilia Arsene](#), Romeo Iulian Olariu, Sulfur in atmosfera, ISBN: 973-8188-87-3, Editura Tehnica, Științifică și Didactică CERMI, Iasi, 2003.
5. Romeo Iulian Olariu, [Cecilia Arsene](#), Degradarea atmosferică a hidrocarburilor aromatice, ISBN 973-8490-25-1, Ed. PIM, Iasi, 2002.
6. [Cecilia Arsene](#), Thorsten Benter, Atmospheric degradation mechanism of organic sulphur compounds, ISSN 1436-2198, Bericht Nr. 57, 2002.

#### 1.3.2 Monografii

1. [Arsene, C.\\*](#) Bougiatioti, A., Mihalopoulos, N., Non-methane hydrocarbons variability in the Eastern Mediterranean, pp. 197-206, in Regional Climate Variability and its Impacts in the Mediterranean Area, Mellouki, A., Ravishankara, A.R., eds, NATO Science Series, IV. Earth and Environmental Sciences, 79, 197-206, 2007.
2. [Arsene, C.\\*](#), Mihalopoulos, N., Olariu, R.I., Atmospheric wet deposition monitoring in Iasi, Romania, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, 62, 369-377, 2006.
3. Olariu, R.I., Duncianu, M., [Arsene, C.](#), Wirtz, K., Determination of photolysis frequencies for small carbonyl compounds using the EUPHORE chamber facilities, in Environmental Simulation Chambers - Application to Atmospheric Chemical Processes, Barnes, I., Rudzinski, K. J., eds., NATO Science Series, IV. Earth and Environmental Sciences, 62, 121-128, 2006.

### 1.4 Participări la conferințe și workshop-uri internaționale

#### 1.4.1 Conferințe/lucrări invitate

1. [Arsene, C.\\*](#), The beauty of analytical chemistry applied in the investigation of suspended in the air tiny particles or droplets. Unraveling the mysteries of "unknown" / Frumusețea Chimiei analitice aplicată în investigarea „necunoscutului” din aer, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021; <https://www.chem.uaic.ro/ro/manifestari/ssmd2021.html>
2. [Arsene, C.\\*](#) (online talk), Chimia în Elita științelor aplicate în descoperirea Minunilor Lumii și a Adevărului despre viață - Răspunsul ideal pentru Educație (CHEMARE), Cursuri online pentru studenți, Universitatea "Alexandru Ioan Cuza" din Iași, 23 Martie 2020. <https://www.uaic.ro/cursuri-deschise/>
3. [Arsene, C.\\*](#) (online talk), The importance of the laboratory quality management system in the academic curricula in developing appropriate student competences for our current societal needs, Virtual Scientific Workshop, Eurachem 2020, Quality Assurance for Analytical Laboratories in the University Curriculum, 15-15 July, 2020.
4. Galon-Negru, A.G., Amarandei, C., Olariu, R.I., [Arsene, C.\\*](#), Source apportionment of PM<sub>2.5</sub> mass concentrations in Iasi urban area, north-eastern Romania, European Aerosol Conference, 25-30 August 2019, Gothenburg, Sweden, oral communication, Source Apportionment Section, Program, pp. 22, O1-F5-A, 2019.
5. [Arsene, C.](#), Olariu, R.I., Measurements in Iasi, Romania, COST Action CA16109 Working Group 1 Meeting, 05-06 March 2019, London, United Kingdom, oral talk, 06 March 2019.
6. [Arsene, C.](#), Olariu, R.I., (Conference), AI-FORECAST project (PN-III-P4-ID-PCE-2016-0299) between prediction of the aerosol chemical composition and integration of Cernesim's infrastructure in a European context, The XXXV-th Romanian Chemistry Conference, Calimanești-Caciulata, Valcea, Romania, Book of Abstracts, pp. 5, 02 - 05 October, 2018.
7. [Arsene, C.](#) (Invited talk), Challenges and achievements in analytical chemistry laboratories. Tropane alkaloids as plant-derived pharmaceuticals or ethnobotanical ingredients, 4<sup>th</sup> French-Romanian Colloquium in Medicinal Chemistry, 05-07 October, 2017.
8. [Arsene, C.](#) (Invited talk), Air quality MONitoring Station - AMOS (CERNESIM-UAIC) ..... the place where aerosols are measured also..., COLOSSAL COST Action CA16109, Chemical On-Line cOMpoSition and Source Apportionment of fine aerosols, Barcelona, Spain, 26-28 September, 2017.
9. [Arsene, C.](#) (Invited talk), Gas-phase kinetic study of OH radical reactions with selected saturated ketones, 20<sup>th</sup> Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE 2017, 06-09 September 2017, Poiana Brașov, Romania, S3-209, 2017.
10. [Arsene, C.](#) (Seminar), North-eastern Romanian trademark achievements in the atmospheric chemistry field. State-of-the-art- and challenges, Seminar, Chemical and physical Properties of the Atmosphere, CaPPA, SAGE Douai, 13 July 2017.

11. [Arsene, C.](#) (Invited talk), Chemistry, the driving force of our every day's life...from fun and danger to scientific challenges, SCIENVIR 2017 International Conference Programme, 15-18 June, 2017.
12. [Arsene, C.](#) (Seminar), METHodologies in Environmentally focused socioeconomic Research (METER), SCIENVIR 2017 International Conference Programme, 15-18 June, 2017.
13. [Arsene, C.](#) (Invited talk), About ultrasound assisted extraction and its suitability for studying physico-chemical processes in various complex matrices, Sample Treatment 2016, Lisbon, Portugal, 05-07 December, 2016.
14. [Arsene, C.](#) (Invited talk, keynote talk), Chemical composition of aerosols, a fragile barrier between healing and wounding, keynote within the International Conference on Medical Physics, August 03-05, 2015.
15. [Arsene, C.](#) (Invited talk), Chemistry – a piece of wonder in the long way to fulfill the dream to reach one of the world's end "The Cape of the Good Hope", 1st International Conference Perspectives in the Humanities and Social Sciences: Hinting at Interdisciplinarity, Iasi, Romania, 23-24 May, 2014.
16. [Arsene, C.](#) (Invited talk), Chromatography in forensic investigations at the macro and microscale level. Searching for the needle in the haystack, National Conference in Forensic, Iasi, Romania, 23 June, 2013.
17. [Arsene, C.](#) (Invited talk), Flow reactor ozonolysis studies of selected dimethyl hexenes in the gas phase, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry”, Iasi, Romania, 31 October-02 November, 2013.
18. [Arsene, C.](#) (Invited talk), Chemical characterization of atmospheric aerosols from local to long range transboundary pollution. ICARUS project at the final phase and beyond, Science. Passion, Mission, Responsibilities, Marie Curie Researchers Symposium, Warsaw, Poland, 25-27 September 2011.
19. [Arsene, C.](#) (Invited talk), Atmospheric aerosols in the north-eastern Romania, The Ecole Nationale Supérieure des Techniques Industrielles et des Mines de Douai, 02 September 2011.
20. [Arsene, C.](#) (Invited talk), Chemical composition of tropospheric aerosols in Iasi, north-eastern Romania, 31<sup>st</sup> National Conference of Chemistry, Valcea, Romania, 05-07 Octombrie 2010.
21. [Arsene, C.](#) (Invited talk), Non-methane hydrocarbons variability in the Eastern Mediterranean, Advanced Research Workshop, Marrakesch, Morocco, 2006. Regional Climate Variability and its Impacts in the Mediterranean Area, Advanced Research Workshop, Marrakech, Morocco, 23 – 27 November 2006.
22. [Arsene, C.](#) (Invited talk), Organic acidity in a wet precipitation study in the northeastern Romania, 2nd International Conference on Environmental Research and Assessment, Romanian Academy, Bucharest, 05 - 08 October, 2006.

#### 1.4.2 Abstracte și proceedings pentru conferințe

##### 1.4.2.1 Abstracte și proceedings pentru conferințe internaționale organizate în străinătate

1. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Variability of pinene oxidation products in the atmospheric aerosols from the northeastern Romania. Influence of the meteorological parameters, Comunicare orală, XXIIth SGEM GeoConference - "Green Sciences for Green Life", Viena, Austria, 07-10 decembrie 2021.
2. Amarandei, C., Galon Negru, A.G., Olariu, R.I., [Arsene, C.](#), Investigation of size-resolved anthropogenic secondary organic aerosol molecular tracers derived from aromatic hydrocarbons, Poster, ICAST 2020: International Conference on Aerosol Science and Technology, Praga, Cehia, 3-4 septembrie, Abstract in IRC 2020 IX. International research conference proceedings, Online ISSN: 1307-5892, pp 39, 2020. (Premiul cea mai bună prezentare)
3. Amarandei, C., Galon (Negru), A.G., Mutzel, A., Hartmut, H., Olariu, R.I., [Arsene, C.](#), Evidences on the  $\alpha/\beta$ -pinene oxidation products contribution to the urban particulate matter in Iasi, north-eastern Romania, Poster, European Aerosol Conference, Gothenburg, Suedia, Source Apportionment Section, Program, pp. 113, P3-026, 25-30 August, 2019.
4. Galon (Negru), A.G., Amarandei, C., Olariu, R.I., [Arsene, C.](#), Source apportionment of PM2.5 mass concentrations in Iasi urban area, north-eastern Romania, Poster, European Aerosol Conference, Gothenburg, Suedia, Source Apportionment Section, Program, pp. 22, O1-F5-A, 25-30 August, 2019.
5. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Variability of pinene oxidation products in the atmospheric aerosols from the northeastern Romania. Influence of the meteorological parameters, XXIIth SGEM GeoConference - "Green Sciences for Green Life", 7th – 10th of December, 2021.
6. Soroaga, L.V., [Arsene, C.](#), Olariu, R.I., The evaluation of  $\text{Na}_2\text{O}_2$  as a sintering agent in solid state dissolution of potential secondary sources for rare earth elements, XXIIth SGEM GeoConference - "Green Sciences for Green Life", 7th – 10th of December, 2021.
7. Amarandei, C., Galon Negru, A.G., Olariu, R.I., [Arsene, C.](#), Investigation of size-resolved anthropogenic secondary organic aerosol molecular tracers derived from aromatic hydrocarbons, International Conference on Aerosol Science and Technology ICAST 2020, within IRC 2020, IX International Conference Proceedings, ISSN online 1307-6892, Conference Proceedings, Prague Czechia, Part I, September 03-04, pp. 39, 2020. <https://panel.waset.org/conference/2020/09/prague/program>
8. Amarandei, C., Galon (Negru), A.G., Mutzel, A., Hartmut, H., Olariu, R.I., [Arsene, C.](#), Evidences on the  $\alpha/\beta$ -pinene oxidation products contribution to the urban particulate matter in Iasi, north-eastern Romania, European Aerosol Conference, 25-30 August 2019, Gothenburg, Sweden, oral communication, Source Apportionment Section, Program, pp. 113, P3-026, 2019.
9. Olariu, R.I., [Arsene, C.](#), Bejan, I.G., Roman, C., Rusu, A.M., Galon (Negru), A.G., Secondary organic aerosols formation from the gas phase OH radical reaction with catechol under  $\text{NO}_x$  conditions, European Aerosol Conference, 25-30 August 2019, Gothenburg, Sweden, pp. 117, P3-131, 2019.
10. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Gas phase kinetic study for a series of methylated furans with chlorine atoms in atmospheric conditions, The 11th International Conference on Chemical Kinetics, Orleans, France, Book of Abstracts, pp. 150, 23-27 June, 2019.
11. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Kinetic investigations of the OH-initiated oxidation of a series of alkylfurans at 298 K and atmospheric pressure, Atmospheric Chemical Mechanisms, University of California Davis USA, 5-7 December, 2018.
12. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Gas phase kinetic study of the OH radical initiated oxidation of alkylfurans at atmospheric pressure and 298±2 K, pp. 166/197, 25<sup>th</sup> International Symposium on Gas Kinetics&Related Phenomena, Lille, France, 22<sup>nd</sup>-26<sup>th</sup> July 2018.
13. Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Temperature dependence kinetic study by using the newly thermostated ESC-Q-UAIC chamber, pp. 167/197, 25<sup>th</sup> International Symposium on Gas Kinetics&Related Phenomena, Lille, France, 22<sup>nd</sup>-26<sup>th</sup> July 2018.

