

INFORMAȚII PERSONALE

Andreea Maria IORDACHE

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Sexul: Feminin | Data nașterii 13/07/1982 | Naționalitatea Română

POZIȚIE

✓ *CERCETĂTOR ȘTIINȚIFIC GRADUL I*

✓ *ADMINISTRATOR PUBLIC RÂMNICU VÂLCEA – MANAGER PROIECTE*

EXPERIENȚA PROFESIONALĂ

Cercetare

10.06.2019 - prezent **Dr. Cercetător Științific Gradul I (CSI)**

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice–ICSI Rm. Vâlcea, Strada Uzinei nr. 4, 240050, Jud. Vâlcea, România, Tel: 0040 250 732744, Fax: 0040 250 732746, E-mail: office@icsi.ro, Website: <http://www.icsi.ro/>, <https://www.icsi.ro/cercetare/departamente/icsi-analytics/echipa-personal-cheie/>

Activități coordonate în calitate de director de proiect și colaborator proiecte de cercetare, privind: (i) cercetare privind aplicarea izotopilor și a altor markeri/bio-markeri în domeniul științelor mediului și vieții, cu accent pe siguranța alimentară, ecologie și hidrologie; (ii) susținerea activităților de cercetare în domeniul schimbărilor climatice și crearea unei baze naționale de date privind schimbările climatice prin intermediul probelor de mediu; (iii) actualizarea scenariilor climatice; (iv) implementarea strategiei privind reducerea emisiilor de gaze cu efect de seră și creșterea capacității naturale de absorbție a CO₂ din atmosferă; (v) monitorizarea procesului de adaptare și atenuare a efectelor schimbărilor climatice prin studiul izotopilor stabili și a rapoartelor izotopice din diferite matrici.

Tipul sau sectorul de activitate: Cercetare-Dezvoltare în domeniul aplicațiilor izotopilor și Apă Grea

15.06.2016 – 09.06.2019 **Dr. Cercetător Științific Gradul II (CSII)**

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice–ICSI Rm. Vâlcea, Strada Uzinei nr. 4, 240050, Jud. Vâlcea, România, Tel: 0040 250 732744, Fax: 0040 250 732746, E-mail: office@icsi.ro, Website: <http://www.icsi.ro/>, <https://www.icsi.ro/cercetare/departamente/icsi-analytics/echipa-personal-cheie/>

Activități coordonate în calitate de director de proiect și colaborator proiecte de cercetare, privind: (i) dezvoltarea de metodologii alternative, substitutive sau complementare ale amprentării izotopice pentru caracterizarea și clasificarea produselor naturale, în scopul determinării originii și a trasabilității materialelor; (ii) investigații analitice complexe pentru studiul apelor de suprafață și subterane, respectiv influența surselor de poluare punctuale/non-punctuale, a proceselor de tratare a apelor, gestionarea deșeurilor organice și industriale în scopul valorificării acestora; (iii) responsabil laborator etalonare/certificare a concentrației de deuteriu din APĂ GREA (D₂O); (iv) acreditare RENAR pentru laboratoarele de încercări, cu coordonator/auditor intern în cadrul laboratoarelor de încercare.

Tipul sau sectorul de activitate: Cercetare-Dezvoltare în domeniul aplicațiilor izotopilor și Apă Grea

01.12.2011 – 14.06.2016 **Dr. Cercetător Științific Gradul III (CSIII)**

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice–ICSI Rm. Vâlcea, Strada Uzinei nr. 4, 240050, Jud. Vâlcea, România, Tel: 0040 250 732744, Fax: 0040 250 732746, E-mail: office@icsi.ro, Website: <http://www.icsi.ro/>, <https://www.icsi.ro/cercetare/departamente/icsi-analytics/echipa-personal-cheie/>

Activități coordonate în calitate de responsabil de activități și colaborator proiecte de cercetare, privind: (i) coordonarea de proiecte/teme de cercetare aplicativă orientată spre mediu și calitatea vieții; (ii) cercetare în domeniul aplicațiilor izotopilor stabili în domeniul securității alimentare și studii de metabolism utilizând trăsori

marcați cu izotopi stabili (^{13}C , ^{15}N); (iii) studii ale componentilor cu valoare terapeutică din plante medicinale, aminoacizi și acizi grași din plasmă, transport transmembranal, biomarkeri utilizați în diagnosticarea unor boli metabolice la copii, precum și studii toxicologice din produse cosmetice cu impact asupra sănătății umane.
Tipul sau sectorul de activitate: Cercetare academică/Biofizică

01.10.2012 – 10.01.2015 **Dr. Cercetător postdoctoral (PD)**

Regional Center of Advanced Technologies and Materials RCPTM, Faculty of Science, Palacký University, Olomouc, Šlechtitelů 27, 78371, Czech Republic; Institute of Analytical Chemistry, Faculty of Chemistry, University of Vienna, Wahringerstrasse 38, 1090, Vienna, Austria.

Activități coordonate în calitate de responsabil de activități și colaborator proiecte de cercetare, privind: (i) testare/instalare și optimizare instrumentală în vederea dezvoltării aplicațiilor în medicină legală, controlul alimentelor și aplicații clinice; (ii) implicată în studii de cercetare aplicativă privind tehnici de ionizare alternative (surse handmade) și dezvoltare de noi metode prin tehnica spectrometriei de masă; (iii) aspectele medicale de cercetare și dezvoltare de cercetare aplicativă prin tehnici MALDI-TOF pentru determinare nivelului de medicamente (ketoconazol, nurofen, etc.) din matricea rădăcinii firului de par; (iv) analiza masei intacte și confirmare proteine și peptide prin tehnica MALDI-TOF sau ionizare electrospray (ESI și nanoESI) cuplată cu spectrometrie de masă MS/MSⁿ; (v) competență în aparatură de cercetare, mod de folosire, întreținere și mentenanță; (vi) colaborator proiecte de cercetare internaționale.

Tipul sau sectorul de activitate: Cercetare academică/Chimie analitică

01.12.2008 – 01.12.2011 **Cercetător Științific (CS)**

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice-ICSI Rm. Vâlcea, Strada Uzinei nr. 4, 240050, Jud. Vâlcea, România, Tel: 0040 250 732744, Fax: 0040 250 732746, E-mail: office@icsi.ro, Website: <http://www.icsi.ro/>, <https://www.icsi.ro/cercetare/departamente/icsi-analytics/echipa-personal-cheie/>

Colaborator la proiecte de cercetare privind: (i) testarea și obținerea de produse bioactive și/sau medicamente încapsulate sub formă de nanostructuri biodegradabile, care ajută la dezvoltarea de noi medicamente-țintă, cu efect antitumoral; (ii) diagnosticarea bolilor metabolice folosind biomarkeri (cafeina pentru ciroză, markeri de respirație); (iii) diagnosticarea unor boli metabolice la copii (fenilcetonuria (PKU) și boala urinei cu miros de arșar (MSUD)) prin tehnici de cercetare non-invasive.

Tipul sau sectorul de activitate: Cercetare academică/Biofizică

11.04.2007 – 01.12.2008 **Asistent Cercetare (ACS)**

Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice-ICSI Rm. Vâlcea, Strada Uzinei nr. 4, 240050, Jud. Vâlcea, România, Tel: 0040 250 732744, Fax: 0040 250 732746, E-mail: office@icsi.ro, Website: <http://www.icsi.ro/>, <https://www.icsi.ro/cercetare/departamente/icsi-analytics/echipa-personal-cheie/>
Colaborator proiecte de cercetare

Tipul sau sectorul de activitate: Cercetare aplicată în domeniul monitorizării mediului; aplicarea izotopilor stabili în studii hidrologice – Lucrare de stagiu.

EDUCAȚIE ȘI FORMARE

09.11.2025 – 15.11.2025 **Specializare – Chimie analitică:** măsurare, intercalibrare, analiză și interpretare a izotopilor stabili de litiu (^6Li , ^7Li) prin tehnica ablației laser cuplată cu spectrometrie de masă cu plasmă cuplată inductiv (LA-ICP-MS), comparativ cu Quadrupole ICP-MS

Regional Center of Advanced Technologies and Materials RCPTM, Faculty of Science, Palacký University, Olomouc, Šlechtitelů 27, 78371, Czech Republic

Tipul sau sectorul de activitate: măsurare, intercalibrare, analiză de date și interpretare a rezultatelor izotopilor stabili și a rapoartelor izotopice, rezultate din utilizarea unui aparat dedicat (LA-ICP-MS) și a unei versiuni accesibile la nivel industrial (Q-ICP-MS).

14.01.2024 – 26.01.2024 **Specializare – Chimie analitică/spectrometrie de masă** privind izotopii stabili de litiu (^6Li , ^7Li) prin tehnica Quadrupole ICP-MS

Department of Biochemistry- University of Porto, Portugal -supervisor Ph.D. Rui M. Santos Global Manager ICP-MS Application Specialists, Portugal

Tipul sau sectorul de activitate: calibrarea parametrilor externi și interni ai instrumentului Q-ICP-MS, măsurarea, analiza datelor și interpretarea rezultatelor izotopilor stabili și a rapoartelor izotopice, crearea de metode și protocoale. Producerea de rezultate pe probe biologice folosite ulterior de producătorii de aparatură pentru certificarea instrumentului.

14.01.2024 – 26.01.2024 **Specializare – Chimie analitică/spectrometrie de masă privind izotopii stabili de litiu (^6Li , ^7Li) prin tehnica Quadrupole ICP-MS**

Department of Biochemistry- University of Porto, Portugal -supervisor Ph.D. Rui M. Santos Global Manager ICP-MS Application Specialists, Portugal

Tipul sau sectorul de activitate: calibrarea parametrilor externi și interni ai instrumentului Q-ICP-MS, măsurarea și analiza datelor, interpretarea rezultatelor izotopilor stabili și a rapoartelor izotopice, crearea de metode și protocoale.