14. Soroaga, L.V., Olariu, R.I., [Arsene, C.](#), Borcia, C., Quantitative analysis of rare earth elements from secondary sources: a comparison of laser ablation inductively coupled plasma-mass spectrometry and solution inductively coupled plasma-mass spectrometry, Scientific Conference SGEM Vienna GREEN 2017, Vienna, Austria, <https://www.sgemviennagreen.org/>, 27-30 November, 2017.
15. Galon (Negru), A.G., Amarandei, C., Olariu, R.I., [Arsene, C.](#), Chromatographic and spectroscopic chemical characterisation of atmospheric aerosols in the north-eastern Romania, Iasi region, The Voltaire Atmospheric Chemistry Summer School: Fundamentals for Atmospheric Chemistry, July 2-8, 2017, Orleans, France, 2017 (<http://www.lestudium-ias.com/fr/event/voltaire-atmospheric-chemistry-summer-school-fundamentals-atmospheric-chemistry>).
16. Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Validation studies on newly developed ESC-Q-UAIC photoreactor for gas-phase atmospheric chemistry, The Voltaire Atmospheric Chemistry Summer School: Fundamentals for Atmospheric Chemistry, July 2-8, 2017, Orleans, France, 2017 (<http://www.lestudium-ias.com/fr/event/voltaire-atmospheric-chemistry-summer-school-fundamentals-atmospheric-chemistry>).
17. Olariu, R.I., Marin, S.L., Roman, C., Bejan, I.G., [Arsene, C.](#), Gas-phase kinetic study of OH radical reactions with selected alkylaromatic compounds, ATMOCHEMIO, Book of abstracts, Clermont-Ferrand, France, 19-21 June 2017, pp.37, 2017.
18. Bejan, I., Olariu, R. I., [Arsene, C.](#), Wenger, J.C., Barnes, Wiesen, I. P., Investigations on the gas-phase chlorine-atom initiated oxidation of 1,4-benzoquinones and 1,2-dihydroxybenzenes, ATMOCHEMIO, Book of abstracts, Clermont-Ferrand, France, 19-21 June 2017, pp.42, 2017.
19. [Arsene, C.](#), Coman (Babusanu), A.C., Negru (Galon), G., Mardare (Balutescu), G., Babusanu(Coman), A., Olariu, R.I., About ultrasound assisted extraction and its suitability for studying physico-chemical processes in various complex matrices, Sample Treatment 2016, Proceedings Book, ISBN 978-989-99639-2-4, Lisbon, Portugal, 05-07 December, pp. 79-80, 2016.
20. Olariu, R.I., [Arsene, C.](#), Soroaga, L.V., Pintilei, M., Nica, V., Borcia, C., Chemical properties of available materials for the recovery of rare earth elements, 3<sup>rd</sup> International Conference on Computational and Experimental Science and Engineering (ICCESN-2016, Antalya, Turkey, 19-24 October), pp. 287, 2016.
21. Bejan, I., Duncianu, M., [Arsene, C.](#), Olariu, R.I., Kinetic study of the gas-phase reactions of chlorine atoms with 2-chlorophenol, 2-nitrophenol and ortho-, meta- and para-cresol, 24<sup>th</sup> International Symposium on Gas Kinetics and Related Phenomena, York, UK, 17<sup>th</sup>-21<sup>st</sup> July, P021, 2016.
22. Bejan, I., Marin, S.L., Duncianu, M., [Arsene, C.](#), Olariu, R.I. Validation of a newly designed simulation chamber (ESCQ-UAIC) using gas phase investigations on aromatic compounds, 24<sup>th</sup> International Symposium on Gas Kinetics and Related Phenomena, York, UK, 17<sup>th</sup>-21<sup>st</sup> July, P023, 2016.
23. [Arsene, C.](#), Chemical composition of aerosols, a fragile barrier between healing and wounding, keynote within the International Conference on Medical Physics, August 03-05, 2015, Birmingham, UK, in Journal of Nuclear Medicine and Radiation Therapy, 6:4, 2015. <http://dx.doi.org/10.4172/2155-9619.S1.001>. Session chair
24. [Arsene, C.](#), European Commission, Romania, Research and Innovation, [https://ec.europa.eu/research/fp7/pdf/country-profiles/romania/country\\_profile\\_and\\_featured\\_projects.pdf](https://ec.europa.eu/research/fp7/pdf/country-profiles/romania/country_profile_and_featured_projects.pdf); 2015.
25. [Arsene, C.](#), Measuring aerosol damage to the atmosphere, Success stories, [http://ec.europa.eu/research/infocentre/article\\_en.cfm?id=/research/headlines/news/article\\_13\\_10\\_28\\_en.html&item=All&artid=31296&caller=SuccessStories](http://ec.europa.eu/research/infocentre/article_en.cfm?id=/research/headlines/news/article_13_10_28_en.html&item=All&artid=31296&caller=SuccessStories), Measuring aerosol damage to the atmosphere, 28 October, 2013.
26. [Arsene, C.](#), Chemical characterization of atmospheric aerosols from local to long-range transboundary pollution. ICAARUS project at the final phase and beyond, in Science, Passion, Mission, Responsibilities, Marie Curie Researchers Symposium, Warsaw, Poland, 25-27 September, pp. 15, 2011.
27. Duncianu, M., Riffault, V., Olariu, R., [Arsene, C.](#), Tomas, A., Codeville, P., Coefficients de vitesse et produits en phase gazeuse obtenus dans les reactions d'ozonolyse d'une serie de pentenes, Premier Colloque Francophone sur les Pollutants Organique Generes par l'Agriculture et les Transports, Agadir, Morocco 24-27 Octobre, 2011.
28. Bercea, R.M., Cemat, R.I., Mihaescu, T., Mocanu, R.D., Olariu, R.I., [Arsene, C.](#), Serum Cu, Fe and Zn concentrations and their relation to the inflammation associated with active pulmonary tuberculosis. European Respiratory Journal Supplement, 3045s, 36(54), 2010.
29. Pindaru, D., Tanase, C., Olariu, R.I., [Arsene, C.](#), Atmospheric deposition of organic and inorganic nitrogen in the north-eastern Romania, in 2010 International Aerosol Conference, P2K19, 29 August-03 September, Helsinki, Finland, pp. 80, 2010.
30. Olariu, R.I., Bejan, I., Barnes, I., Becker, K.H., [Arsene, C.](#), Evaluation of phenols-SOA formation mechanism with respect to chamber type, pp. 159, in 2010 International Aerosol Conference, 29 August-03 September, Helsinki, Finland, P3W4, 2010.
31. Cemat, R., Cioroiu, M., Dragan, D., Raducanescu, C., Olariu, R., [Arsene, C.](#), Mocanu, R., Distribution et comportement des oligo-elements et des polluants organochlorides dans le serum de personnes ayant des affections pulmonares, chroniques ou actives, in Colloque Franco-Roumain de chimie Apliquee, COFeRoCA-2010, ISSN 2068-6382, Orleans, France, 07-10 July, pp. 71, 2010.
32. Bertescu, M., Humelnicu, D., Mantu, D., Burghele, B.D., [Arsene, C.](#), Olariu, R.I., Solid phase extraction-spectrophotometric determination of thorium (IV) in water samples, 2nd Terrestrial Radioisotopes in Environment International Conference on Environment Protection, Veszprem, Hungary, May 2010.
33. [Arsene, C.](#), Olariu, R.I., Ponzio, M., Vione, D., Fast reversed-phase ion-pair liquid chromatography in the simultaneous analysis of nitrite and nitrate in rainwater samples collected in the north-eastern Romania over 2003-2008, in 9<sup>th</sup> Csaba Horváth Medal Award Symposium, Hartford, Connecticut, USA, 28-29 April, pp. 28, 2009.
34. Olariu, R.I., [Arsene, C.](#), Humelnicu, D., Duncianu, M., Newly synthesized stationary phase used on method development for  $\alpha$ - and  $\beta$ -emitters measurements in environmental samples, in 9<sup>th</sup> Csaba Horváth Medal Award Symposium, Hartford, Connecticut, USA, 28-29 April, pp. 27, 2009.
35. [Arsene, C.](#), Olariu, R.I., Kanakidou, M., Mihalopoulos, N., Atmospheric aerosol characterisation at Iasi, northeastern Romania. First results, European Aerosol Conference (EAC 2008), Thessaloniki, Greece, 24-29 August, T06A206P, 2008.
36. [Arsene, C.](#), Bougiatioti, A., Mihalopoulos, N., Sources and variability of non-methane hydrocarbons in the Eastern Mediterranean, Protection and Restoration of the Environment IX (Pre-IX), Kefalonia, Greece, 29 June - 03 July, 2008. AWARD for the BEST POSTER.
37. [Arsene, C.](#), Bougiatioti, A., Mihalopoulos, N., Indirect evidence of chlorine atom concentration in the lower troposphere of the Eastern Mediterranean, European Geosciences Union, SRef-ID: 1607-7962/gra/EGU2007-A-00538, Geophysical Research Abstracts, Vol. 9, 00538, 2007.

38. [Arsene, C.](#), Bougiatioti, A., Kalivitis, N., Chourdakis, G., Zarpas, P., Mihalopoulos, N., Non-methane hydrocarbons measurements in the eastern Mediterranean during summer: implications for OH radical and Cl atom levels, ACCENT 2<sup>nd</sup> Symposium, Atmospheric Composition Change, Causes and Consequences, Local to Global, Urbino, Italy, 2007.
39. [Arsene, C.](#), Non methane hydrocarbons (NMHCs) variability in the Eastern Mediterranean, Regional Climate Variability and its Impacts in the Mediterranean Areas, Marrakech, Morocco, 23-27 November, 2006.
40. [Arsene, C.](#), Liakakou, E., Bougiatioti, A., Mihalopoulos, N., Sources of non-methane hydrocarbons (NMHCs) in the eastern Mediterranean, in Atmospheric Chemistry at the Interfaces, Cape Town, South Africa, 17-22 September, pp. 534, 2006.
41. [Arsene, C.](#), Olariu, R.I., Violaki, K., Mihalopoulos, N., Dissolved organic nitrogen deposition on land in the northeastern part of Romania, in Atmospheric Chemistry at the Interfaces, Cape Town, South Africa, 17-22 September, pp. 499, 2006.
42. [Arsene, C.](#), Olariu, R.I., Violaki, K., Mihalopoulos, N., Dissolved organic nitrogen deposition on land in the northeastern part of Romania, in Workshop on agricultural air quality. State of the science, Aneja, V.P., Schlesinger, W.H., Knighton, R., Jennings, G., Niyogi, D., Gillian, W., Duke, C.S., eds., Potomac, Maryland USA, 05-08 June, pp. 464-467, 2006.
43. [Arsene, C.](#), Olariu, R.I., Barnes, I., Wirtz, K., A study of new particle formation in the OH-initiated oxidation of dimethyl sulphide, European Geosciences Union Geophysical Research Abstracts, Vol. 6, SRef-ID: 1607-7962/gra/EGU04-A-06878, 2004.
44. Duncianu, M., Olariu, R.I., [Arsene, C.](#), Wirtz, K., Revejo, M.M., Euphore chamber measurement of atmospheric photolysis frequencies for NO<sub>2</sub>, O<sub>3</sub> and other molecules, European Geosciences Union, SRef-ID: 1607-7962/gra/EGU04-A-06932, Geophysical Research Abstracts, Vol. 6, 06932, 2004.
45. Olariu, R.I., Tomas, A., Barnes, I., Bejan, I., [Arsene, C.](#), Wirtz, K., Organic aerosol formation during the atmospheric ozone degradation of 1,2-dihydroxybenzenes, European Geosciences Union, SRef-ID: 1607-7962/gra/EGU04-A-07103, Geophysical Research Abstracts, Vol. 6, 07103, 2004.
46. [Arsene, C.](#), Mihalopoulos, N., Olariu, R.I., Atmospheric Wet deposition monitoring in Iasi, Romania, NATO: EST.ARW 980164, Environmental Simulation Chambers: Application to Atmospheric Chemical Processes, Zakopane, Poland, 01-04 October, pp. 18, 2004.
47. Olariu, R.I., Duncianu, M., [Arsene, C.](#), Wirtz, K., Determination of photolysis frequencies for small carbonyl compounds using the EUPHORE chamber facilities, in NATO: EST.ARW 980164, Environmental Simulation Chambers: Application to Atmospheric Chemical Processes, Zakopane, Poland, 01-04 October, pp. 19, 2004.
48. Albu, M., Barnes, I., Patroescu-Klotz, I., [Arsene, C.](#), Mocanu, R., Simulation chamber experiments on the OH-initiated oxidation of dimethyl sulphide at low temperatures, European Geophysical Society, Geophysical Research Abstracts, Vol. 5, 11050, 2003.
49. Olariu, R.I., Barnes, I., Bejan, I., [Arsene, C.](#), Becker, K.H., Wirtz, K., Secondary organic aerosol formation from the atmospheric oxidation of phenols, European Geophysical Society, Geophysical Research Abstracts, Vol. 5, 11692, 2003.
50. Albu, M., [Arsene, C.](#), Barnes, I., FT-IR product investigations of the OH-initiated oxidation of dimethyl sulphide at sub-zero temperatures, in EC/EUROTRAC-2 Joint Workshop, Shaping the Future of Atmospheric Chemistry Research in Europe, Paris, France, pp.11, 2002.
51. Albu, M., [Arsene, C.](#), Barnes, I., Investigations of the OH-initiated oxidation of dimethyl sulphide at sub-zero temperatures, in 7<sup>th</sup> Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC), Heraklion, Crete, Greece, pp. 144-145, 2002.
52. [Arsene, C.](#), Barnes, I., Albu, M., Product study of the Cl Atom initiated photo-oxidation of dimethyl sulphide, in 7<sup>th</sup> Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC), Heraklion, Crete, Greece, pp.145-146, 2002.
53. [Arsene, C.](#), Barnes, I., Albu, M., Chlorine atom reaction kinetics with organic sulphur compounds as a function of temperature and O<sub>2</sub> partial pressure, in 17<sup>th</sup> International Symposium on Gas Kinetics, AP03, Essen, Germany, 2002.
54. Barnes, I., [Arsene, C.](#), Yields of aerosol precursors in the oxidation of DMS as a function of atmospheric conditions (temperature and NO<sub>x</sub>), Poster zum Status Seminare AFS, Contribution to Projekt No.: 07 AF 225. 1998-2001, Koln Germany, 2001.
55. [Arsene, C.](#), Barnes, I., Becker, K.H., Studies on the Photo-oxidation of dimethyl sulphide and dimethyl sulphoxide under atmospheric conditions, in Proceedings of the A Changing Atmosphere, 8<sup>th</sup> European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants, Hjorth, J., Jensen, N., eds., Torino, Italy, 17-20 September, 2001.
56. [Arsene, C.](#), Barnes, I., Albu, M., Becker, K.H., Investigations of the particle formation from the photooxidation of DMS, Global Atmospheric Change and its Impact on Regional Air Quality, Advanced Research Workshop, NATO Science Programme, Irkutsk, Russian Federation, 22-27 August, 2001.
57. Barnes, I., Beyer, H., [Arsene, C.](#), Patroescu, I., Individual contributions, University of Wuppertal, in Dimethyl sulphide (DMS). Oxidation mechanism in relation to aerosols and climate, Contribution to Project ENV 4 - CT97 - 0410. 1998-1999, DOMAC, EUR 19569 EN, European Communities, pp. 28-42, 2000.
58. [Arsene, C.](#), Barnes, I., Becker, K.H., Mocanu, R., Product studies on the photo-oxidation of dimethyl sulphoxide (DMSO:CH<sub>3</sub>S(O)CH<sub>3</sub>), in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Rossi, M.J., Rossi, E.M., eds., pp. 17-20, 2000.
59. Onofrei, T., [Arsene, C.](#), Albu, M., Sorption of Pb(II) on chemically modified celluloses, in Euroanalysis XI, European Conference on Analytical Chemistry, Book of Abstracts, Lisbon, Portugal, P-109, 2000.
60. [Arsene, C.](#), Barnes, I., Becker, K.H., New product studies on the photo-oxidation of dimethyl sulphide, in EC Cluster, Chemical Processes and Mechanisms and EUROTRAC-2, Chemical Mechanism Development, Vogt, R., Axelsdottir, G., eds., ISBN 3-00-005414-6, pp. 117-121, 1999.
61. Barnes, I., Becker, K.H., [Arsene, C.](#), New product studies on the photo-oxidation of dimethyl sulphide, in Sixth Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC), Book of Abstracts, Bologna, Italy, 13-17 September, pp.140, 1999.
62. [Arsene, C.](#), Barnes, I., Produkt- und aerosolbildung bei der DMS-oxidation, in Proceeding of Atmosphärische Umweltforschung im Wandel, Berlin, Germany, 1999.
63. [Arsene, C.](#), Barnes, I., Becker, K.H., New product and aerosol studies on the oxidation of dimethyl sulfide, in Proceedings of the US-German Environmental Chamber Workshop, Riverside, <http://cert.ucr.edu/carter/epacham/meeting1.htm>, Riverside, California, 1999.
64. Barnes, I., [Arsene, C.](#), Patroescu, I., Aerosol und Produktbildung bei der dimethylsulfid-oxidation, Poster zum Status Seminare AFS, Munchen, Germany, 24-25 June, 1999.
65. Barnes, I., Bayer, H., [Arsene, C.](#), Neue produktstudien der atmosphärischen dimethylsulfid-bzw. dimethylsulfoxid oxidation, in Physikalische Chemie der Atmosphäre, Crutzen, P.J., Zellner, R., ISSN 0936-9376, Dortmund, Germany, 13-15 May, pp. B53, 1999.
66. Onofrei, T., [Arsene, C.](#), Sorption of Cu(II), Cd(II) and Zn(II) on 4(benzylcellulose)-5-azo-8-hydroxyquinoline, in Chimia, Euroanalysis 10, Abstract Book, Vol. 52, 299-427, ISSN 0009-4293, 7-8/98, Verlag Helvetica Chimica Acta, Swiss, 06 September, p. 345, 1998.

1.4.2.2 **Abstracte și proceedings pentru conferințe naționale/internaționale organizate în țară**

1. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Measurements of 4-nitrophenol and 4-nitrocatechol in urban aerosols from North-Eastern Romania, Comunicare orală, Conferința Națională de Chimie, Ediția XXXVI, Călimanești-Caciulata, Vâlcea, România, Book of Abstracts, pp 23, 04-07 Octombrie, 2022.
2. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Source apportionment of the organic aerosols in Iasi urban area using the molecular tracer method, Comunicare orală, Abstract în Rezumate, Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor, „Chimia - frontieră deschisă spre cunoaștere”, ediția a XII-a, Iași, România, pp. 18-19, 11-12 noiembrie 2021.
3. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Determination of Polycyclic Aromatic Hydrocarbons. First Steps in Method Development and Preliminary Findings in Atmospheric Aerosols from Iasi, North-Eastern Romania, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE III), Cluj-Napoca, June 04 – 05, pp 57, 2021.
4. Roman, C., [Arsene, C.](#), Bejan, G.I., Olariu, R.I., Revisited SAR parameters derived from newly determinations rate coefficients for the gas-phase reactions of OH radicals with a series of nitrocatechols / Revizuirea parametrilor SAR utilizați în estimarea reactivității față de radicalii OH derivați din noile determinări cinetice pentru nitrocatecholi, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
5. Apostol, V., Roman, C., Iancu, C., Bejan, I.G., Olariu, R.I., [Arsene, C.](#), Long-term monitoring of optical properties of tropospheric aerosols in the Iasi urban area, north-eastern Romania, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
6. Rusu-Vasilache, A.M., Roman, C., [Arsene, C.](#), Bejan, G.I., Olariu, R.I., OH radicals and ozone kinetic studies with some methyl-butenols undesimulated atmospheric conditions / Cinetica în fază gazoasă cu radicali OH și ozon a unei serii de metilbutenoli în condiții de atmosferă simulate, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
7. Măirean, C.P., Roman, C., Bejan, I.G., [Arsene, C.](#), Olariu, R.I., Gas-phase kinetic study of some selected cis-3-hexenyl esters with the OH radicals / Studiul cinetic privind reactivitatea unor esteri cis-3-hexenilici cu radicalii OH în fază gazoasă, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
8. Soroaga, L.V., [Arsene, C.](#), Olariu, R.I., Evaluation of the extended uncertainty for the quantification of rare earth elements by inductively coupled plasma-mass spectrometry / Evaluarea incertitudinii extinse în cuantificarea metalelor rare ale pământului prin spectrometrie de masa cu plasma cuplată inductiv, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
9. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Molecular tracers method applied for sources apportionment of the organic aerosols from the Iasi urban area, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
10. Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Investigations on the gas-phase photolysis and OH radical kinetics of nitrocatechols, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 11-12 November, 2021;
11. [Arsene, C.](#) (online talk), The importance of the laboratory quality management system in the academic curriculum in developing appropriate student competences for our current societal needs, Quality Assurance Elements for Analytical Laboratories in the University Curriculum – Online, Virtual Scientific Workshop Eurachem2020, Quality Assurance for Analytical Laboratories in the University Curriculum, 15-15 July 2020, Bucharest, Romania.
12. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Implications of matrix effects in quantitative HPLC/ESI-ToF-MS analyses of atmospheric organic aerosol, Quality Assurance Elements for Analytical Laboratories in the University Curriculum – Online, Virtual Scientific Workshop Eurachem2020, Quality Assurance for Analytical Laboratories in the University Curriculum, 15-15 July 2020, Bucharest, Romania.
13. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Atmospheric organic aerosols in Iasi urban area. Tiny particles with big impact, Abstract Online <https://conferinte.doctoranzi.geo.unibuc.ro/participanti/>, Conferința Națională a Doctoranzilor, Consorțiul Universitar, Bucharest, Romania, 12 December 2020.
14. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Chemical characterization of atmospheric organic aerosols by high-performance liquid chromatography time-of-flight mass spectrometry, on-line presentation (Cisco Webex platform), 2020, Conferința Școlilor Doctorale din cadrul Universității „Alexandru Ioan Cuza” din Iași, organizată în cadrul proiectului POCU/380/6/13/123623, Iasi, Romania, 24-25 October 2020.
15. Soroaga, L.V., [Arsene, C.](#), Olariu, R.I., Rare Earth Elements analysis in secondary sources using Inductively Coupled Plasma – Mass Spectrometry, on-line presentation (Cisco Webex platform), 2020, Conferința Școlilor Doctorale din cadrul Universității „Alexandru Ioan Cuza” din Iași, organizată în cadrul proiectului POCU/380/6/13/123623, Iasi, Romania, 24-25 October 2020.
16. Amarandei, C., Olariu, R.I., [Arsene, C.](#), Fragmentor and skimmer voltages effect on the electrospray ionization time-of-flight mass spectrometer response, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020, Abstract in Book of abstracts, pp. 6-7, 2020.
17. Roman, C., Roman, T., Bejan, I., [Arsene, C.](#), Olariu, R.I., Nitrocatechols: Synthesis, characterization and gas phase kinetic results towards reaction with OH radicals, Abstract in Book of abstracts, pp. 8-9, 2020. Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020.
18. Soroaga, L.V., [Arsene, C.](#), Olariu, R.I., Assessing the performance of an analytical procedure using Certified Reference Materials, Abstract in Book of abstracts, pp. 10-11, 2020, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020.
19. Măirean, C.P., Roman, C., Bejan, I.G., [Arsene, C.](#), Olariu, R.I., Gas-phase kinetic study of n-butyl acetate with the OH radicals using the ESC-Q-UAIC facilities chamber, Abstract in Book of abstracts, pp. 12-13, 2020, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020.
20. Apostol, V., Amarandei, C., Olariu, R.I., [Arsene, C.](#), Optical properties of ambient aerosols: a case study on chemical laboratories indoor environment vs. outdoor conditions, Abstract in Book of abstracts, pp. 18-19, 2020, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020.
21. Cernalevschi, G., Roman, C., Șoroagă, L. V., Olariu, R. I., [Arsene, C.](#), Fourier transformed InfraRed spectroscopy applied in the analysis of active compounds from selected essential oils, Abstract in Book of abstracts, pp. 26-27, 2020, Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 29-30 October 2020.
22. Amarandei, C., Galon (Negru), A.G., Olariu, R.I., [Arsene, C.](#), Investigarea markerilor moleculari organici din atmosfera urbană prin HPLC-ESI-ToF-MS. Dezvoltare de metodă, Conferința Școlilor Doctorale din Consorțiu, Ed. a II-a - 2019/CHIMIE, Timisoara, Romania, 2019.