01.09.2020 – 30.09.2020 **Specializare – Chimie analitică măsurare, analiză și interpretare probe de dendrochimie (inele anuale arbori) prin tehnica LA-ICP-MS**

Department of Analytical Chemistry, Palacký University in Olomouc; Regional Center of Advanced Technologies and Materials RCPTM, Faculty of Science, Palacký University, Olomouc, Šlechtitelů 27, 78371, Czech Republic - supervisor RNDr. Tomáš Pluháček, Ph.D., Assoc. Prof. RNDr. Petr Bednář, Ph.D. Head of the Department of Analytical Chemistry.

Tipul sau sectorul de activitate: metode ICP-MS, prepararea probelor, analiza cantitativă, intercalibrare, analiza statistică și interpretarea datelor.

27.10.2019 – 09.11.2019 **Specializare – Chimie analitică măsurare, analiză și interpretare probe de dendrochimie (inele anuale arbori) prin tehnica LA-ICP-MS**

Department of Analytical Chemistry, Palacký University in Olomouc; Regional Center of Advanced Technologies and Materials RCPTM, Faculty of Science, Palacký University, Olomouc, Šlechtitelů 27, 78371, Czech Republic - supervisor RNDr. Tomáš Pluháček, Ph.D., Assoc. Prof. RNDr. Petr Bednář, Ph.D. Head of the Department of Analytical Chemistry.

Tipul sau sectorul de activitate: metode ICP-MS, prepararea probelor, analiza cantitativă, analiza statistică și interpretarea datelor.

01.10.2012 – 10.01.2015 **Specializare – Program postdoctoral de cercetare avansată-Chimie analitică/Spectrometrie de masă**

Department of Analytical Chemistry, Palacký University in Olomouc; Regional Center of Advanced Technologies and Materials RCPTM, Faculty of Science, Palacký University, Olomouc, Šlechtitelů 27, 78371, Czech Republic - supervisor RNDr. Tomáš Pluháček, Ph.D., Assoc. Prof. RNDr. Petr Bednář, Ph.D. Head of the Department of Analytical Chemistry.

Tipul sau sectorul de activitate: Mecanisme de desorbție/ionizare/tehnici nano-DESI, ESI și EESI/investigarea factorilor decisivi pentru eficiența surselor de ioni/aplicații în medicină legală/controlul alimentelor/aplicații clinice.

01.10.2014 – 15.12.2014 **Specializare – pozitie postdoctorală-mobilitate schimb de experiență postdoctoral**

Institute of Analytical Chemistry, Faculty of Chemistry, University of Vienna, Vienna, Austria

Tipul sau sectorul de activitate: Confirmare a proteinelor și a peptidelor prin tehnica MALDI-TOF, respectiv prin ionizare electrospray (ESI și nanoESI), cuplată cu spectrometrie de masă MS/MSⁿ.

01.11.2006 – 14.11.2011 **Doctor în Fizică**

"Studiul unor sisteme complexe cu aplicații biomedicale și ecologice" – 2011, Universitatea Babeș-Bolyai, Facultatea de Fizică, Cluj-Napoca, România, Conducător de doctorat: Prof. Univ. Habil. Dr. Onuc COZAR. Domeniul – Biofizică și Fizică Atomică și Moleculară/Fizică-medicală/ Metodologia cercetării științifice

28.01.2008 – 01.02.2008 **Specializare – Cerințe generale pentru competența laboratoarelor de încercări și etalonări și auditarea sistemelor de management al calității și de mediu, Brașov**

Tipul sau sectorul de activitate: Cursuri de instruire, acreditare a laboratoarelor RENAR/SR EN ISO/CEI 17025:2005 și SR EN ISO 19011:2003/implementare, validare/incertitudine de măsurare.

- 01.10.2005 – 01.07.2007 **Masterat în Fizică Medicală**
 Universitatea Babes-Bolyai, Facultatea de Fizică, Cluj-Napoca, România
 Claude Bernard University, Lyon, Franța (mobilitate).
 Instrumentarea sistemelor de semnal și imagine în tehnica rezonanței magnetice nucleare (RMN) / utilizarea tehnologiei biomedicale în unitatea sanitară Institutul de Oncologie "Prof.Dr.I. Chiricuța", Cluj-Napoca.
- 15.11.2006 – 05.12.2006 **Specializare – Fizică Medicală**
 European School of Medical Physics, ESMP, Geneva – France
Tipul sau sectorul de activitate: Computerizare medicală/Radioterapie/Brahiterapie
- 27.10.2005 – 15.06.2005 **Specializare – Fizică Medicală**
 European School of Medical Physics, ESMP, Geneva – France
Tipul sau sectorul de activitate: Ultrasunete și Rezonanță Magnetică/Imagistică medicală cu radiații ionizante
- 01.10.2001 – 15.06.2005 **Fizician Medical**
 Universitatea Babes-Bolyai, Facultatea de Fizică, Cluj-Napoca, România
 Testarea și punerea în aplicare a biomarkerilor în practica clinică/sprrijinirea cercetării/prevenirea și diseminarea cunoștințelor privind cancerul de col uterin prin brahiterapie.
- 01.10.1997 – 01.07.2001 **Colegiul Național “Mircea cel Bătrân”**
 Liceu – specializarea Informatică

COMPETENTE PERSONALE

Limba maternă Română

Alte limbi străine cunoscute

	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
Engleză	C1	C1	C1	C1	C1
Franceză	B1	B1	B2	B2	B2

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat
 Cadru european comun de referință pentru limbi străine

Competențe de comunicare Bune competențe de comunicare dobândite prin experiența muncii în echipă în facultate și locul de muncă, prin relații de colaborare inter- și intraspécializări.

Competențe organizaționale/managieriale

Abilități de lider / Trăsături și calități: auto-motivat, aleg standarde de performanță, încredere, optimism și pozitivitate, responsabilitate, curaj, angajat, caracter, integritate, respectabil, plăcut, etic, loial, carisma, inteligență emoțională, costuri, disciplină, perspectivă, managementul riscului, managementul timpului, siguranța de sine, maturitate, conducerea prin exemplu, construirea relațiilor, aptitudini sociale, abilități de vorbire / vorbire publică, onestitate și transparență, compasiune, abilitate de a încuraja pe cei din jur, abilități de negociere, claritate, abilități de a preda, interesat de feedback, încredere în echipă, abilitatea de a inspira, transformarea viziunii în realitate, îmi asum responsabilitatea, respect pentru ceilalți, decisivitate, angajament față de viziune, coerență, capacitate de pivotare, confrunt cu obstacole cu grație, gândire strategică, proactivă, flexibilă, creativă, intuitivă, urmăresc noi experiențe, curiozitate, competență, concentrare.

Consilier local al Municipiului Râmnicu Vâlcea (mandatul 2019–2024).

Administrator public al Municipiului Râmnicu Vâlcea (01.12.2024–prezent)

Competențe dobândite la locul de muncă

O bună cunoaștere a modului de obținere și de derulare a proiectelor științifice.

Competență digitală
AUTOEVALUARE

Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
UEX	UEX	UEX	UEX	UEX

Niveluri: Utilizator elementar (UEL) - Utilizator independent (UI) - Utilizator experimentat (UEX)
Competențele digitale - Grilă de auto-evaluare

Utilizator experimentat al programelor informatice: *CorelDRAW, Adobe Photoshop, QGIS, Rgui, Statistica, Matlab, OriginLab.*

Alte competențe

Literatura / Sportul

Permis de conducere

B

INFORMATII SUPLIMENTARE
Cărți

1. Botoran, O.R., Ionete, R.E., Ciucure, C.T., Cîrîc, A., Costinel, D., Geană, E.I., **Iordache, A.M.**, Moisac, A., Șandru, C., 2025. *Metode Analitice pentru Evaluarea Siguranței și Compoziției Fructelor Produse în Sistem Organic – COMPENDIU*. Validare – Studiu de caz „Zmeura”, 114 pagini, ISBN: 978-973-0-41400-4, Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice – ICSI Rm. Vâlcea, Rm. Vâlcea, 2025, Romania
2. Voica, C., **Iordache, A.M.**, 2025. Chapter 7: *Analysis of Strontium and Lead Isotopic Ratios in Environmental Matrices Using ICP-MS*, in book: *Geography, Earth Science and Environment: Research Highlights*, Vol. 8, pp. 142-154, DOI: <https://doi.org/10.9734/bpi/geserh/v8/4862>, Print ISBN: 978-93-49729-94-0, eBook ISBN: 978-93-49729-43-8, BP International, Romania
3. Voica, C., Marincas, O., Feher, I., **Iordache A.M.**, 2025. Chapter 5: *River Water Chemistry in Romania: An Overview*. In book: *Chemistry and Biochemistry: Research Progress*, Vol. 5, 48-62, <https://doi.org/10.9734/bpi/cbrp/v5/4863>, ISBN: 978-93-49729-89-6, eBook ISBN: 978-93-49729-51-3, BP International, Romania
4. Voica, C., Roba, C., **Iordache, A.M.**, 2024. Health Risk Assessment of Heavy Metals in Selected Root Vegetables. *Innovations in Biological Science Vol. 3*, 50–64. <https://doi.org/10.9734/bpi/ibs/v3/3428G>
5. Voica, C., Cristea, G., **Iordache, A.M.**, 2023. Metal content and stable isotope determinations in daily food from the Romanian Market", in book "Current Perspectives in Agriculture and Food Science", 3(1-17), Editor Publisher Book Publisher International; Edited by Dr. Muhammad Shehzad; India, DOI 10.9734/bpi/cpafs/v3/5113E, ISBN: 978-81-19217-13-7 (Print); 978-81-19217-15-1 (eBook), Editura Publisher International.
6. Șuvar, N.S., **Iordache, A.M.**, Nechita, C., Mesaroș, C., Podea, P., Culea, M., 2021. *Studii asupra unor compuși biologici și toxici prin metode spectroscopice*. Editura Presa Universitară Clujeană. ISBN-978606-37-1165-7.
7. Voica, C., **Iordache, A.M.***, Ionete, R.E., Ștefănescu, I., 2017. Aspects on the accumulation of trace metals in various environmental matrices (Water, Soil, Plant and Sediments): Case study on catchment are of the Somes River, Romania, *Water Quality*, chapter 12, page 269-291, Book edited by Hlanganani Tutu, ISBN 978-953-51-2882-3, print ISBN: 978-953-51-2881-6. <http://dx.doi.org/10.5772/65700>
8. Voica, C., Feher, I., **Iordache, A.M.**, 2019. Evaluation of Metal Concentration in Herbal Tea Beverages by ICP-MS and Chemometrics Techniques, Chapter 6, *Book Quality Control in the Beverage Industry*, Pages 205-224, i, 1st Edition, Volume 17: *The Science of Beverages*, Editors: Alexandru Grumezescu, Alina-Maria Holban, Woodhead Publishing – Elsevier, Paperback ISBN: 9780128166819, eBook ISBN: 9780128166826, Imprint: Academic Press, Romania <https://doi.org/10.1016/B978-0-12-816681-9.00006-0>
9. **Iordache A.M.**, Culea, M., Mesaroș, C., Ștefănescu, I., 2012. Aplicații biomedicale și ecologice prin spectrometrie de masă”, Editura Risoprint, Cluj-Napoca, ISBN 978-973-53-0784-4, 543.421.
10. Mesaros. C., Culea, M., **Iordache, A.M.**, Diagnosticare prin GC-MS, Editura Risoprint, Cluj-Napoca, ISBN: 978-973-53-0762-2, 543.544, 2012.