23. Roman, C., [Arsene, C.](#), Olariu, R.I., Studiul formării aerosolilor organici secundari de la foto-oxidarea atmosferică a 1,2-dihidroxi(alchil)benzenilor inițiată de radicalii OH în condiții controlate de NO<sub>x</sub>, Conferința Școlilor Doctorale din Consorțiu, Ed. a II-a - 2019/CHIMIE, Timisoara, Romania, 2019.
24. Soroaga, L.V., [Arsene, C.](#), Olariu, R.I., Analysis of rare earth elements and refractory metals in volcanologic samples by ICP-MS using alkali fusion as sample dissolution procedure, The 10th Scientific Session of Undergraduate, Master and PhD Students, communication, Iasi, Romania, Book of Abstracts, pp. 8, 20-21 June, 2019.
25. Rusu, A.M., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Characterization of a sample preparation methods for the identification of carbonyl compounds by using derivatization technique coupled with GC/Ion Trap MS, The 10th Scientific Session of Undergraduate, Master and PhD Students, communication, Iasi, Romania, Book of Abstracts, pp. 10, 20-21 June, 2019.
26. Roman, C., Bejan, I.G., [Arsene, C.](#), Olariu, R.I., FTIR and PTR-ToF-MS investigations of gas-phase major ring retaining products from OH radical initiated reactions with alkylated phenols, The 10th Scientific Session of Undergraduate, Master and PhD Students, communication, Iasi, Romania, Book of Abstracts, pp. 16, 20-21 June, 2019.
27. Amarandei, C., Galon (Negru), A.G., Olariu, R.I., [Arsene, C.](#), High-performance liquid chromatography time-of-flight mass spectrometry method development for investigation of organic aerosols, The 10th Scientific Session of Undergraduate, Master and PhD Students, poster, Iasi, Romania, Book of Abstracts, pp. 46, 20-21 June, 2019 (best poster award).
28. Galon (Negru), A.G., Olariu, R.I., [Arsene, C.](#), The nucleation and growth rates of atmospheric particles in Iasi, northeastern Romania, The 10th Scientific Session of Undergraduate, Master and PhD Students, poster, Iasi, Romania, Book of Abstracts, pp. 48, 20-21 June, 2019.
29. Roman, C., Bejan, I.G., [Arsene, C.](#), Olariu, R.I., PTR-ToF-MS data interpretation for gas phase vocs measurements using the ESC-Q-UAIC atmospheric simulation chamber facility, The 10th Scientific Session of Undergraduate, Master and PhD Students, poster, Iasi, Romania, Book of Abstracts, pp. 56, 20-21 June, 2019.
30. Galon (Negru), A.G., Amarandei, C., Riffault, V., Tomas, A., Duncianu, M., Olariu, R.I., [Arsene, C.](#), High resolution time-of-flight mass spectrometry in submicrometric aerosol particles characterization, National Conference of the Doctoral Schools from Universtaria Consortium, 1st Edition, Iasi, Romania, Book of Abstracts, pp. 27, oral communication, 31 October – 3 November, 2018.
31. Soroaga, V.L., [Arsene, C.](#), Olariu, R.I., Analiza elementelor rare ale pamanturilor folosind spectrometria de masa cu plasma cuplata inductiv, National Conference of the Doctoral Schools from Universtaria Consortium, 1st Edition, Iasi, Romania, Book of Abstracts, pp. 30, oral communication, 31 October – 3 November, 2018.
32. Roman, C., [Arsene, C.](#), Olariu, R.I., Camera de reacție ESC-Q-UAIC, un instrument analitic adecvat pentru studiul chimiei atmosferei, National Conference of the Doctoral Schools from Universtaria Consortium, 1st Edition, Iasi, Romania, Book of Abstracts, pp. 39, oral communication, 31 October – 3 November, 2018.
33. Rusu, A.M., Roman, C., [Arsene, C.](#), Olariu, R.I., Constanta de viteză a reacției în fază gazoasă a 3-metil-2-buten-1-ol cu radicalii OH la 298 K și presiune atmosferică, National Conference of the Doctoral Schools from Universtaria Consortium, 1st Edition, Iasi, Romania, Book of Abstracts, pp. 46, oral communication, 31 October – 3 November, 2018.
34. Olariu, R.I., [Arsene, C.](#), Relevant kinetic data for atmospheric degradation of selected volatile organic compounds: ESC-Q-UAIC Simulation Chamber Studies, IasiChem 2018, Faculty of Chemistry Conference, Iasi, Romania, Book of Abstracts, 25 – 26 October, 2018.
35. Rusu, A.M., Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Kinetic study of the gas-phase reaction of OH radicals with 3-methyl-2-buten-1-ol at 298 K and atmospheric pressure, IasiChem 2018, Faculty of Chemistry Conference, Iasi, Romania, Book of Abstracts, pp. 49, poster, 25 – 26 October, 2018.
36. Amarandei, C., Galon (Negru), A.G., Riffault, V., Tomas, A., Duncianu, M., Bejan, I.G., Olariu, R.I., [Arsene, C.](#), Attempts to characterize the organic aerosols using an Aerodyne High-Resolution Aerosol Mass Spectrometer, IasiChem 2018, Faculty of Chemistry Conference, Iasi, Romania, Book of Abstracts, pp. 33, poster, 25 – 26 October, 2018.
37. Soroaga, V.L., [Arsene, C.](#), Breaban, I.G., Bobric, E.D., Olariu, R.I., Rapid analysis of rare earth elements from solid samples by using on-line dissolution and Inductively Coupled Plasma-Mass Spectrometry, IasiChem 2018, Faculty of Chemistry Conference, Iasi, Romania, Book of Abstracts, pp. 32, poster, 25 – 26 October, 2018.
38. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I., Rate coefficients for the gas-phase OH radical initiated oxidation of 2,3,5-trimethylfuran in atmospheric conditions, IasiChem 2018, Faculty of Chemistry Conference, Iasi, Romania, Book of Abstracts, pp. 50, poster, 25 – 26 October, 2018.
39. Amarandei, C., Galon (Negru), A.G., Mutzel, A., Herrmann, H., Olariu, R.I., [Arsene, C.](#), A preliminary investigation on the chemical composition of secondary organic aerosols in the north-eastern Romania, The XXXV-th Romanian Chemistry Conference, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Book of Abstracts, Chimie Anorganica, Bioanorganica si Analitica, pp. 3, poster, 02 – 05 October, 2018.
40. Rusu, A.M., Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Gas chromatography-mass spectrometry (GC-MS) analysis of gaseous methylglyoxal after derivatization and solid phase extraction, The XXXV-th Romanian Chemistry Conference, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Chimie Anorganica, Bioanorganica si Analitica, pp.11, poster, 02 – 05 October, 2018.
41. Galon (Negru), A.G., Olariu, R.I., [Arsene, C.](#), Investigation on new atmospheric particles formation and growth in Iasi, north-eastern Romania, The XXXV-th Romanian Chemistry Conference, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Chimie Anorganica, Bioanorganica si Analitica, pp. 16, poster, 02 – 05 October, 2018.
42. Soroaga, L.V., [Arsene, C.](#), Borcia, C., Olariu, R.I., ICP-MS analysis of rare earth elements in samples enriched by using environmentally friendly methods, The XXXV-th Romanian Chemistry Conference, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Chimie Anorganica, Bioanorganica si Analitica, pp. 26, poster, 02 – 05 October, 2018.
43. Roman, C., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Rate coefficient of the gas-phase atmospheric OH radical initiated oxidation of 2-methoxyphenol, The XXXV-th Romanian Chemistry Conference, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Protectia Mediului si Monitorizare/Inginerie Chimica si Bioinginerie, pp. 16, poster, 02 – 05 October, 2018.
44. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Kinetic study of the gas-phase OH radical initiated oxidation of 2-methylfuran in atmospheric conditions, The XXXV-th Romanian Chemistry Conference, pp.17, Posters Section, Calimanesti-Caciulata, Valcea, Romania, Book of Abstracts, Protectia Mediului si Monitorizare/Inginerie Chimica si Bioinginerie, pp.17, poster, 02 – 05 October, 2018.

45. Galon-Negru, A.G., Olariu, R.I., [Arsene, C.\\*](#), Meteorological parameters role on the formation and growth of new atmospheric particles in Iasi urban area, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 5, Iasi, Romania, oral communication, 29-30 June 2018.
46. Roman, C., [Arsene, C.](#), Bejan, I.G., Duncianu, M., Tomas, A., Riffault, V., Olariu, R.I., Rate coefficients of the gas-phase ozonolysis of C5-C6 unsaturated aldehydes, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 9, Iasi, Romania, 29-30 June 2018.
47. Amarandei, C., Galon-Negru, A.G., Cucu-Man, S.M., Olariu, R.I., [Arsene, C.\\*](#), Assessment of lake water chemistry using statistical analysis, pp. 35, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 35, Iasi, Romania, poster, 29-30 June 2018.
48. Rusu, A.M., [Arsene, C.](#), Bejan, I.G., Olariu, R.I., Development of a new method for carbonyls analysis in the atmosphere by using solid phase derivatization coupled with GC/Ion Trap MS technique, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 37, Iasi, Romania, 29-30 June 2018.
49. Roman, C., [Arsene, C.](#), Olariu, R.I., Bejan, I.G., Rate coefficient of the gas-phase OH radical initiated oxidation of 2,5-dimethylfuran at  $298 \pm 2$  K and atmospheric pressure, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 41, Iasi, Romania, 29-30 June 2018.
50. Soroagă, L.V., [Arsene, C.](#), Olariu, R.I., Sintering as sample dissolution procedure for complex matrices prior analysis of REEs by ICP-MS, Sintering as sample dissolution procedure for complex matrices prior analysis of REEs by ICP-MS, The 9th Scientific Session of Undergraduate, Master and PhD Students, pp. 45, Iasi, Romania, 29-30 June 2018.
51. Mardare (Balutescu), G., Olariu, R.I., [Arsene, C.\\*](#), Challenges and achievements in analytical chemistry laboratories. Tropene alkaloids as plant-derived pharmaceuticals or ethnobotanical ingredients. 4th French-Romanian Colloquium in Medicinal Chemistry, 05-07 October, 2017, abstract in Acta Chemica Iasi, 25(2), 232-303 (259), 2017, DOI: 10.1515/achi-2017-0018.
52. Petrea-Ioneasa, M., Bejan, I.G., Olariu, R.I., [Arsene, C.\\*](#), Gas-phase kinetic study of OH radical reactions with selected saturated ketones, 20th Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE 2017, 06-09 September 2017, Poiana Brasov, Romania, S3-209, 2017.
53. Olariu, R.I., Roman, C., Bejan, I.G., [Arsene, C.](#), ESC-Q-UAIC chamber, a proper analytical tool for the estimation of infrared absorption cross sections for selected volatile organic compounds in the gas phase, 20th Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE 2017, 06-09 September 2017, Poiana Brasov, Romania, S5-207, 2017.
54. Bejan, I.G., [Arsene, C.](#), Olariu, R.I., Barnes, I., Wiesen, P., Atmospheric chemistry of catechol. Product studies and mechanistic investigations, 20th Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE 2017, 06-09 September 2017, Poiana Brasov, Romania, S5-252, 2017.
55. [Arsene, C.\\*](#), Olariu, R.I., Chemistry, the driving force of our every day's life...from fun and danger to scientific challenges, SCIENVIR 2017 Scientific Convergence and Interdisciplinarity in EU Environmental Research, International Conference, Iasi, Romania, 15-17 June, 2017, in Abstract Book, pp. 39, 2017.
56. Olariu, R.I., [Arsene, C.](#), Bejan, I.G., The role of environmental simulation chambers to the study of atmospheric pollutants evolution, conference at SCIENVIR 2017, 1st SCIENVIR International Conference, Scientific Convergence and Interdisciplinarity in EU Environmental Research, Iasi, Romania, 15-17 June, 2017, METHodologies in Environmentally focused socioeconomic Research (METER), SCIENVIR 2017 International Conference, Programme, 15-17 June, 2017.
57. Olariu, R.I., [Arsene, C.](#), Seminar: METHodologies in Environmentally focused socioeconomic Research (METER), SCIENVIR 2017 International Conference Programme, Iasi, Romania, 15-18 June, 2017.
58. Galon (Negru), A.G., Olariu, R.I., [Arsene, C.\\*](#), Atmospheric behavior of water soluble organic anions in fine and coarse particulate matter from Iasi, Romania, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 26 - 28 October, 2017, abstract in Acta Chemica Iasi, 25(2), 304-342 (322), 2017, DOI: 10.1515/achi-2017-0019.
59. Amarandei, C., Galon (Negru), A.G., Cucu-Man, S.M., Olariu, R.I., [Arsene, C.\\*](#), Pedologic, atmospheric or anthropogenic contributions as driving forces for aquaculture water quality. A case study for an artificial lake from the north-eastern Romania, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 26 - 28 October, 2017, abstract in Acta Chemica Iasi, 25(2), 304-342 (324), 2017, DOI: 10.1515/achi-2017-0019.
60. Roman, C., Bejan, I.G., [Arsene, C.](#), Olariu, R.I., FT-IR gas-phase products study of OH radicals initiated photooxidation of phenol, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 26 - 28 October, 2017, abstract in Acta Chemica Iasi, 25(2), 304-342 (327), 2017, DOI: 10.1515/achi-2017-0019.
61. Mardare (Balutescu), G., Olariu, R.I., [Arsene, C.\\*](#), QuEChERS and ultrasound-assisted extraction as preparative tools for various secondary metabolites analysis by GC-MS technique, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 26 - 28 October, 2017, abstract in Acta Chemica Iasi, 25(2), 304-342 (333), 2017, DOI: 10.1515/achi-2017-0019.
62. Galon (Negru), A.G., Olariu, R.I., [Arsene, C.\\*](#), Size distributions of water soluble aluminium and magnesium in atmospheric aerosols from Iasi, Romania, The 8th Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 30 June, pp. 4, 2017, abstract in Acta Chemica Iasi, 25(1), 99-111 (102), 2017, DOI: 10.1515/achi-2017-0010.
63. Roman, C., [Arsene, C.](#), Bejan, I., Olariu, R.I., Gas-phase FT-IR kinetic study of the OH radicals reaction with phenol, The 8th Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 30 June, pp. 6, 2017, abstract in Acta Chemica Iasi, 25(1), 99-111 (103), 2017, DOI: 10.1515/achi-2017-0010.
64. Mardare (Balutescu), G., Olariu, R.I., [Arsene, C.\\*](#), Accumulation of selected tocopherols in Datura innoxia structural constituents, The 8th Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 30 June, pp. 14, 2017, abstract in Acta Chemica Iasi, 25(1), 99-111 (107), 2017, DOI: 10.1515/achi-2017-0010.
65. Petrea-Ioneasa, M., Bejan, I.G., Olariu, R.I., [Arsene, C.\\*](#), Investigations on the gas-phase OH radical initiated oxidation of 5-methyl-2-hexanone and 2-heptanone. A kinetic approach, The 8th Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 30 June, pp. 20, 2017, abstract in Acta Chemica Iasi, 25(1), 99-111 (110), 2017, DOI: 10.1515/achi-2017-0010.
66. Mardare (Balutescu), G., Olariu, R.I., [Arsene, C.\\*](#), Datura innoxia, planta medicinala sau ingredient etnobotanic?, Conferinta de Criminalistica, 01-02 April 2017, Iasi, Romania, 2017.
67. Olariu, R.I., [Arsene, C.](#), Centrul CERNESIM: O nouă infrastructură de cercetare pentru studii integrate de mediu inclusiv de biodiversitate pentru Regiunea de Nord-Est a României "Aspecte etologice și ecologice privind ornitofauna urbană din zona Moldovei", Universitatea "Ion Ionescu" de la Brad din Iasi, Romania, 08-09 Decembrie 2017.