Patente

1. **Iordache, A.M.**, Zgavaroșea, I.R., Ionete, E.R., Ionete, I.E., Spiridon, I.S., "Celulă de separare electrochimică", OSIM, no. CBI nr. A/00238/2025; BOPI 10/2025
2. **Iordache, A.M.**, Zgavaroșea, R.I., Nasture, A.M., Ionete, E.I., Chițu, A., Niculescu, V.C., Ionete, R.E., "Instalație modulară automatizată în cascadă pentru separarea izotopică a litiului prin electromigrare cu cristalizare controlată", CBI nr. A/00230/23.04.2026

Articole ISI

1. Koç İ., Sevik, H., Nechita, C., Canturk U., **Iordache A.M.**, Camarero J.J., 2026. *Selenium bioaccumulation in*

- industrialized urban forests: case study of five tree species used for phytoremediation*. Urban Ecosystems, 29,73. doi.org/10.1007/s11252-026-01935-3 (IF2.4; Q2) [WOS:001702843000005]
2. Man, G.T., **Iordache, A.M.**, Popescu, D.I., Zgavarogea, I.R., Sutan, N.A., 2026. *Thorium Valorization at the Interface of Technology, Risk, and Sustainability*, Toxics, 14(3) 193, doi.org/10.3390/toxics14030193 (IF4.1; Q1) [WOS:001725259600001]
 3. Nechita, C., **Iordache, A.M.**, Roba, C., Pluhacek, T., Koc, I., Ionete, R.E., Camarero, J.J., 2026. *Nutrient imbalances caused by industrial pollution were not affected by extreme climate events*. Journal of Hazardous Materials Advances, 21, 101071, doi.org/10.1016/j.hazadv.2026.101071 (IF7.7; Q1)
 4. Voica, C., Ioana, F., Romulus, P., **Andreea, M.L.**, Cristea, G., 2025. *Elemental and Isotopic Fingerprints of Potatoes*, Foods, 14(14), doi.org/10.3390/foods14142440 (IF:5.1; Q1) [WOS:001535713200001]
 5. Nechita, C., **Iordache, A.M.**, Roba, C., Apetri, A.N., Camarero, J.J., 2025. *Non-linear relationships between climate and toxic metals in stressed polluted areas*. Environmental Research, 287, 123124, [DOI: 10.1016/j.envres.2025.123124](https://doi.org/10.1016/j.envres.2025.123124) (IF7.7; Q1) [WOS:001599016100001]
 6. Nechita, C., **Iordache, A.M.**, Pluhacek, T., Gregar, F., Camarero, J.J., 2025. *Hazardous metals coupled with increasing summer diurnal temperature range contributed to growth decline of two oak species in a heavily industrialized area*, Journal of Hazardous Materials, 496, 139519, [DOI:10.1016/j.jhazmat.2025.139519](https://doi.org/10.1016/j.jhazmat.2025.139519) (IF11.3; Q1) [WOS:001585552800003]
 7. Nechita, C., **Iordache, A.M.**, Roba, C., Sandru, C., Zgavarogea, I.R., Camarero, J.J., 2025, *Heavy Metal Health Risk Assessment in Picea abies L. Forests Along an Altitudinal Gradient in Southern Romania*, Plants, 14(6): 968, doi.org/10.3390/plants14060968 (IF4.1; Q1) [WOS:001452084500001]
 8. **Iordache, A.M.**, Zgavarogea, R.I., Nasture, A.M., Feizula, E., Ionete, R.E., Santos, R., Nechita, C., 2025. *Testing Low-Density Polyethylene Membranes for Lithium Isotope Electromigration System*, Materials, 18(11), 2519, doi.org/10.3390/ma18112519 (IF3.2; Q2) [WOS:001506569500001]
 9. Paun, N., Zgavarogea, R.I., **Iordache, A.M.**, Feizula, E., Niculescu, V.C., 2025. *Lithium-Enriched Organic Membranes for Future Enhanced Electromigration Performance*, MRS Advances, <https://link.springer.com/article/10.1557/s43580-025-01304-w> (IF0.9; Q4) [WOS:001501883100001]
 10. **Iordache, A.M.**, Nasture, A.M., Zgavarogea, R.I., Andrei, R., Mandoc, R., Feizula, E., Santos, R., Nechita, C., 2025. *Lithium Isotope Separation Using the 15-Crown-5 Ether System and Laboratory-Made Membranes*, Materials, 18(9), 2025, doi.org/10.3390/ma18092016 (IF3.2; Q2) [WOS:001486985900001]
 11. **Iordache, A.M.**, Voica, C., Roba, C., Nechita, C., 2024. *Evaluation of potential human health risks associated with Li and their relationship with Na, K, Mg, and Ca in Romania's nationwide drinking water*. Frontiers in Public Health, 12, 1456640, doi.org/10.3389/fpubh.2024.1456640 (IF3.4; Q1) [WOS:001329343400001]
 12. Man, G.T., **Iordache, A.M.**, Zgavarogea, R., Nechita, C., 2024. *Recycling Lithium-Ion Batteries-Technologies, Environmental, Human Health, and Economic Issues-Mini-Systematic Literature Review*, Membranes (Basel), 21;14(12):277, [doi:10.3390/membranes14120277](https://doi.org/10.3390/membranes14120277) (IF3.6; Q2) [WOS:001384611400001]
 13. **Iordache, A.M.**, Voica, C., Roba, C., Nechita, C., 2024. *Lithium content and its nutritional beneficence, dietary intake, and impact on human health in edibles from the Romanian Market*, Foods, 13 (4), 592, doi.org/10.3390/foods13040592 (IF5.1; Q1) [WOS:001172766100001]
 14. Suvar, N.S., Podea, N.S., Match Eszter E., **Iordache A.M.**, Matei, A., 2023. *Analysis of seeds and rhizomes of spices for metals, amino acids, polyphenols, flavonoids, and antioxidant capacity for evaluation of the nutritional quality*. Analytical Letters, 57(4), 517-530, doi.org/10.1080/00032719.2023.2192505 (IF1.8; Q3) [WOS:000956915400001]
 15. Cezara, V., **Iordache, A.M.**, Roba, C., Nechita, C., 2023. *Determination of toxic elements in facial cosmetics from the Romanian market and their health risk assessment*, Analytical Letters, 2023, 56(2): 244-256, [DOI:10.1080/00032719.2022.2053699](https://doi.org/10.1080/00032719.2022.2053699) (IF1.8; Q3) [WOS:000773196300001]
 16. Badea, S.L., Niculescu, V.C., **Iordache, A.M.**, 2023. *New trends in separation techniques of lithium Isotopes. A Review of chemical separation methods*, Materials, 6(10), 3817, doi.org/10.3390/ma16103817 (IF3.2; Q2) [WOS:000997114400001]
 17. Cezara, V., Cristea, G., **Iordache, A.M.**, Roba, C., Curean, V., 2023. *Elemental Profile in Chicken Egg Components and Associated Human Health Risk Assessment*, Toxics, 2023, 11(11), 900, doi.org/10.3390/toxics11110900 (IF4.1; Q1) [WOS:001115315600001]
 18. **Iordache, A.M.**, Nechita, C., Podea, P., Şuvar, N.S., Mesaroş, C., Voica, C., Bleiziffer, R., Culea, M., 2023. *Comparative amino acid profile and antioxidant activity in sixteen plant extracts from Transylvania, Romania*, Plants, 12(11), 2183, doi.org/10.3390/plants12112183 (IF4.1; Q1) [WOS:001005356700001]
 19. Nechita, C., **Iordache, A.M.**, Voica, C., Costinel, D., Botoran, O.R., Popescu, D.I., Şuvar, N.S., 2023. *Evaluating the chemical hazards in wine production associated with climate change*, Food, 12(7), 1524, doi.org/10.3390/foods12071526 (IF5.1; Q1) [WOS:000969566000001]
 20. Iordache, M., Bucura, F., Ionete, R.E., Grigorescu, R., **Iordache, A.M.**, Zgavarogea, R.I., Chiţu, A., Zaharioiu, A., Botoran, O.R., Constantinescu M., 2022. *The GHGs Evolution of LULUCF Sector at the European Union (EU-*