68. Galon (Negru), A.G., Olariu, R.I., [Arsene, C.](#); Vertical transport of continental air masses and their influence on the distribution of size resolved aerosols from Iasi, Romania, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 27 - 29 October, Acta Chimica Iasi, 24(2), pp. 166, 2016.
69. Coman (Babusanu), A.C., Mardare (Balusescu), G., Ababei (Hogas), G.I., Butnaru, E., Olariu, R.I., [Arsene, C.](#); Dynamics of tebuconazole and other combination fungicide formulations in Jonathan and Golden Delicious apple leaves, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 27 - 29 October, Acta Chimica Iasi, 24(2), pp. 177, 2016.
70. Roman, C., Bejan, I., [Arsene, C.](#), Olariu, R.I., Gas phase infrared absorption cross sections for a series of aromatic compounds in the ESCQ-UAIC chamber, "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 27 - 29 October, 2016.
71. Soroaga, L.V., [Arsene, C.](#), Borcia, C., Olariu, R.I., Rare earth elements (REEs) microwave assisted extraction for further analysis by inductively coupled plasma mass spectrometry (ICP-MS), "Alexandru Ioan Cuza" University Days, Faculty of Chemistry Conference Iasi, Romania, 27 - 29 October, 2016.
72. Olariu, R.I., [Arsene, C.](#), Bejan, I., Newly designed simulation chamber for atmospheric chemistry investigations, XXXIV-th Romanian Chemistry Conference, Valcea, Romania, 04-07 October, pp. 9, 2016.
73. Soroaga, L.V., [Arsene, C.](#), Pintilei, M., Nica, V., Borcia, C., Olariu, R.I., Chemical characterisation of a series of samples as secondary sources for rare elements, XXXIV-th Romanian Chemistry Conference, Valcea, Romania, 04-07 October, pp. 7, 2016.
74. Bejan, I., [Arsene, C.](#), Olariu, R.I., Atmospheric chemistry investigations in a newly designed gas phase simulation chamber (ESCQ-UAIC), 3<sup>rd</sup> International Conference on Analytical Chemistry, Iasi, Romania, 28-31 August, pp. 49, 2016.
75. Galon (Negru), G.A., Pruna, I., Olariu, R.I., [Arsene, C.](#); Mono- and multimodal distributions of water soluble ionic species in urban particulate matter from Iasi, Romania, The 7<sup>th</sup> Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 24 June, Acta Chimica Iasi, 24(1), pp. 65, 2016.
76. Soroaga, L.V., Olariu, R.I., Galon (Negru), A.G., [Arsene, C.](#); Elemental and morphological analysis of airborne particulate matter collected in Iasi, north-eastern Romania, The 7<sup>th</sup> Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 24 June, Acta Chimica Iasi, 24(1), pp. 66, 2016.
77. Rusu, A.M., Matei, M., Mahu, E., Ababei, G.I., Cucu, D., Smadici, R.M., Badragan, L.O., Aonigioaiei, C., Bivol (Augustin), G., Cretu, A.F., Damaschin, R.P., Olariu, R.I., [Arsene, C.](#); On how the lack of experience in hplc measurements of aspirin, a selected medicine, can bring you into the trap of elaborating erroneously conclusion, The 7<sup>th</sup> Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 24 June, Acta Chimica Iasi, 24(1), pp. 67, 2016.
78. Marin, S.L., Bejan, I., [Arsene, C.](#), Olariu, R.I., FT-IR kinetic study of the gas-phase reaction of 2,6-dimethylphenol with OH radicals, The 6<sup>th</sup> Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 24 June, Acta Chimica Iasi, 24(1), pp. 68, 2016.
79. Galon (Negru), G.A., Olariu, R.I., [Arsene, C.](#); Trace water soluble ions in fine atmospheric particles from Iasi, north-eastern Romania, in Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, Florescu, M., Raicu, V., LeGac, S., Turcu, I., Maerty, J.L., Eds., Transilvania University Press, IC-ANMBES 2016, 29 June-01 July, ISSN 2360-3461, pp. 116, 2016.
80. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Gas Chromatography/Mass Spectrometry (GC/MS) as Challenging Problems Solving Microanalytical Tools, in Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, Florescu, M., Raicu, V., LeGac, S., Turcu, I., Maerty, J.L., Eds., Transilvania University Press, IC-ANMBES 2016, 29 June-01 July, ISSN 2360-3461, pp. 121, 2016.
81. Galon (Negru), G.A., Olariu, R.I., [Arsene, C.](#); Atmospheric behavior and size distribution of water soluble acetate, formate and oxalate ions in urban aerosols from Iasi, Romania, The International Conference CHIMIA 2016 "New Trends in Applied Chemistry", Constanta, Romania, 26-28 May, Ovidius University Press, Constanta, ISSN 2360-3941, pp. 34, 2016.
82. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Methoxy phenols and other structural constituents in *Datura innoxia* seeds. Mechanistic approaches, The International Conference CHIMIA 2016 "New Trends in Applied Chemistry", Constanta, Romania, 26-28 May, Ovidius University Press, Constanta, ISSN 2360-3941, pp. 35, 2016.
83. Galon (Negru), G.A., Olariu, R.I., [Arsene, C.](#); Particulate matter and gaseous pollutants variability in Iasi urban area, north-eastern Romania, 12<sup>th</sup> International Conference on Colloid and Surface-Chemistry, ICCSC-2016, Iasi, Romania, 16-18 May, pp. 53, 2016.
84. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Sterols in *Datura innoxia* as potential key source specific tracers for organic components in ambient atmospheric aerosol particles, 12<sup>th</sup> International Conference on Colloid and Surface-Chemistry, ICCSC-2016, Iasi, Romania, 16-18 May, pp. 68, 2016.
85. Galon (Negru), G.A., Olariu, R.I., [Arsene, C.](#); Mass concentrations and chemical composition of size resolved atmospheric aerosols in the north-eastern Romania, Iasi region, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), Cluj-Napoca, Romania, 12-14 May, pp. 35, 2016.
86. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Gas chromatography-mass spectrometry analysis of a lignin marker and an indirect contributor to secondary organic aerosols in the atmosphere: p-vinylguaicol in *Datura innoxia*, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), Cluj-Napoca, Romania, 12-14 May, pp. 33, 2016.
87. Marin, S.L., Galon (Negru), A.G., Mardare (Balusescu), G., Bejan, I., Olariu, R.I., [Arsene, C.](#); Gas-phase kinetic study of OH radical reactions with mesitylene in the newly designed ESCQ-UAIC chamber, Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE I), Cluj-Napoca, Romania, 12-14 May, pp. 34, 2016.
88. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Tandemul cromatografie de gaze-spectrometrie de masă ca instrument ideal în decelarea „drogurilor ascunse” de „natura verde”, Conferința de Criminalistică, 4<sup>th</sup> Edition, Iasi, Romania, 02-03 April, 2016.
89. Marin, S.L., Olariu, R.I., [Arsene, C.](#); Morphological and microchemical surface analyses of modern coins minted in the 20th century, Abstracts for Faculty of Chemistry Conference, Iasi, Romania, 29-31 October, Acta Chimica Iasi, 23(2), pp. 114, 2015.
90. Mardare, G.M., Olariu, R.I., [Arsene, C.](#); Gas chromatography-mass spectrometry analysis of intermediates involved in lysergic acid biosynthesis in plants, Abstracts for Faculty of Chemistry Conference, Iasi, Romania, 29-31 October, Acta Chimica Iasi, 23(2), pp. 124, 2015.
91. Mardare, G.M., Olariu, R.I., [Arsene, C.](#); Gas chromatographic analysis of secondary metabolites in *Datura innoxia*, International Conference of Young Researchers, New Trends in Environmental and Materials Engineering, Galati, Romania, 21-23 October, 2015.
92. Mardare (Balusescu), G., Olariu, R.I., [Arsene, C.](#); Chromatographic fingerprints as a first step in the long way of deciphering the very complex nature of herbal materials, The 6<sup>th</sup> Scientific Session of Undergraduate, Master and PhD Students, Iasi, Romania, 26 June, Acta Chimica Iasi, 23(1), pp. 55, 2015.