- 27 + UK): *Romania Case Study*, *Atmosphere*, 13(10), 1638, doi.org/10.3390/atmos13101638 (IF2.3; Q3) [WOS:000872256600001]
21. **Iordache, A.M.**, Nechita, C., Zgavarogea, R., Voica, C., Varlam, M., Ionete, R.E., 2022. *Accumulation and ecotoxicological risk assessment of heavy metals in surface sediments of Olt river, Romania*. *Scientific Reports*, 12, 880, doi.org/10.1038/s41598-022-04865-0 (IF 4.996; Q1) [WOS:000744120000038]
 22. Iordache, A.M.; Nechita, C.; Voica, C.; Roba, C.; Botoran, O.R.; Ionete, R.E., 2022. *Assessing the Health Risk and the Metal Content of Thirty-Four Plant Essential Oils Using the ICP-MS Technique*. *Nutrients*, 14, 2363, doi.org/10.3390/nu14122363 (IF6.706; Q1) [WOS:000818462600001]
 23. **Iordache, A.M.**, Nechita, C., Voica, C., Pluhacek, T., Schug, Kevin A., 2022. *Climate change extreme and seasonal toxic metals occurrence in Romanian freshwaters in the last two decades — case study and critical review*. *npj Clean Water*, doi.org/10.1038/s41545-021-00147-w (IF12.19; Q1) [WOS:000742352600002]
 24. Nechita, C., **Iordache, A.M.**, Costinel, D., Botoran, O.R., Dănilă, G., Ionete, R.E., Varlam, M., 2022. *A tree ring proxy evaluation of declining causes in Pinus sylvestris L. and Pinus nigra J. F. Arnold in northeastern Romania*. *Forests*, doi.org/10.3390/f13020336 (IF3.282; Q1) [WOS:000850411600001]
 25. Nechita, C., **Iordache, A.M.**, Lemr, K., Levanič, T., Pluhacek, T., 2021. *Evidence of declining trees resilience under long term heavy metal stress combined with climate change heating*. *Journal of Cleaner Production*, 128428, doi.org/10.1016/j.jclepro.2021.128428 (IF11.072; Q1) [WOS:000723159400011]
 26. Voica, C., Nechita, C., **Iordache, A.M.**, Roba, C., Zgavarogea, R., Ionete, R.E., 2021. *ICP-MS assessment of essential and toxic trace elements in foodstuffs with different geographic origins available in Romanian supermarkets*. *Molecules*, 26, 7081, doi.org/10.3390/molecules26237081 (IF4.412; Q2) [WOS:000734582000001]
 27. Voica, C., Roba, C., **Iordache, A.M.**, 2021. *Lithium Levels in Food from the Romanian Market by Inductively Coupled Plasma – Mass Spectrometry (ICP-MS): A Pilot Study*, *Analytical Letters*, 54(1-2): 242-254, [DOI: 10.1080/00032719.2020.1748642](https://doi.org/10.1080/00032719.2020.1748642) (IF2.267; Q3) [WOS:000527696600001]
 28. **Iordache, A.M.**, Nechita, C., Pluhacek, T., Iordache, M., Zgavarogea, R., Ionete, R.E., 2020. *Past and present anthropic environmental stress reflect high susceptibility of natural freshwater ecosystems in Romania*. *Environmental Pollution*, 267, 115505, doi.org/10.1016/j.envpol.2020.115505 (IF8.071; Q1) [WOS:000593966400012]
 29. Voica, C., **Iordache, A.M.**, Ionete, R.E., 2020. *Multielemental characterization of honey using inductively coupled plasma mass spectrometry fused with chemometrics*, *Journal of Mass Spectrometry*, 55(7): 196-200, [DOI: 10.1002/jms.4512](https://doi.org/10.1002/jms.4512) (IF1.98; Q3) [WOS:000530157600001]
 30. **Iordache, A.M.**, Iordache, M., Zgavarogea, R., Șandru, C., Ionete, R.E., 2019. *The Impact of Industrial Process Viewed from Side of Heavy Metals Bioaccumulation in Surface Sediments of a Watershed*, *Journal of Biotechnology*, 305, S37-S37, [DOI:10.1016/j.jbiotec.2019.05.134](https://doi.org/10.1016/j.jbiotec.2019.05.134) (IF3.503; Q2) [WOS:000491118400116]
 31. Zgavarogea, R., Iordache, M., **Iordache, A.M.**, Șandru, C., Ionete, R.E., 2019. *Modelling the dynamics of VOCs and BTEXs bioaccumulation as tool for environmental risk assessment*, *Journal of Biotechnology*, 305, S37-S37, [DOI:10.1016/j.jbiotec.2019.05.133](https://doi.org/10.1016/j.jbiotec.2019.05.133) (IF: 3.503; Q2) [WOS:000491118400115]
 32. **Iordache, A.M.**, Iordache, M., Sandru, C., Voica, C., Stegarus, D., Ionete, R.E., 2019. *A fugacity based model for the assessment of pollutant dynamic evolution of VOCs and BTEX in the Olt river basin (Romania)*, *Revista de Chimie*, 70(10), 3456-3463, doi.org/10.37358/RC.19.10.7575 (IF1.755; Q3) [WOS:000500795900002]
 33. Zgavarogea, R.I., Covaliu, C., **Iordache, A.M.**, Niculescu, V., Neacsu, M., 2017. *The use of anaerobic membrane bioreactor and reverse osmosis system for wastewater treatment*, *UPB Scientific Bulletin, B Series: Chemistry and Material Science*, 79(2): 55-62, https://www.scientificbulletin.upb.ro/rev_docs_arhiva/full249_698627.pdf (IF0.44; Q4) [WOS:000405523600006]
 34. Zgavarogea, R.I., Niculescu, V., Miricioiu, M., **Iordache, A.M.**, Paun, N., Covaliu, C., 2017. *Waste gas biotreatment*, *Journal of Biotechnology*, 256, S62-S62, <https://doi.org/10.1016/j.jbiotec.2017.06.1010> (IF3.533; Q2) [WOS:000413585400195]
 35. Bleiziffer, R., Mesaros, C., Suvar, S., Podea, P., **Iordache, A.M.**, Yudin, F.D., Culea, M., 2017. *Comparative characterization of basil, mint and sage extracts*, *Studia Universitatis Babes-Bolyai -Chimia*, 62(2), 2, 373-385, [DOI: 10.24193/subbchem.2017.2.30](https://doi.org/10.24193/subbchem.2017.2.30) (IF0.305; Q4) [WOS:000417263800018]
 36. Șuvar, S., Bleiziffer, R., Podea, P., **Iordache, A.M.**, Voica, C., Zgavarogea, R.I., Culea, M., 2016. *A comparative mass spectrometric study of fatty acids and metals in some seed extracts*, *European Journal of Mass Spectrometry*, 22(5), 253-260, [DOI: 10.1255/ejms.1448](https://doi.org/10.1255/ejms.1448) (IF1.00; Q4) [WOS:000388836100006]
 37. Culea, M., **Iordache, A.M.**, Horj, E., Mesaros, C., Bleiziffer, R., 2016. *GC-MS methods for amino acids determination in different biological extracts*, *Studia Universitatis Babes-Bolyai Chimia*, 61(1), 213-222 (IF0.244; Q4) [WOS:000385902800021]
 38. Voica, C., Feher, I., **Iordache, A.M.**, Cristea, G., Dehelean, A., Magdas, D.A., Mirel, V., 2016. *Multielemental analysis of coffee by inductively coupled plasma-mass spectrometry*, *Analytical Letters*, 49(16), 2627-2643,

- DOI: 10.1080/00032719.2015.1116003 (IF1.15; Q3) [WOS:000387452800009]
39. Sistik, P., Turjap, M., **Iordache, A.M.**, Saldanha, H., Lemr, K., Bednar, P., 2016. *Quantification of selected antidepressants and antipsychotics in clinical samples using chromatographic methods combined with mass spectrometry: A review (2006-2015)*, Biomedical Papers-Olomouc, 160(1), 39-53, DOI: 10.5507/bp.2015.065 (IF0.894; Q4) [WOS:000373390800005]
 40. Suvar, S., Horj, E., Podea, P., **Iordache, A.M.**, Gocan, D., Culea, M., 2015. *Fatty acids determination in trout plasma and meat by GC-MS*, Studia Universitatis Babeş-Bolyai Chemia, 60(2):109-116. (IF0.148; Q4) [WOS:000369161800010]
 41. Hermannova, M., **Iordache, A.M.**, Slovakova, K., Havliček, V.I., Pelantova, H., Lemr, K., 2015. *Arrival time distributions of product ions reveal isomeric ratio of deprotonated molecules in ion mobility-mass spectrometry of hyaluronan derived oligosaccharides*, Journal of Mass Spectrometry, 50(6):854-863, DOI 10.1016/j.saa.2012.07.056 (IF2.541; Q2) [WOS:000355618600009]
 42. Geana, E.I., Marinescu, A., **Iordache, A.M.**, Sandru, C., Ionete, R.E., Bala, C., 2014. *Differentiation of Romanian Wines on Geographical Origin and Wine Variety by Elemental Composition and Phenolic Components*, Food Analytical Methods, 7(10):2064-2074, DOI: 10.1007/s12161-014-9846-2 (IF1.956; Q2) [WOS:000343707100013]
 43. Geana, E.I., **Iordache, A.M.**, Ionete, R., Marinescu, A., Ranca, A., Culea, M., 2013. *Geographical origin identification of Romanian wines by ICP-MS element analysis*, Food Chemistry, 138(2-3): 1125-1134, DOI: 10.1016/j.foodchem.2012.11.104 (IF3.259; Q1) [WOS:000316039500056]
 44. Florescu, D., **Iordache, A.M.**, Costinel, D., Horj, E., Ionete, R.E., Culea, M., 2013. *Validation procedure for assessing the total organic carbon in water samples*, Romanian Journal of Physics, 58(1-2):211-219. (IF0.745; Q4) [WOS:000320141600021]
 45. Voica, C., Kovacs, M.H., Dehelean, A., Ristoiu, D., **Iordache, A.M.**, 2012. *ICP-MS determinations of heavy metals in surface waters from Transylvania*, Romanian Journal of Physics, 57(7-8), 1184-1193 (IF0.526; Q4) [WOS:000309633600017]
 46. Voica, C., Dehelean, A., **Iordache, A.M.**, Geana, E.I., 2012. *Method validation for determination of metals in soils by ICP-MS*, Romanian Reports in Physics, 64(1), 221-231 (IF1.123; Q4) [WOS:000302105700020]
 47. Florescu, D., Ionete, R.E., Sandru, C., **Iordache, A.M.**, Culea, M., 2012. *The Influence of Pollution Monitoring Parameters in Characterizing the Surface Water Quality from Romania Southern Area*, Romanian Journal of Physics, 56(7-8), 1001-1010 (IF0.526; Q4) [WOS:000295495400017]
 48. Geana, E.I., **Iordache, A.M.**, Ionete, R.E., 2012. *Ochratoxin a occurrence in Romanian wines*, Revista de Chimie, 63(9), 883-886, doi.org/10.37358/Rev.Chim.1949 (IF0.538; Q4) [WOS:000310928900007]
 49. Florescu, D., Ionete, R.E., **Iordache, A.M.**, Horj, E., Stefanescu, I., Culea, M., 2011. *Optimal measurements of surface water pollution-case study on southern part of Romania*, Asian Journal of Chemistry, 23(12), 5209-5212 (IF0.266; Q4) [WOS:000296219000006]
 50. Culea, M., Horj, E., **Iordache, A.M.**, Cozar, O., 2011. *Determination of glycine in biological fluids by isotopic dilution Mass Spectrometry*, Asian Journal of Chemistry, 23(10), 4279-4281 (IF0.266; Q4) [WOS:000296218600009]
 51. Horj, E., **Iordache, A.M.**, Toma, A., Cozar, O., Culea, M., 2011. *Determination of fatty acid composition of two carp species by GC-MS*, Asian Journal of Chemistry, 23(11) 4768-4770 (IF0.266; Q4) [WOS:000296218700007]
 52. **Iordache, A.M.**, Horj, E., Toma, A., Cozar, O., Culea, M., 2011. *Determination of amino acid composition of two carp species by GC-MS*, Asian Journal of Chemistry, 23(11), 4757-4760 (IF0.266; Q4) [WOS:000296218700005]
 53. **Iordache, A.M.**, Culea, M., Horj, E., Cozar, O., 2011. *Determination of amino acids and selenium in fish plasma*, Romanian Journal of Physics, 56(7-8), 963-970 (IF0.414; Q4) [WOS:000295495400012]
 54. Horj, E., **Iordache, A.M.**, Culea, M., 2011. *Isotopic dilution GC/MS method for methionine determination in biological media*, AIP Conference Proceedings, 1387, 241-246, doi.org/10.1063/1.3647081 (IF0.364; Q4) [WOS:000301176200035]
 55. Geana, E.I., **Iordache, A.M.**, Voica, C., Culea, M., Ionete, R.E., 2011. *Comparison of three digestion methods for heavy metals determination in soils and sediments materials by ICP-MS technique*, Asian Journal of Chemistry, 23(12), 5213-5216 (IF0.355; Q4) [WOS:000296219000007]
 56. **Iordache, A.M.**, Horj, E., Ani, A.R., Mesaros, C., Morar, S., Cozar, O., Culea, M., 2010. *Amino acids profiles in biological media*, AIP Conference Proceedings, 1262, 192-197, https://doi.org/10.1063/1.3482230 (IF0.364; Q4) [WOS:000287169800030]
 57. Mesaros, C., Culea, M., **Iordache, A.M.**, Visovan, I., Cozar, C., Cosma, C., 2010. *A new caffeine test for diagnosis of cirrhosis by GC/MS*, Asian Journal of Chemistry, 22(5), 3608-3614 (IF0.247; Q4) [WOS:000279844500040]
 58. Culea, M., Jimborean, M., Pinte, A., Chiriac, M., **Iordache, A.M.**, 2009. *Cheese amino acids characterization*

- by isotopic dilution GC-MS, Journal of Environmental Protection and Ecology, 10(1), 149-155, <https://scibulcom.net/en/article/JEbuwBF4fhjhZjg6dbvL> (IF0.168; Q4) [WOS:000265259400019]
59. Culea, M., **Iordache, A.M.**, Cozar, O., Ristoiu, D., 2009. *Trihalomethanes analysis in drinking water*, Journal of Environmental Protection and Ecology, 10(2), 342-350 <https://scibulcom.net/en/article/rOsOTCHk6OxNYYzsbQIz> (IF0.168; Q4) [WOS:000268400000005]
60. **Iordache, A.M.**, Culea, M., Gheman, C., Cozar, O., 2009. *Characterization of some plant extracts by GC-MS*, Nuclear Instruments & Methods in Physics Research Section B-Beam Interactions with Materials and Atoms, 267(2), 338-342 [DOI: 10.1016/j.nimb.2008.10.021](https://doi.org/10.1016/j.nimb.2008.10.021) (IF1.156; Q2) [WOS:000263586200041]

Indici

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1. Dang, F.H., Caminschi, M., Drăgușin, V., Ionete, R.E., **Iordache, A.M.**, Mirea, I.C., Șandru, C., Vlaicu, M., Zgavarogea, R.I., 2025. *Hydrogeochemical parameters of karst and thermo-mineral waters in the Motru-Cerna karst area (SW Romania) and their relationship with multi-decadal climate variability*, Karst Science Days Symposium, Proceedings, 3 (2025), pp. 48-69, [DOI: 10.70655/KSD.2025.09](https://doi.org/10.70655/KSD.2025.09), ISSN-L: 2972-1261, ISSN: 2972-127x, Ed. Emil Racoviță” Institute of Speleology of the Romanian Academy, Romania
2. Botoran, O.R., Ionete, R.E., Costinel, D., Șandru, C., Geană, E.I., Ciucure, C., **Iordache, A.M.**, Păun, N., Pruteanu, M.A., Dunca, E.C., Bahrim, G.E., 2025. *Chemistry in Service of Nutrition: Multi-marker Profiling of Raspberries for Safe and Functional Food Development*, Congresul Medicina, Științele Moleculare și de Mediu (MedMolMed 2025), 10-15.11.2025, Chișinău, Republica Moldova, Book of abstracts, pg. 222, <https://doi.org/10.19261/medmol25>, ISBN: 978-9975-62-925-6
3. Paun, N., Niculescu, V., Zgavarogea, R.I., Badea, S.L., **Iordache, A.M.**, 2024. *An overview of methods for lithium separation*. Smart Energy and Sustainable Environment, 27 (2), 73-84, <https://doi.org/10.46390/j.smensuen.27224.461>
4. **Iordache, A.M.**, Nechita, C., Niculescu, V., 2024. *Trends of the years: Sistematic literature review analysis based on the methodological principles of the electromigration process*. Smart Energy and Sustainable Environment, 27(2), 43-58, <https://doi.org/10.46390/j.smensuen.27224.459>
5. **Iordache, A.M.**, Voica, C., Nechita, C., Grigorescu, R., Zgavarogea, R.I., Paun, N., 2024. *Statistical Analysis of Li concentration and the ⁶⁷Li isotopic from specific provenance environments*. Smart Energy and Sustainable Environment, 27(1), 5-24, <https://doi.org/10.46390/j.smensuen.27124.456>
6. Iordache, M., Zgavarogea, R.I., **Iordache, A.M.**, Constantinescu, M., Bucura, F., Ionete, R.E., Grigorescu, R., Nechita, C., 2021. *Temporal Evolution of Greenhouse Gas Emissions in European Union (Eu-28): A Perspective on Romania*, Smart Energy and Sustainable Environment, 2021, 24(2): 43-58, <https://doi.org/10.46390/j.smensuen.24221.438>
7. Zgavarogea, R.I., Iordache, M., **Iordache, A.M.**, Constantinescu, M., Bucura, F., Ionete, R.E., Grigorescu, R., Nechita, C., 2021. *The contribution of Romania to climate change – the effects of accounting the ghg emissions from land use, land-use change and forestry (LULUCF)*. Smart Energy and Sustainable Environment. 24(1), 5–20, <https://doi.org/10.46390/j.smensuen.24121.433>
8. Sandru, C., **Iordache, M.**, **Iordache (Rădulescu), A.M.**, Zgavarogea, R.I., Ionete, R.E., 2020. *Hydrochemical characterization and quality of surface water from Olt River, Romania*, Smart Energy and Sustainable Environment, 23(1): 35-46, <https://doi.org/10.46390/j.smensuen.23120.80>
9. Sandru, C., Iordache, M., **Iordache, A.M.**, Ionete, R.E., Zgavarogea, R.I., 2020. *CWQI Index as Quality Indicator of Surface Water - An Approach on the Olt River, Romania*, Smart Energy and Sustainable Environment, 23(2): 93-106, <https://doi.org/10.46390/j.smensuen.23220.432>
10. Voica, C., Rosu, C., **Iordache, A.M.**, Pisteu, I.C., 2020. *The Romanian consumer among education, information, health risk, food quality and ethics*, Revista de Chimie, 71(2), 436-442, <https://doi.org/10.37358/RC.20.2.7946>
11. Voica, C., Iordache, A.M., Miricioiu, M., Magdas, A.D., Cristea, G., 2020. *Preliminary Study on Characterization of Edible Oils Using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and Isotope Ratio Mass Spectrometry (IRMS)*, Revista de Chimie, 71(5), 436-443, <https://doi.org/10.37358/RC.20.5.8135>
12. Sandru, C., Iordache, M., **Iordache (Rădulescu), A.M.**, Zgavarogea, R.I., Ionete, R.E., 2019. *Distribution of heavy metals in water and sediments from lakes of the Olt watershed*, Progress of Cryogenics and Separation, 22(1), 77-90.
13. Iordache, M., **Iordache, A.M.**, Sandru, C., Voica, C., Zgavarogea, R.I., Miricioiu, M., Ionete, R.E., 2019. *Assessment of heavy metals pollution in sediments from reservoirs of the Olt river as tool for environmental risk management*, Revista de Chimie, 70(12), 4153-4162. <https://doi.org/10.37358/RC.19.12.7725>
14. Sandru, C., Iordache, M., **Iordache, A.M.**, Ionete, R.E., 2018. *Assessment of heavy metal sludge quality in a municipal wastewater treatment plant*, Progress of Cryogenics and Isotopes Separation, 21(1), 117-124 <https://www.energ-en.ro/assets/pdfsc/0167747c2fc1a6174bf113105b7906e6.pdf>
15. Bleiziffer, R., Culea, M., Sarbu, C., Podea, P., Suvar, S., **Iordache, A.M.**, Mesaros, C., 2017. *Classical chemometrics methods applied for clinical data analysis*, IFMBE Proceedings – 5th International Conference on