93. Mardare, G.M., Olariu, R.I., [Arsene, C.](#), Secondary metabolites, drugs precursors and chromatographic techniques as interrelated concepts in forensic chemistry, Conferința internațională de criminalistică „Clasic și modern în obținerea și valorificarea științifică a probatoriului”, Cluj Napoca, Romania, 13-15 May, 2015.
94. Petrea-Ioneasa, G., Petrea-Ioneasa, M., Rusu, A.M., Gitman, A., Bibire, N., Olariu, R.I., [Arsene, C.](#), Reversed-phase high performance liquid chromatographic assay method of active pharmaceutical ingredients in anti-tuberculosis 2-fixed dose combination tablets, Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, Acta Chimica Iasi, 22(2), pp. 215, 2014.
95. Negru, A.G., Zbancioc, G., Mangalagiu, I., [Arsene, C.](#), Olariu, R.I., Physico-chemical behaviour of newly synthesized organic compounds. A reality between expectations and experimental evidences, Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, Acta Chimica Iasi, 22(2), pp. 216, 2014.
96. Mardare-Balutescu, G., Soroaga, L.V., Marin, L.S., Agafitei, M.C., [Arsene, C.](#), Olariu, R.I., Physico-chemical forensic expertise in the analysis of soil samples by graphite furnace atomic absorption spectrometry, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, Acta Chimica Iasi, 22(2), pp. 261, 2014.
97. Petrea-Ioneasa, M., Olariu, R.I., [Arsene, C.](#), Water soluble organic carbon in aerosols from Iasi, north-eastern Romania, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, Acta Chimica Iasi, 22(2), pp. 262, 2014.
98. Olariu, R.I., [Arsene, C.](#), Barnes, I., Klotz, B., Becker, K.H., Gas-phase absorption cross sections of selected aromatic hydrocarbons in the IR spectral ranges, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference Iasi, Romania, 30 October-01 November, 2014.
99. Bibire, N., Olariu, R.I., Vieriu, M., Panainte, A.D., Cernat, R.I., [Arsene, C.](#) Analiza prin cromatografie de lichide de înaltă performanță cu fază inversă a unor medicamente antituberculoase de primă linie/Reversed phase-high performance liquid chromatographic analysis of some first line antituberculosis drugs, Congresul Național de Farmacie din România, ediția a-XV-a, Iasi, Romania, 24-27 September, Volum de rezumate, ISBN 978-606-544-252-8, Editura „Gr. T. Popa”, UMF Iasi, pp. 312, 2014.
100. [Arsene, C.](#), Chemistry – a piece of wonder in the long way to fulfill the dream to reach one of the world’s end “The Cape of the Good Hope”, 1st International Conference Perspectives in the Humanities and Social Sciences: Hinting at Interdisciplinarity, Iasi, Romania, 23-24 Mai, 2014.
101. [Arsene, C.](#), Workshop “Luminol and Kastle Mayer”, International Conference in Forensics, Iasi Romania, 05-06 April, 2014.
102. [Arsene, C.](#), Olariu, R.I., Duncianu, M., Riffault, V., Tomas, A., Flow reactor ozonolysis studies of selected dimethyl hexenes in the gas phase, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry”, Book of Abstract, Iasi, Romania, 31 October-02 November, Acta Chimica Iasi, 21(2), pp. 26, 2013.
103. Olariu, R.I., Barnes, I., Bejan, I., [Arsene, C.](#), Vione, D., Klotz, B., Becker, K.H., Night chemistry of hydroxyl(methyl)benzenes: New directions in atmospheric chemistry at the A.I.I.Cuza University of Iasi, “Alexandru Ioan Cuza” University Days, Faculty of Chemistry Conference & Mini-Hot-Conference: „Recent Achievements in Organic and Supramolecular Chemistry”, Book of Abstract, Supplement of the Acta Chimica Iasi journal, Iasi, Romania, 31 October-02 November, Acta Chimica Iasi, 21(2), pp. 20, 2013.
104. [Arsene, C.](#), Cromatografia în macro și microcosmosul investigațiilor criminalistice. În căutarea acului în carul cu fan, Conferința Națională “Criminalist pentru o zi”, Iasi, Romania, 23 Iunie, 2013.
105. Pindaru, D.M., Tanase, C., Iftime, C.M., [Arsene, C.](#), Olariu, R.I., Analiza speciilor ionice solubile în apă din materia particulată atmosferică și din populațiile de ciuperci lichenizate Xanthoria parietina și Phaeophyscia orbicularis din zona urbană Iasi, Faculty of Chemistry Conference Iasi, Romania, 25-26 October, 2012.
106. Pindaru, D.M., Tanase, C., [Arsene, C.](#), Olariu, R.I., Influența poluanților asupra speciilor de ciuperci lichenizate Xanthoria parietina și Phaeophyscia orbicularis, în Sesiunea de comunicări științifice, Facultatea de Biologie, Universitatea „Alexandru Ioan Cuza” Iasi, Iasi, Romania, 26-27 October, pp. 38, 2012.
107. Pindaru, D.M., Tanase, C., [Arsene, C.](#), Olariu, R.I., Biological and chemical characterisation of cortical lichenised fungi specimens, in „Rezultate de excelență în cercetarea științifică, un prim pas spre inserarea profesională. Conferința anuală a școlilor doctorale” POSDRU 107/1.5/S/78342 DOC-Paideia, Iasi, Romania, 19-20 October, pp. 6, 2012.
108. Pindaru, D.M., Tanase, C., [Arsene, C.](#), Olariu, R.I., Impactul nutrienților atmosferici asupra frecvenței ciupercilor lichenizate în centrele urbane, în Simpozion științific “Conservarea diversității plantelor in situ și ex situ”, Grădina Botanică, ISBN 978-973-640-677-5, Iasi, Romania, 27-29 October, pp. 105-106, 2011.
109. Pindaru, D.M., Iftime, C.M., [Arsene, C.](#), Olariu, R.I., Tanase, C., Variabilitatea unor parametri chimici din ciupercile lichenizate Xanthoria parietina și Phaeophyscia orbicularis colectate din zona urbană Iasi, Faculty of Chemistry Conference, Iasi, Romania, 28 October, 2011.
110. Pindaru, D.M., Tanase, C., [Arsene, C.](#), Olariu, R.I., Xanthoria parietina and Phaeophyscia orbicularis as lichenized fungi used in air quality biomonitoring of Iasi region, in „Rezultate de excelență în cercetarea științifică, un prim pas spre inserarea profesională. Conferința anuală a școlilor doctorale” POSDRU 107/1.5/S/78342 DOC-Paideia, ISBN 978-973-0-11612-0, Iasi, Romania, 21-22 October, pp. 11, 2011.
111. [Arsene, C.](#), Olariu, R.I., Duncianu, M., Chemical composition of tropospheric aerosols in Iasi, north-eastern Romania, in The XXXI-st Romanian Chemistry Conference, ISBN 978-973-750-194-3, Valcea, Romania, 06-08 October, pp. 233, 2010.
112. [Arsene, C.](#), Humelnicu, D., Olariu, R.I., Solid-phase extraction-spectrophotometric determination of the radionuclides in water samples, in The XXXI-st Romanian Chemistry Conference, ISBN 978-973-750-194-3, Valcea, Romania, 06-08 October, pp. 230, 2010.
113. Pindaru, D., Tanase, C., Barsan, C., Olariu, R.I., [Arsene, C.](#), Atmospheric organic nitrogen deposition fluxes from the fine and coarse particles in Iasi, north-eastern Romania, in The XXXI-st Romanian Chemistry Conference, ISBN 978-973-750-194-3, Valcea, Romania, 06-08 October, pp. 238, 2010.
114. Marcu, M., Olariu, R.I., [Arsene, C.](#), Speciation and temporal variability of iron in wet and dry deposition in Iasi, north-eastern Romania, in The XXXI-st Romanian Chemistry Conference, ISBN 978-973-750-194-3, Valcea, Romania, 06-08 October, pp. 237, 2010.
115. Bertescu, M., [Arsene, C.](#), Duncianu, M., Humelnicu, D., Mantu, D., Olariu, R.I., Solid-phase extraction of ultratrace thorium(IV) in water samples using polioxometalic material modified with silica and its spectrophotometric determination with arsenazo II, in The XXXI-st Romanian Chemistry Conference, ISBN 978-973-750-194-3, Valcea, Romania, 06-08 October, pp. 241, 2010.
116. Cernat, R.I., Mihaescu, T., Mocanu, R.D., Olariu, R.I., [Arsene, C.](#), Studii privind determinarea unor elemente esențiale în probe biologice (păr, piele, spută) provenite de la indivizi în diferite stări clinice. INSPiR. Conferința Națională de Pneumologie, Iași, România, 2010.

117. Cernat, R.I., Butnaru, L., Mihaescu, T., Olariu, R.I., [Arsene C.](#), Ceruloplasmin and copper concentrations in patients with active pulmonary tuberculosis, 5<sup>th</sup> Conference of the Romanian Association of Medical Laboratories, Mamaia, Romania, 16-19 June, 2010.
118. Cernat, R.I., Mihaescu, T., Mocanu, R.D., Olariu, R.I., [Arsene C.](#), Comportamentul fierului, feritinei și transferinei serice la adulții tratați pentru tuberculoza pulmonară activă, în Al 21-lea Congres al Societății Române de Pneumologie, Plamanul, parte a unui întreg: www.congrespneumo2010.com, ISBN: 978-973-0-08646-1, Bucharest, Romania, 09-12 June, pp.10-10, 2010.
119. Bertescu, M., Humelnicu, D., Mantu, D., Humelnicu, I., [Arsene C.](#), Olariu, R.I., pH influence on the extraction in solid phase on the Th(IV) ions onto POMs sorbent type, pp. 170, in 14th International Conference on Physical Chemistry, ROMPHYSICHEM-14, Bucharest, Romania, 02-04 June, 2010.
120. Gherasim, C.V., Bourceanu, G., Olariu, R.I., [Arsene C.](#), Selective separation of lead (II) ions using a PVC-based polymer inclusion membrane, in International Conference on Fishery and Aquaculture, A view point upon the sustainable management of the water resources in the Balkan area, Marine, fresh water and soil pollution – public health protection section, Galati, Romania, 26-28 May, pp. 10, 2010.
121. Olariu, R.I., Duncianu, M., [Arsene C.](#), Wirtz, K. Determination of photolysis frequencies for VOCs using the Euphore chamber facilities, in 10th International Balkan workshop on Applied Physics, Ovidius University Press, ISBN 978-973-614-507-0, Constanta, Romania, 06-08 July, pp. 198, 2009.
122. Humelnicu, D., Olariu, R.I., [Arsene C.](#), Synthesis and characterisation of some isopolyoxomolybdates with  $UO_2^{2+}$  and  $Th^{4+}$  ions, in International Conference, Chimia 2009, New Trends in Applied Chemistry, Ovidius University Press, ISBN 978-973-614-500-1, Constanta, Romania, 13-16 May, pp. 89-90, 2009.
123. Cernat, R.I., Mocanu R.D., Olariu, R.I., [Arsene C.](#), Rolul metalelor în urme în anemia cronică inflamatorie, The days of the „Al.I. Cuza” University of Iasi, Iasi, Romania, 2009.
124. [Arsene C.](#), Olariu, R.I., Kanakidou, M., Mihalopoulos, N., On how sodium and ammonium chloride salts may influence aerosols chemistry, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2009.
125. [Arsene C.](#), Olariu, R.I., Bougiatioti, A., Mihalopoulos, N., Meteorological factors role in hydrocarbons distribution, The days of the „Al.I. Cuza” University of Iasi, Iasi, Romania, 2009.
126. Pindaru, D., Bertescu, M., Paslaru, E., Burghel, B., Diaconu, R., Mahu, L., Marcu, M., Oniciuc, A., Onila, I., Parasca, M., Pascaru, A., Parparita, E., Olariu, R.I., [Arsene C.](#), Variabilitatea spațială a parametrilor de calitate din apa potabilă. Regiunea de NE a României (Iasi, Vaslui, Suceava), The days of the „Al.I. Cuza” University of Iasi, Iasi, Romania, 2009.
127. Baesu-Gherasim, C.V., Bourceanu, G., Olariu, R.I., [Arsene C.](#), Studii asupra extracției și transportului prin membrane lichide a ionilor Pb (II), The days of the „Al.I. Cuza” University of Iasi, Iasi, Romania, 2009.
128. Cernat, R., Butnaru, L., Cioroiu, M., Balta, L., Mocanu, R., [Arsene C.](#), Cuprul și zincul, indicatori pentru eventuale afecțiuni pulmonare, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 24-25 October, 2008.
129. Cernat, R., Butnaru, L., Cioroiu, M., Balta, L., Mocanu, R., [Arsene C.](#), Variabilitatea parametrilor biochimici în diferite boli pulmonare, Conferința Internațională de Pneumologie INSPIR, Iasi, Romania, 2008.
130. Olariu, R.I., [Arsene C.](#), Barnes, I., Becker, K.H., Secondary organic aerosol formation from selected aromatic hydrocarbons under simulated atmospheric conditions, Mediul actual & dezvoltarea durabilă, Al 3<sup>ea</sup> Simpozion Internațional de Geografia Mediului, Iasi, Romania, 17-19 October, 2008.
131. [Arsene C.](#), Non-methane hydrocarbon measurements. Implications for the atmospheric photochemistry, pp. 361, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, 2008.
132. [Arsene C.](#), Olariu, R.I., Theodosi, Ch., Mihalopoulos, N., Trace metals in precipitation in an urban area of Romania, pp. 360, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, 2008.
133. Duncianu, M., Vione, D., [Arsene C.](#), Olariu, R.I., Kinetic study regarding the nitrophenols decay pathways in atmospheric aqueous phase and surface waters, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, pp. 337, 2008.
134. Olariu, R.I., Humelnicu, D., [Arsene C.](#), Synthesis and chemical characterization of new  $UO_2^{2+}$  and  $Th^{4+}$  isopolyoxomolybdate and isopolyoxotungstate derivative complexes, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, pp. 149, 2008.
135. Humelnicu, D., Olariu, R.I., [Arsene C.](#), Synthesis of heteropolyoxometalates with uranyl and thorium ions with possible applications in the decontamination of radioactive liquid wastes, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, pp. 124, 2008.
136. Dirtu, A.C., Cernat, R., [Arsene C.](#), Covaci, A., Phenolic organohalogenated contaminants in human serum from Belgium and Romania, Book of abstracts, A XXX- a Conferința Națională de Chimie, ISBN 973750124-1, Calimanesti-Valcea, Romania, 08-10 October, pp. 406, 2008.
137. Cernat, R., Butnaru, L., Cioroiu, M., Balta, L., Mocanu, R., [Arsene C.](#), Variability of biochemical parameters in various lung diseases/Variabilitatea parametrilor biochimici în diferite boli pulmonare, Conferința de Pneumologie cu participare internațională INSPIR 2008, Ediția VI, Iasi, Romania, September, pp. 40-41, 2008.
138. [Arsene C.](#), Olariu, R.I., Mihalopoulos, N., Chemical composition of rainwater in the north-eastern part of Romania, Environmental Research and Mitigation of Water Pollution in Romania and in the Lower Danube Region, International ESTROM Conference, Bucharest, Romania, 03-05 September, 2008.
139. Cernat, R., Cioroiu, M., Mocanu, R., [Arsene C.](#), Folosirea indicilor biochimici în atribuirea tuberculozei pulmonare, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 26-27 October, 2007.
140. Olariu, R.I., Vione, D., Cucu-Man, S., Duncianu, M., [Arsene C.](#), A case study of the groundwater quality in the village of Letcani, Iasi, Romania, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 26-27 October, 2007.
141. [Arsene C.](#), Mihalopoulos, N., Olariu, R.I., Ivanuca, S., Miron, A., Motu, M., Puscasu, C.M., Chemical characterisation of precipitation in the north eastern part of Romania, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2006.
142. [Arsene C.](#), Olariu, R.I., Mihalopoulos, N., Organic and inorganic acidity in a wet precipitation study in the northeastern Romania, 2nd International Conference on Environmental Research and Assessment, Bucharest, Romania, 05-08 October, 2006.
143. [Arsene C.](#), Bougiatioti, E., Mihalopoulos, N., Development of a gas chromatographic method (GC) for non-methane hydrocarbons (NMHCs) measurements in the gas phase, A XXIX- a Conferința Națională de Chimie, ISBN-10 973-750-049-0; ISBN-13 978-973-750-049-6, Calimanesti-Valcea, Romania, 04-06 October, pp. 377, 2006.