- Advancements of Medicine and Health Care Through Technology, Meditech 2016, Cluj-Napoca, Springer International Publishing AG, Switzerland, 59, 39-42, DOI: 10.1007/978-3-319-52875-5_9
16. Zgavaroaga, R.I., Covaliu, C., Niculescu, V., Miricioiu, M., Paun, N., **Iordache, A.M.**, Neacşa, M., 2016. *Membrane bioreactor (MR) technology- a new and effective treatment of wastewater*, Progress of Cryogenics and Isotopes Separation, 19(2), 61-72.
 17. Cezara, V., Ionete, R.E., Culea, M., Suvar, S., **Iordache, A.M.**, 2015. *Assessment of trace elements in fish tissues as tool for monitoring pollution in the aquatic ecosystem*, Czech Chemical Society Symposium Series – Chemicke Listy, 13(45-162), 78-80
 18. Suvar, S., **Iordache, A.M.**, Voica, C., Ionete, R.E., Bleizifeer, R., Culea, M., 2015. *Comparison of nutrients composition of some vegetable oils*, Czech Chemical Society Symposium Series – Chemicke Listy, 13(45-162), 146-148
 19. Geana, E.I., **Iordache, A.M.**, Ionete, R., 2012. *Simultaneous determination of artificial sweeteners in possible counterfeited wines, using high performance liquid chromatography with dad detection*, Ovidius University Annals of Chemistry, 23(1), 77-81
 20. Florescu, D., **Iordache, A.M.**, Picioara, I., Ionete, R.E., 2011. *Assessment of heavy metals contents in soil from an industrial plant of southern part of Romania*, Advances in Environmental Sciences, International Journal of the Bioflux Society, 3(2), 206-210
 21. Geana, E.I., **Iordache, A.M.**, Ionete, R.E., 2011. *Assessing the wine anthocyanin profile for red grape varieties identification*, Progress of Cryogenics and Isotopes Separation, 14(1), 127-133
 22. Geana, E.I., **Iordache, A.M.**, Saros, G., Ionete, R.E., 2011. *Determination of some polycyclic aromatic hydrocarbons in surface water of Valcea County*, Progress of Cryogenics and Isotopes Separation, 14(2), 87-94
 23. Culea, M., Horj, E., Florescu, D., **Iordache, A.M.**, Mesaros, C., Vulturar, R., 2011. *Diagnosis and monitoring by GC/MS*, Chemicke Listy, 105(s6)
 24. Horj, E., **Iordache, A.M.**, Florescu, D., Culea, M., 2011. *Amino acids determination in dry fermented salami*, Chemicke Listy, 105(s6), s1047-1048
 25. Horj, E., **Iordache, A.M.**, Florescu, D., Culea, M., 2011. *Leucine transmembrane transport study in human red cell*, Chemicke Listy, 105(s6), s1048-s1049
 26. **Iordache, A.M.**, Florescu, D., Horj, E., Culea, M., 2011. *Fatty Acids Determination in Biological Samples by GC-MS*, Chemicke Listy, 105(s6), s1015
 27. Florescu, D., **Iordache, A.M.**, Horj, E., Ionete, R.E., Stefanescu, I., Culea, M., 2011. *SIM-GC/MS determination of BTEX in ambient air*, Chemicke Listy, 105(s6), s984
 28. Yudin, D., **Iordache, A.M.**, Horj, E., Ionete, R.E., Sandru, C., Culea, M., 2011. *Trace of heavy metals in fish tissues, sediment and water from Danube river in Romania*, Chemicke Listy, 105(s6), s984
 29. Yudin, D., **Iordache, A.M.**, Saros, G., Bucura, F., Constantinescu, M., Ionete, R.E., Culea, M., 2011. *Investigation and monitoring of ambiental pollutants of atmosphere from in situ collected samples in an industrial area*, Chemicke Listy, 105(s6), s985
 30. **Iordache, A.M.**, Voica, C., Florescu, D., Ionete, R.E., Culea, M., 2011. *The potentialities of multi-element composition and 87Sr/86Sr ratio of wine provenance*, Chemicke Listy, 105(s6), s1038
 31. **Iordache, A.M.**, Florescu, D., Ionete, R.E., Culea, M., 2011. *Low-levels specification of elements in drinking waters using ICP-MS*, Chemicke Listy, 105(s6), s1039
 32. Horj, E., **Iordache, A.M.**, Culea, M., 2010. *Method validation for free amino-acids determination in biological samples*, Studia Universitatis Physica, Babeş-Bolyai, LV, 2, 61-68
 33. **Iordache, A.M.**, Sandru, C., Geana, E.I., Bara, L., Ionete, R.E., Culea, M., 2010. *Metal concentrations in sediment and fish from the Topalu area*, Bulletin USAMV Animal Science and Biotechnologies, 67(1-2), 459
 34. **Iordache A.M.**, Geana, E.I., Horj, E., Pop, C., Ionete, R.E., 2010. *Determination of metals content from wines by Inductively Coupled Plasma Mass Spectrometry*, Bulletin USASM Agriculture, 67(2), 500
 35. Pop, C., Bara, L., Horj, E., **Iordache, A.M.**, Laslo, C., 2010. *Determination of free fatty acids in sausage meat*, Bulletin of UASVM Agriculture, Cluj-Napoca, volume 67(2), 373-377
 36. **Iordache, A.M.**, Horj, E., Ani, A.R., Mesaroş, C., Morar, S., Culea, M., 2010. *Fatty acids profile in fish plasma*, Analele Universităţii de Vest Timişoara, Seria Fizica, volume: LIV, 55-61
 37. Mesaroş, C., **Iordache, A.M.**, Cozar, O., Cosma, C., Culea, M., 2010. *Diagnosis by Mass Spectrometry*, Rom. J. Biophys., 20(1), 71-82
 38. **Iordache, A.M.**, Geana, I., Ionete, R.E., Culea, M., 2010. *The optimisation of the method for metals content determination in Romanian wines by ICP-MS after microwave mineralization*, Progress of Cryogenics and Isotopes Separation, 13(1), 137-145
 39. Geana, E.I., **Iordache, A.M.**, Ionete, R.E., 2010. *Evaluating heavy metal contents in soils using microwave digestion method and ICP-MS technique*, Proceedings of Nuclear 2010, The third Annual International

- Conference on Sustainable Development through Nuclear Research and Education, 26-28, 613-617
40. Culea, M., **Iordache, A.M.**, Cozar, O., 2010. *Allegens Determination by GC/MS*, Journal of Environmental Protection and Ecology, 11(2), 523-528
 41. Mesaros, C, Culea, M., **Iordache, A.M.**, Cozar, O., 2009. *GC-MS Characterization of the compounds in some essential oils*, Bulletin UASVm Agriculture, 66(1), 111-116
 42. Mesaros, C., Culea, M., **Iordache, A.M.**, Cozar, O., Cosma, C., 2009. *GC-MS Analysis of Flavonoids in Orthosiphon Stamineus Benth*, Bulletin UASVm Agriculture, 66(1), 547-548
 43. **Iordache, A.M.**, Culea, M., Cozar, O., 2009. *Characterization of some extracts for therapeutic use by GC/MS*, Journal of Physics: Conference Series, 182(1), 012027 [10.1088/1742-6596/182/1/012027](https://doi.org/10.1088/1742-6596/182/1/012027)
 44. **Iordache, A.M.**, Mesaros, C., Cozar, O., Culea, M., 2009. *Determination of theophylline in biological fluids by isotopic dilution mass spectrometry*. Studia Universitatis Babes-Bolyai, Physica, LIV, 2.
 45. Mesaros, C., **Iordache, A.M.**, Culea, M., Craciun, C., Cozar, O., Fechet, R., Culea, E., 2009. *Sea Buckthorn Oil Study GC/MS and IR*, Studia Universitatis Babes-Bolyai, Physica, LIV, 1.
 46. Mesaros, C., Culea, M., **Iordache, A.M.**, 2008. *Diagnosis of cirrhosis by GC/MS*, Chemicke Listy I, 102(15) s961-s9622008
 47. Culea, M., **Iordache, A.M.**, Mesaros, C., 2008. *Aminoacid profiles monitoring for diagnosis*, Chemicke Listy, 102(15), s936-s938
 48. **Iordache, A.M.**, Minea, R., Culea, M., Lehene, C., 2008. *Gas Chromatography-Mass Spectrometry Characterization of Sea Buckthorn*, Chemicke Listy, 102(15), s663-s664
 49. **Iordache, A.M.**, Culea, M., Cozar, O., 2008. *Rapid Authentication of Natural Juices by GC-MS*, Chemicke Listy, 102(15), s665-s666
 50. **Iordache, A.M.**, Culea, M., Cozar, O., 2008. *Comparative extraction methods of some biologic active compounds in herbs*, Chemicke Listy, 102(15), s667-s669
 51. **Iordache, A.M.**, Mesaros, C., Culea, M., Cozar, O., 2008. *Statistics for Cirrhosis diagnosis by GC/MS*, Studia Universitatis Babes-Bolyai, Physica, LIII.
 52. Tamaian, R., Păun, N., Niculescu, V., **Iordache, A.M.**, Vremeră, R., Broscăţean, Ş., 2008. *Antibiotic Effects of The Naphtoquinonic Derivative On Gram-Positive And Gram-Negative Germs*. Chemicke Listy, 102(15s):s479-481.