144. [Arsene C.](#), Barnes, I., Albu, M., Olariu, R.I., Bejan, I., Wirtz, K., Gas phase reactions of organic sulphur compounds with Cl atoms and NO<sub>3</sub> radicals, A XXIX- a Conferința Natională de Chimie, ISBN-10 973-750-049-0; ISBN-13 978-973-750-049-6, Calimanesti-Valcea, Romania, 04-06 October, pp. 376, 2006.
145. Olariu, R.I., Rinaldi, E., Ravizoli, B., Vione, D., [Arsene C.](#), Spatial and temporal variation of groundwater nitrate concentration in a rural area in the northeastern Romania, A XXIX- a Conferința Natională de Chimie, ISBN-10 973-750-049-0; ISBN-13 978-973-750-049-6, Calimanesti, Romania, 04-06 October, pp. 449, 2006.
146. [Arsene C.](#), Vione, D., Olariu, R.I., Nitrate in ground waters-still an important problem?, in EnvEdu 2005 Conference, Trends in Environmental Education, Badea, M., Sica, M., Draghici, C., eds., ISBN 973-635-554-3, Editura Universitatii Transilvania Brasov, Brasov, Romania, pp. 78, 2005.
147. Olariu, R.I., [Arsene C.](#), Reviejo, M.M., Wirtz, K., European photoreactor - Euphore. Technical descriptions and facilities, EnvEdu 2005 Conference, Trends in Environmental Education, Badea, M., Sica, M., Draghici, C., eds., ISBN 973-635-554-3, Editura Universitatii Transilvania Brasov, Brasov, Romania, pp. 61, 2005.
148. Bejan, I., Olariu, R.I., [Arsene C.](#), Barnes, I., Mocanu, R., Becker, K.H., Laboratory simulation chamber – a microscale atmosphere, in EnvEdu 2005 Conference, Trends in Environmental Education, Badea, M., Sica, M., Draghici, C., eds., ISBN 973-635-554-3, Editura Universitatii Transilvania Brasov, Brasov, Romania, pp. 81, 2005.
149. [Arsene C.](#), Olariu, R.I., Mihalopoulos, N., Annual wet deposition of sulphate and nitrate in Iasi, Romania, in 3<sup>rd</sup> Black Sea Basin Conference on Analytical Chemistry, Process Related Environmental Analytical Chemistry, Chinla, E., Draghici, C., eds., ISBN 614-291-4, Ovidius University Press, Constanta, Romania, 12-14 September, pp. 85, 2005.
150. [Arsene C.](#), Barnes, I., Olariu, R.I., Development of an ion chromatographic (IC) optimized method for organic sulphur compounds analysis, S04-P06, in Romanian International Conference on Chemistry and Chemical Engineering, RIVVVR XIV, Bucharest, Romania, 22-24 September, pp. 24, 2005.
151. [Arsene C.](#), Olariu, R.I., Duncianu, M., Monitorizarea depozitelor atmosferice in Iasi, Romania, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 09-30 October, 2004.
152. Duncianu, M., Olariu, R.I., Wirtz, K., [Arsene C.](#), Mocanu, R., Determinarea frecventelor de fotoliza ale unor specii chimice din atmosfera pe baza masuratorilor spectrale ale fluxului actinic, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2004.
153. [Arsene C.](#), Olariu, R.I., Barnes, I., Aerosol formation in the photo-oxidation of dimethyl sulphide at various NO<sub>2</sub> concentrations, in Mediul-Cercetare, Protectie si Gestiune, Environment&Progress, Cluj Napoca, Romania, pp. 21, 2004.
154. Olariu, R.I., Barnes, I., Klotz, B., Bejan, I., [Arsene C.](#), Wirtz, K., Organic aerosol formation during the atmospheric degradation of phenols, in Mediul-Cercetare, Protectie si Gestiune, Environment&Progress, Cluj Napoca, Romania, pp. 28, 2004.
155. [Arsene C.](#), Barnes, I., Olariu, R.I., Yields of sulphur containing productys in the photo-oxidation of dimethyl sulphide at various NO<sub>2</sub> concentrations, Rezumate A XXVIII- a Conferinta Nationala de Chimie, ISBN 973-8488-74-5, Calimanesti-Valcea, Romania, 06-08 October, pp. 387, 2004.
156. Olariu, R.I., Duncianu, M., [Arsene C.](#), Wirtz, K., Determination of photolysis frequencies for some aromatic aldehydes using the Euphore chamber facilities, Rezumate A XXVIII- a Conferinta Nationala de Chimie, ISBN 973-8488-74-5, Calimanesti-Valcea, Romania, 06-08 October, pp. 345, 2004.
157. [Arsene C.](#), Formarea aerosolilor din oxidarea in faza gazoasa a unor compusi organici cu sulf, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2003.
158. [Arsene C.](#), Olariu, R.I., Wirtz, K., Oxidarea initata de radicalii OH a dimetil sulfurii si impactul ozonului asupra formării particulelor de aerosoli, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2003.
159. Olariu, R.I., [Arsene C.](#), Duncianu, M., Wirtz, K., Reviejo, M.M., EUROPEAN PHOTOREACTOR – EUPHORE. Technical descriptions and facilities, The days of „Al.I. Cuza” University of Iasi, Iasi, Romania, 2003.
160. [Arsene C.](#), Mecanismul degradării atmosferice a dimetil sulfurii în prezența oxizilor de azot, The days of „Al.I. Cuza” University of Iasi, Iasi, 2002.
161. [Arsene C.](#), Barnes, I., Olariu, R.I., Mocanu, R., Becker, K.H., Investigation of Particle Formation in the Photo-oxidation of Selected Organic Sulphur Compounds, A XXVII- a Conferinta Nationala de Chimie, Calimanesti-Valcea, Romania, 23-25 October, pp. 321, 2002.
162. Olariu, R.I., Barnes, I., [Arsene C.](#), Becker, K.H., Mocanu, R., Wirtz, K., Reveijo, M.M., Studies of the Atmospheric Oxidation of Phenol in the EUPHORE Chamber, A XXVII- a Conferinta Nationala de Chimie, Calimanesti-Valcea, Romania, 23-25 October, pp. 297, 2002.
163. Onofrei, T., [Arsene C.](#), Veleanu, M., Concentration of Pb(II) on chelating cellulose with azo and thiourea groups, XIVth National Conference on Analytical Chemistry, SCAR 98, Piatra Neamt, Romania, 24-26 September, 1998.

## 2 Experiență în cercetare

### 2.1 Activitatea de cercetare

#### Mediu

- ✓ Chimia aerosolilor atmosferici
- ✓ Chimia analitică a mediului
- ✓ Poluanți organici și anorganici prezenți în mediu (aer, apă, sol)
- ✓ Investigații cinetice, de reactivitate și mecanistice pentru procesele de oxidare induse pe cale fotochimică sub acțiunea radicalilor OH, NO<sub>3</sub>, a atomilor de Cl și a altor specii oxidative (fază lichidă și fază gazoasă)

#### Tehnici cromatografice și alte tehnici instrumentale

- ✓ Tehnici cromatografice tandem spectrometrie de masă (GC-MS, HPLC-MS), analiza unor compuși chimici din diverse matrici naturale (aer, apă, sol, matrici biologice, medicamente)
- ✓ Tehnici microscopice și spectrofotometrice

#### Materiale noi pentru procese de decontaminare

- ✓ Dezvoltarea și caracterizarea unor materiale potrivite ca faze staționare pentru extracția în fază solidă (polioxometalați) și a unor membrane cu incluziune polimerică

#### Aspecte legate de sănătatea umană

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Anexa 1: Lista de lucrări/contribuții științifice

- ✓ Abordări mecanistice asupra comportamentului unor indicatori biochimici în bolile infecțioase pulmonare (tuberculoza, etc.)
- ✓ Conținuturi chimice ai atmosferei (aerosoli, VOCs) cu posibile implicații asupra sănătății umane

Responsabil stație AMOS (Air Quality Monitoring Station of CERNESIM, UAIC), locație la care parte din echipamentele din cadrul Centrului CERNESIM rulează pentru generarea unor date de încredere asupra unor parametri specifici compartimentului atmosferă din mediu.

**2.2 Proiecte (coordonator, membru)****Coordonator (director)** **Internațional**

1.	FP7/PEOPLE-MERG-CT-2007 203934	Intensive Characterisation of Atmospheric Aerosols in the north-eastern Romania at various Urban Sites (ICAARUS)	2007-2010	45000 EUR
2.	NATO ESP.EAP.CLG.98258/2007	Chemical Composition of Atmospheric Aerosols in the North-Eastern Romania	2007-2009	20000 EUR
3.	Bilateral Romania-Italy C18002/09.01.2006	Environmental Quality Understanding Inferred by Laboratory Investigation of the Borne Pollutants Released by Industrial and Agricultural Activities in a Small Part of Romania (EQUILIBRIAAS-PRO)	2006-2008	15000 EUR
4.	Bilateral Romania-Greece C18873/28.12.2005	Chemical Composition of Aerosols in an Urban Atmosphere (CCAUA)	2006-2007	12000 EUR
5.	Marie-Curie FP-6/MEIF-CT-2005-009578	Evaluation of the Climatic Impact of the Tropospheric Aerosols in the Mediterranean Area (ECITAMA)	2005-2007	136834 EUR

 **Național**

1.	POC 2014-2020	Centru de cercetare cu tehnici integrate pentru investigarea aerosolilor atmosferici, Contract nr. 322/04.09.2020, MySMIS 127324	2020-2023	89.570.958,10 lei
2.	PN-III-P4-ID-PCE-2016-0299 37/2017 UEFISCDI, Romania	Assessing the Anthropogenic and Biogenic Emissions Impact on Atmospheric Urban Fine Organic Particles in Eastern Romania. Solving the Challenge of the Aerosols Missing Mass as a One Step Forward Tool (AI-FORECAST)	2017-2019	850000 RON
3.	PN-II-ID-PCE-2011-3-0471 UEFISCDI, Romania	Evaluation of Volatile Organics in the Lower/Upper Troposphere - their Impact on the Oxidizing, Noxious and Aerosol Influx Capacity in Romania (EVOLUTION-AIR)	2011-2016	1050000 RON