Comunicări orale

1. *Analytical Characterization of Nutritional and Toxic Trace Element Profiles in Dairy, Meat, and Tomato Samples by Inductively Coupled Plasma Optical Emission Spectrometry*, Zgavaroega I.R., **Iordache A.M.**, Nasture A., (2025). The 5th International Online Conference on Nutrients (IOCNU2025), MDPI, 10-12 December 2025. MDPI (poster)
2. *Integrated LabVIEW–Python Platform for Automated Control, Data Management, and AI-Assisted Analysis in Lithium Isotope Cascade Separation Experiments*, Zgavaroega I.R., **Iordache A.M.**, Nasture A., (2025). The 6th International Electronic Conference on Applied Sciences (ASEC2025), MDPI, 9-11 December 2025. MDPI (poster)
3. *Hydrogeochemical parameters of karst and thermo-mineral waters in the Motru-Cerna karst area (SW Romania) and their relationship with multi-decadal climate variability*, Huan F.D., Caminschi M., Drăguşin V., Ionete R.E., **Iordache A.M.**, Mirea I.C., Şandru C., Vlaicu M., Zgavaroega R.I., (2025). Karst Science Days Symposium Proceedings, 3, 48-69, 14.11.2025, Bucharest, Romania
4. *Chemistry in Service of Nutrition: Multi-marker Profiling of Raspberries for Safe and Functional Food Development*, Botoran O.R., Ionete R.E., Costinel D., Şandru C., Geană I.E., Ciucure C., **Iordache A.M.**, Păun N., Pruteanu M.A., Dunca E.C., Bahrim G.E., (2025). Congresul Medicina, Ştiinţele Moleculare şi de Mediu (MedMolMed 2025), 10-15.11.2025, Chişinău, Republica Moldova, *Book of Abstracts*, pp. 222, DOI: <https://doi.org/10.19261/medmol25>, ISBN: 978-9975-62-925-6 (prezentare poster)
5. *Electromigration Separation Techniques for Trace Ion Control in Beverage and Food Matrices*, Zgavaroega I.R., **Iordache A.M.**, Nasture A., (2025). 6th International Electronic Conference on Foods (FOODS2025), MDPI, 28–30 October 2025, online poster presentation, Section A: Food Technology and Engineering (poster)
6. *Integrated Electromigration–Crystallization System for Selective Lithium-6 Isotopic Separation*, Zgavaroega I.R., **Iordache A.M.**, Nasture A., Paun N., (2025). 1st International Online Conference on Separations (IOCS2025), MDPI, 15–17 October 2025, online poster presentation, Section 3: Materials in Separation Science (poster)
7. *From Natural Lithium to Nuclear-Grade Li 6: Cascade Separation and Crystallization Insights*, Zgavaroega I.R., **Iordache A.M.**, Paun N., (2025). Lithium Days 2025 Online - Lithium in a changing world, 08-09 octombrie 2025, Hamburg, Germany (prezentare poster – online)
8. *Optimization of lithium isotope ratios measured by quadrupole ICP-Q-MS*, **Iordache A.M.**, Zgavaroega R.I., Nasture A.M., Ionete R.E., Santos R., Nechita C., (2025). International Conference on Environmental Organic Chemistry and Geochemistry – ICEOCG-25, 13-14.10.2025, Salonic, Grecia (prezentare orală)

9. *Iso-Li: An open-source Python package for pipeline data from multicollecion ICP-MS and an electromigration facility for 6Li enrichment based on training AI algorithms*, **Iordache A.M.**, Nasture A.M., Zgavarogea R.I., Ionete R.E., Carcadea E., Nechita C., (2025). 29th International Symposium on Separation Sciences – ISSS 2025, 25-27.09.2025, Belgrad, Serbia – prezentare poster
10. *Isotopic and elemental variability of water and calcite at Ascunsă Cave, Romania, under unusually warm conditions*, Drăgușin V., Burghele B.D., Caminschi M., Ersek V., Fernandez A., Grigore G., Ionete R.E., **Iordache A.M.**, Marin C., Meckler A.N., Mirea I.C., Mørkved P.T., Șandru C., Zudorache A., Vlaicu M., Zgavarogea R.I., (2025). 10th International Climate Change: The Karst Record (KR10) Conference, 24-28 Martie 2025, Cape Town, Africa de Sud, Abstract Book, pg. 39 (prezentare orală)
11. *Preliminary investigations of agro-industrial by-products: an integrated approach to sustainability and food safety*, Botoran O.R., Geană E.I., Șandru C., Ciucure C., Păun N., **Iordache A.M.**, Popescu D.I., Ionete R.E., (2024). Simpozionului Internațional „Prioritățile chimiei pentru o dezvoltare durabilă” – PRIOCHEM XX, București, Romania, 16-18 Octombrie 2024.
12. *Physicochemical Characterization of Industrial and Agricultural By-products for Sustainable Biofertilizer Development in Organic Raspberry Cultivation*, Botoran O.R., Geană E.I., Ciucure C.T., **Iordache A.M.**, Șandru C., Miricioiu M.G., Ionete R.E., (2024). 11th International Symposium on Recent Advances in Food Analysis, November 5-8, 2024, Prague, Czech Republic
13. *Occurrence and health risk assessment of alkali metals and macronutrients in potable waters*, Voica C., **Iordache A.M.**, Nechita C., Roba C., (2024). The 7th edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences – IC-ANMBES 2024, 17- 20 September 2024 Brasov, Romania
14. *Health risk assessment of heavy metals in selected root vegetables*, Voica C., Cristea G., **Iordache A.M.**, Roba C., (2024). The 7th edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences –IC-ANMBES 2024, 17- 20 September 2024 Brasov, Romania
15. *Lithium impregnation of low-density polyethylene membranes (LDPEMs) in the process of lithium isotopes separation (6 Li/ 7 Li) and enrichment of 6 Li*, **Iordache A.M.**, Nechita C., Feizula E., Zgavarogea R.I., Santos R.M., (2024). 11th International Conference on “Energy, Sustainability and Climate Crisis” ESCC 2024, 26-30 august 2024, Ionian Academy, Corfu, Greece
16. *Extraction and separation of lithium isotopes by using an organic liquid extraction system of crown ether in ionic liquids*, **Iordache A.M.**, Santos R.M., Nechita C., Mandoc R.L., Zgavarogea R.I., Feizula E., (2024). 40th Informal Meeting on Mass Spectrometry, 12-15 May 2024, Budapest, Hungary
17. *An Overview on Membrane-Based Methods for Lithium Isotopes Separation*, Paun N., Niculescu V.C., Zgavarogea I.R., Badea S.L., **Iordache A.M.**, (2023). The 24th International Conference “New Cryogenic and Isotope Technologies for Energy and Environment” – EnergEn 2023, Baile Govora, Romania, Oct 18-20, 2023, Book of abstract, ISSN: 2601-9965, pp: 267-271
18. *An overview on the utilization of crown ethers in lithium isotopes separation*, Niculescu V.C., Badea S.L., **Iordache A.M.**, (2023). “International Conference of Physical Chemistry – ROMPHYSCHEM17”, 25-27 September 2023, Bucuresti, Romania, Abstract Book, ISSN: 3008-3850, pg. 96
19. *Recent progresses in separation techniques for lithium isotopes – an overview of chemical exchange methods in two liquid phases using crown ethers*, Badea S.L., Niculescu V.C., **Iordache A.M.** (2023). 14th International Conference “Processes in Isotopes and Molecules”, 19-22 September 2023, Cluj-Napoca, Romania (poster)
20. *Water chemistry and stable isotopes pattern in the Olt River, Romania – Aspects for tracing contaminant sources*, Ionete R.E., Costinel D., Botoran O.R., Șandru C., **Iordache A.M.**, (2023). 6th International Conference Water Resources and Wetlands (WRW 2023), 13-17 September 2023, Tulcea, Romania
21. *Patterns of Isotopic and Biogeochemical Signatures in Picea abies L. Stands in Southern Romania: Implications for Nutrient and Metal Dynamics*, Botoran O.R., Costinel D., Miricioiu M., Nechita C., **Iordache A.M.**, Badea S.L., Zaharioiu A.M., Sandru C., Ionete R.E. (2023). Isotope Workshop XVI – European Society for Isotope Research, ESIR 2023, July 10-14, 2023, Graz, Austria
22. *Nutritional chemical evaluation and antioxidant capacity of spices*, Suvar N.S., Podea P., Eszter E.M., **Iordache A.M.**, Dragoescu R., (2022). The 6th edition of International Conference on Analytical and Nanocatalytical Methods for Biomedical and Environmental Sciences – IC-ANMBES 2022, 08-10.06.2022.
23. *Screening and target analysis of emerging organic contaminants in water and sediments using U-HPLC-QExactive Orbitrap HRMS. Case study of middle and lower course of Olt River, Romania*, Geană E.I., Ciucure C.T., Chitescu C.L., **Iordache A.M.**, Ionete R.E., (2021). Scientific Conference of Doctorals Schools – SCDS-UDJG 2021, organizata de Universitatea Dunărea de Jos din Galați in perioada 10-11.06.2021 (prezentare orală), pp. 108
24. *Elemental levels in twenty environmental matrices and temporal trends in normally and declining trees growth from Copsa Mica, Romania*, Nechita C., **Iordache A.M.**, Pluhacek T., Lemr K., Levanič T., Botoran O.R., Zgavarogea R.I., Ionete R.E., Musca C.D., (2021). EGU General Assembly 2021 – Session CL1.18 – Interdisciplinary Tree-Ring Research,