 **Membru** **Internațional**

1.	INFRAIA-03-2020	Integrating and Opening Research Infrastructures of European Interest ATMO-ACCESS Solutions for Sustainable Access to Atmospheric Research Facilities	2021-2024	
2.	COST Action CA16109	COLOSSAL, Chemical On-Line cOmpoSition and Source Apportionment of fine aerosols	2017-2020	
3.	EC-DGRI, Grant No. 730997 H2020-INFRAIA-2016-2017/H2020- INFRAIA-2016-1	EUROCHAMP-2020	2016-2020	
4.	PN-III-P3-3.1-PM-RO-FR-2016-0047 Bilateral Romania-France, BRANCUSI 90BM/2017	Ozonolysis of oxygenated unsaturated compounds of biogenic origin in the atmosphere: from kinetics to secondary organic aerosol formation (OzOA)	2017-2018	
5.	EVR1-CT-2001-40013 Environment and Sustainable Development	Improvements and Access to a Large Simulation Chamber (IALSI)	2002-2004	
6.	EVK2-CT-1999-00033 Environment and Sustainable Development	Evaluation of the Climatic Impact of Dimethyl Sulphide (EL-CID)	2000-2003	
7.	ENV4-CT97-0410 Environment and Sustainable Development	Dimethyl Sulphide (DMS): Oxidation Mechanism in Relation to Aerosols and Climate (DOMAC)	1998-1999	
8.	Projekt No.: 07 AF 22 GSF-Forschungszentrum für Umwelt und Gesundheit, Projektträger des BMBF für Umwelt und Klimaforschung, Germany	Yields of Aerosol Precursors Substances Formed by DMS-Oxidation as a Function of Atmospheric Conditions	1998-2001	

 **Național**

1	POCU/380/6/13/ – Sprijin pentru doctoranzi și cercetători post-doctorat	Doctoranzi și cercetători postdoctorat pregătiți pentru piața muncii	02.2019-12.2020	
2	Proiect 34PFE/19.10.2018	Dezvoltarea capacității de inovare și creșterea impactului cercetării de excelență la UAIC, proiect de tip Proiecte de dezvoltare instituțională – Proiecte de finanțare a excelenței în CDI finanțat de Ministerul Cercetării și Inovării (MCI)	10.2018-11.2020	
3	Proiect FDI-2018	Cercetare de Excelență în România în cadrul Centrului Cernesium (CER-CE)	07.2018-12.2018	
4	PN-III-P4-ID-PCE-2016-0270 38/2017	Ozonoliza ca sursă de formare a aerosolilor organici secundari. Investigații de laborator într-o cameră de simulare a atmosferei (OLFA-ROA)	2017-2019	

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5	PN-III-P4-ID-PCE-2016-0807 118/2017	Investigații asupra chimiei atmosferice a hidrocarburilor oxigenate ciclice (IGAC-CYCLO)	2017-2019
6	PN-III-P2-2.1.-PED-2016-0924 78PED/03.01.2017	Development and validation of a temperature regulated environmental chamber for studying atmospheric oxidation processes and mechanisms (DEV-TREC)	2017-2018
7	PN-III-P2-2.1.-PED-2016 86PED/2017	Atmospheric Simulation Chamber-New Research Facility to Understand Sesquiterpene Oxidation (CHARUSO)	2017-2018
8	PN-II-RU-TE-2014-4-2461 305/01.10.2015 UEFISCDI-Romania	Studies on Substituted Aromatic Compounds under Simulated Atmospheric Conditions (SOS-AROMATIC)	2015-2017
9	ERA-MIN/0005/2014 25/2015 UEFISCDI-Romania	ENVIRONMENTALLY friendly and efficient methods for extraction of Rare Elements from secondary sources (ENVIREE)	2016-2017
10	POSCCE-A2-O2.2.1-2009-4, ID 901, SMIS 13984 257/28.09.2010 CNCSIS - Romania	Integrated research centre for environmental sciences investigation in the north-eastern region/CERNESIM	2010-2014
11	POSDRU/86/1.2/S/62307 E6677/18.08.2010	Promoting the criminality scientific research in juridical activities	2010-2013
12	Bilateral Romania-Austria Module III 304/27.04.2009	Sources and physico-chemical characteristics of atmospheric aerosols at central and east European sites, ARCEE	2009-2010
13	PN II/405/2007-2010 MCT-Romania	Research on the retention of selected environmental radionuclides on heteropolioxometalates sorbents for subsequent ion chromatographic analysis	2007-2010
14	INFRAS: 210/2.11.2004 MCT-Romania	Development of the infrastructure for the monitoring and biomonitoring of environmental toxic compounds with the assessment of their toxic effect on living organisms. Certification of a laboratory for the analysis of heavy metals and of selected persistent organic pollutants (POPs)	2004-2007

## 2.3 Referenți și activități ca expert evaluator

## Referenți pentru articole ISI

Nr.	Year	Journal	Publisher
1.	2022	Atmospheric and Pollution Research	Elsevier
2.	2022	Atmosphere	MDPI
3.	2022	Chemosphere	Elsevier
4.	2022	Environmental Science and Pollution Research	Springer
5.	2022	Environmental Pollution	Elsevier
6.	2022	Water, Air and Soil Pollution	Springer
7.	2021	Environmental Science and Pollution Research	Springer
8.	2021	Environmental Pollution	Elsevier
9.	2021	Environmental Science and Technology (Iunie)	ACS Publications
10.	2021	Environmental Science and Technology (August)	ACS Publications
11.	2021	Journal of Liquid Chromatography and Related Technologies (February)	Taylor&Francis
12.	2021	Journal of Liquid Chromatography and Related Technologies (May)	Taylor&Francis
13.	2021	Journal of Liquid Chromatography and Related Technologies (July)	Taylor&Francis
14.	2020	Atmosphere (May)	MPDI
15.	2020	Atmosphere (December)	MPDI
16.	2020	Atmospheric Chemistry and Physics (May)	Copemicus
17.	2020	Chemosphere (May)	Elsevier
18.	2020	Environmental Development and Sustainability ((March)	Springer
19.	2020	Environmental Pollution (May)	Elsevier
20.	2020	Environmental Science and Technology (February)	ACS Publications
21.	2020	Environmental Science and Technology (May)	ACS Publications
22.	2020	Journal of Liquid Chromatography and Related Technologies (March)	Taylor&Francis
23.	2020	Journal of Liquid Chromatography and Related Technologies (January)	Taylor&Francis
24.	2020	Journal of Liquid Chromatography and Related Technologies (August)	Taylor&Francis
25.	2020	Journal of Liquid Chromatography and Related Technologies (August)	Taylor&Francis
26.	2020	Environmental Science and Pollution Research (January)	Springer
27.	2019	Atmospheric Environment (April)	Elsevier
28.	2019	Atmospheric Environment (July)	Elsevier
29.	2019	Chemosphere	Elsevier
30.	2019	Environmental Pollution (April)	Elsevier
31.	2019	Environmental Pollution (July)	Elsevier
32.	2019	Journal of Liquid Chromatography and Related Technologies (February)	Taylor&Francis
33.	2019	Journal of Liquid Chromatography and Related Technologies (March)	Taylor&Francis
34.	2019	Journal of Liquid Chromatography and Related Technologies (June)	Taylor&Francis
35.	2019	Journal of Liquid Chromatography and Related Technologies (August)	Taylor&Francis
36.	2018	Environmental Pollution	Elsevier
37.	2018	Science of the Total Environment	Elsevier
38.	2018	Tuberculosis Research and Treatment	Hindawi
39.	2018	Journal of Liquid Chromatography and Related Technologies	Taylor&Francis
40.	2017	Environmental Science and Technology	ACS Publications
41.	2017	Environmental Science and Pollution Research	Springer
42.	2017	Journal of Hazardous Materials	Elsevier
43.	2017	Biomarkers Medicine	Future Medicine
44.	2017	Water	MDPI
45.	2017	Applied Surface Science	Elsevier
46.	2016	Environmental Science and Pollution Research	Springer
47.	2016	Chemosphere	Elsevier
48.	2016	Environmental Science and Pollution Research	Springer
49.	2016	Journal of Liquid Chromatography and Related Technologies	Taylor&Francis
50.	2015	Chemosphere	Elsevier
51.	2015	Environmental Chemistry Letters	Springer
52.	2015	Environmental Science and Pollution Research	Springer
53.	2015	Journal of Liquid Chromatography and Related Technologies	Taylor&Francis
54.	2015	Journal of Liquid Chromatography and Related Technologies	Taylor&Francis
55.	2015	Journal of Membrane Science	Elsevier
56.	2015	Journal of Membrane Science	Elsevier
57.	2014	Environmental Science and Pollution Research	Springer
58.	2014	Water, Air and Soil Pollution	Springer
59.	2013	Chemosphere	Elsevier

60.	2013	Environmental Science and Pollution Research	Springer
61.	2013	Science of the Total Environment	Elsevier
62.	2013	Science of the Total Environment	Elsevier
63.	2013	Acta Chimica Iasi	De Gruyter
64.	2013	International Journal of Conservation Science	Index Copernicus
65.	2012	Atmospheric Environment	Elsevier
66.	2012	Chemosphere	Elsevier
67.	2012	Environmental Science and Pollution Research	Springer
68.	2012	Environmental Science and Pollution Research	Springer
69.	2012	International Journal of Environmental Analytical Chemistry	Taylor&Francis
70.	2012	Journal of Membrane Science	Elsevier
71.	2012	Malaysian Journal of Medical Science	SciVerse Scopus
72.	2011	Environmental Science and Pollution Research	Springer
73.	2011	Science of the Total Environment	Elsevier
74.	2010	Environmental Monitoring and Assessment	Springer
75.	2010	Chemosphere	Elsevier
76.	2010	CLEAN - Soil, Air, Water	Springer
77.	2010	CLEAN - Soil, Air, Water	Springer
78.	2010	Atmospheric Environment	Elsevier
79.	2009	Atmospheric Research	Elsevier
80.	2009	International Journal of Environmental Analytical Chemistry	Taylor&Francis
81.	2009	Environmental Chemistry Letters	Springer
82.	2008	Environmental Chemistry Letters	Springer
83.	2008	Atmospheric Research	Elsevier
84.	2008	Atmospheric Research	Elsevier
85.	2007	Chemosphere	Elsevier
86.	2006	Atmospheric Environment	Elsevier
87.	2004	Atmospheric Chemistry and Physics	Copernicus

- ✓ Referent/Expert în procesele de evaluare a unor proiecte trimise în cadrul programelor:
  - PN-III-P1-1.2-PCCDI-2017 (peer review activity in 2017)
  - PE-PN-III-P1-1.1-TE-2016 (peer review activity in 2017)
  - PE-PN-III-P1-1.1-PD-2016 (peer review activity in 2017)
  - Nucleu Core Program (activitate peer review in 2016)
  - PN-II-RU-TE-2011-3 Action (activitate peer review in 2014)
  - PN-II-PT-PCCA-2013-4 Action (activitate peer review in 2013)
- ✓ Evaluator/Examinator teze de doctorat
- ✓ Membru comisii de abilitare
- ✓ Membru comisii de promovare
- ✓ Membru în comitetul științific sau de organizare a unor conferințe naționale sau internaționale
  - National Conference of the Doctoral Schools from Universtaria Consortium, 1st Edition, 31 October – 3 November, Iasi, Romania, 2018 – membru comitet științific și moderator
  - IasiChem 2018, Faculty of Chemistry Conference, Iasi, 25 – 26 October, Iasi, Romania (2018) – președinte comitet de organizare
  - IasiChem 2019, Faculty of Chemistry Conference, Iasi, 31 October – 01 November, Iasi, Romania (2019) – președinte comitet de organizare
  - The XXXV-th Romanian Chemistry Conference, Posters Section, 02 – 05 October, Calimanesti-Caciulata, Valcea, Romania, 2018
  - The XXXV-th Romanian Chemistry Conference, Posters Section, 02 – 05 October, Calimanesti-Caciulata, Valcea, Romania, 2018, moderator
  - The 9th Scientific Session of Undergraduate, Master and PhD Students, 29-30 June 2018, Iasi, Romania – președinte comitet de organizare
  - The 10th Scientific Session of Undergraduate, Master and PhD Students, 20-21 June 2019, Iasi, Romania – președinte comitet de organizare
  - International Congress on Chemistry and Materials Science (ANCON), Ankara, Turkey (2017) – membru comitet științific
  - 1st SCIENVIR International Conference, Scientific Convergence and Interdisciplinarity in EU Environmental Research, Iasi, Romania, (2017) – membru comitet științific
  - Faculty of Chemistry Conference, Iasi, Romania (2012-2017) – membru comitet științific și de organizare
  - National Conference on Forensics, Iasi, Romania (2016-2017) – membru comitet de organizare
  - Medical Physics Conference, Birmingham, UK (2015) – membru comitet de organizare

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