- nr. EGU21-7619, Viena, 19-30 aprilie 2021 (prezentare orală – online) EGU General Assembly 2021, online, 19-30 Apr 2021, EGU21-7619, <https://doi.org/10.5194/egusphere-egu21-7619>, 2021
25. *Farmed calcite $\delta^{18}O$, $\delta^{13}C$, and δ^{47} at Ascunsa cave*, Romania, Dragusin V., Ersek V., Fernandez A., Ionete R.E., **Iordache A.M.**, Meckler N., Mirea I., Zgavaroega R.I., (2021). EGU General Assembly 2021 – Session CL1.19 – Speleothem and Continental Carbonate Archives of Modern and Palaeoenvironmental Change, nr. EGU21-7151, Viena, 19-30 aprilie 2021 (prezentare orală – online)
 26. *Bioaccumulation of heavy metals in different fish species from Olt River, Romania*, Sandru C., Iordache M., **Iordache A.M.**, Zgavaroega R.I., Ionete R.E., (2021). 23rd International Conference New Cryogenic and Isotope Technologies for Energy and Environment (EnergEn 2021), Baile Govora, 26-29.10.2021, ISSN: 2810-3203, ISSN-L: 2810-3203, pag. 341 (prezentare poster)
 27. *The efficiency of the aeration process as the main energy consumer in a wastewater treatment plant*, Zgavaroega R.I., **Iordache A.M.**, Iordache M., Ionete R.E., (2020). European Biotechnology Congress, Praga, Cehia, 24-26 Septembrie 2020
 28. *Estimation of honey authenticity by multielements characteristics using inductively coupled plasma-mass spectrometry (ICP-MS) combined with chemometrics*, Voica C., **Iordache A.M.**, Ionete R.E., (2019). Book of Abstracts of the 37th Informal Meeting on Mass Spectrometry – IMMS 2019, ISBN: 978-88-93495-59-2, pag. 77, 5-8 May 2019, Fiera di Primiero (TN), Italia
 29. *Tracing source and mobility of heavy metal in environmental compartments via isotopic variation of Pb and Sr*, **Iordache A.M.**, Voica C., Iordache M., Șandru C., Zgavaroega R.I., Ionete R.E., (2019). 37th Informal Meeting on Mass Spectrometry – IMMS 2019, Book of Abstracts, ISBN: 978-88-93495-59-2, pag. 103, 5-8 May 2019, Fiera di Primiero (TN), Italia
 30. *Distribution Of Lithium Content in Romanian Foods Using ICP-MS Technique*, Voica C., Feher I., Magdas A., Cristea G., **Iordache A.M.**, (2019). Proceedings of the 12th International Conference on Processes in Isotopes and Molecules (PIM 2019), 25-27 September 2019, Cluj-Napoca, Romania
 31. *Spatial distribution and accumulation of heavy metals in sediments from the lakes of the Olt River catchment, the main tributary of Danube in Romania*, Zgavaroega R.I., Iordache M., **Iordache A.M.**, Șandru C., Ionete R.E., Botoran O.R., (2019), Conferința internațională “The International Society for Ecological Modeling Global Conference 2019”, 1-5 October 2019, Salzburg Congress Center, Salzburg, Austria
 32. *Aspects on advanced multiparametric and isotopic investigation on surface water as support for the inventory of toxic and persistent contaminants*, **Iordache A.M.**, Iordache M., Voica C., Costinel D., Ionete R.E. (2018). Book of abstract to Conference “36th Informal Meeting on Mass Spectrometry IMMS 36”, 6-9 May, Koszeg, Hungary, ISBN: 978-963-7067-37-2
 33. *Comparison of amino acids and antioxidant capacity in different herb extracts*, Suvar S., Podea P., **Iordache A.M.**, Mesaros C., Culea M. (2018), Book of abstract to Conference “36th Informal Meeting on Mass Spectrometry IMMS 36”, 6-9 May, Koszeg, Hungary, ISBN: 978-963-7067-37-2
 34. *Geochemical characterization of the Olt river (Romania) using piper and Durov diagrams*, Sandru C., Iordache M., **Iordache A.M.**, Niculescu V., Ionete R.E., (2018). XXIInd National Conference with International Participation New Cryogenic and Isotope Technologies for Energy and Environment, 24-26 October 2018, Băile Govora, Romania, Book of Abstracts, vol. 1/2018, pp. 232-233, ISSN: 2601-9965; ISSN-L: 2601-9965.
 35. *Geochemical characterization of river Olt, Romania using of piper and Durov diagrams*, Sandru C., Iordache M., **Iordache A.M.**, Niculescu V., Ionete R.E., (2018). XXIInd National Conference with International Participation New Cryogenic and Isotope Technologies for Energy and Environment, 24-26 October 2018, Băile Govora, Romania, Book of Abstracts, vol. 1/2018, pp. 232-233, ISSN: 2601-9965; ISSN-L: 2601-9965.
 36. *Aspects on advanced isotopic and multiparametric investigation of surface waters as support in environmental processes*, **Iordache A.M.**, Iordache M., Sandru C., Voica C., Zgavaroega R., Ionete R.E., (2018). XXIInd National Conference with International Participation New Cryogenic and Isotope Technologies for Energy and Environment, 24-26 October 2018, Băile Govora, Romania, Book of Abstracts, vol. 1/2018, pp. 247-248, ISSN: 2601-9965; ISSN-L: 2601-9965.
 37. *The polycyclic aromatic content evaluation of the hydrocarbons (PAH) from the water and sediments Olt River reservoirs*, Iordache M., Geana I.E., **Iordache A.M.**, Sandru C., Ionete R.E., Iordache I., (2018). Proceeding to A XXXV-a Conferință Națională de Chimie Călimănești-Căciulata, 02-05 octombrie 2018, pp. 72 – poster
 38. *Aspects on Advanced Isotopic and Multiparametric Investigation of Surface Waters as Support in Environmental Processes*, **Iordache A.M.**, Iordache M., Voica C., Sandru C., Ionete R.E., (2018), Book of Abstracts IMSC2018, 22nd International Mass Spectrometry Conference (IMSC), 2018, 26-31 August, Florenta (Italia), ThP-80
 39. *Assessment of heavy metals pollution in sediments from reservoirs of the Olt River as tool for environmental risk management*, Iordache M., **Iordache A.M.**, Sandru C., Voica C., Ionete R.E., (2018). Book of Abstracts/2018, Issue 18th International Balkan Workshop on Applied Physics and Materials Science – IBWAP 2018 Constanta, 10-13th July 2018, page: 96

40. *A fugacity-based model for the assessment of pollutant dynamic evolution of VOCs and BTEX in the Olt river basin (Romania)*, **Iordache A.M.**, Iordache M., Sandru C., Voica C., Stegarus D., Ionete R.E., (2018), Book of Abstracts/2018, 18th International Balkan Workshop on Applied Physics and Materials Science – IBWAP 2018 Constanta, 10-13th July, pag: 190
41. *Aspects on Advanced Isotopic and Multiparametric Investigation of Sediments as Suport in Environmental Processes*, **Iordache A.M.**, Iordache M., Costinel D., Ionete R.E., (2018), XXXV-a Conferință Națională de Chimie Călimănești-Căciulata, 02-05 octombrie 2018, SC Oltchim Rm. Valcea, pp. 71, poster
42. *Aspects on advanced multiparametric and isotopic investigation of surface waters as suport for inventory of toxic and persistent contaminants*, **Iordache A.M.**, Iordache M., Voica C., Costinel D., Ionete R.E., (2018), Book of Abstracts of the, 36th Informal Meeting on Mass Spectrometry, 6-9 May, 2018, Koszeg, Hungary, pp. 80, ISBN: 978-963-7067-37-2
43. *The Romanian consumer among education, information, health risk, food quality and ethics*, Voica C., Rosu C., **Iordache A.M.**, Pistea I.C., (2018), Book of Abstracts, 12th International Conference of Environmental Legislation, Safety Engineering and Disaster Management ELSESEDIMA 2018, 17-19 May, 2018, Cluj Napoca, page: 191
44. *Characterization of some seed extracts by using isotopic dilution-gas chromatography-mass spectrometry*, Bleiziffer R., Șuvar S., Podea P., **Iordache A.M.**, Mesaros C., Culea M., Book of Abstracts, (2018), 5th Conference of Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences” IC-ANMBES 2018”, 23-25 Mai 2018, Brașov, România, page: 78
45. *Preliminary Study to Characterize Edible Oils Using Elemental Analysis (ICP-MS) and Isotope Ratio Mass Spectrometry (IRMS)*, Voica C., **Iordache A.M.**, Magdas D.M., Cristea G., (2018). Book of Abstracts 18th International Balkan Workshop on Applied Physics and Materials Science – IBWAP 2018 Constanta, 10-13th July, pag: 147
46. *Metal Content of Some Romanian Wines*, Zgavaroagea R.I., Voica C., **Iordache A.M.**, Bleiziffer R., Suvar S., Culea M., (2017), 35th International Meeting on Mass Spectrometry, 06-12.05.2017, Aussois, Franta
47. *Waste Gas Biotreatment*, R. Zgavaroagea, V. Niculescu, M. Miricioiu, **A.M. Iordache**, C. Covaliu, (2017). European Biotechnology Congress, 24-28.05.2017, Dubrovnik, Croatia
48. *Identification and Characterization of Some Seed Extracts by using Isotopic Dilution-Gas Chromatography-Mass Spectrometry*, Bleiziffer R., Suvar S., Podea P., **Iordache A.M.**, Zgavaroagea R.I., Mesaros C., Culea M., (2017). The XIVth Workshop of the European Society for Isotope Research – ESIR 2017, 25-29.06.2017, Baile Govora, Romania
49. *Comparison of Amino Acids AND Antioxidant Capacity of Some Herb Extracts*, **Iordache A.M.**, Bleiziffer R., Suvar S., Podea P., Mesaros C., Culea M., (2017). The XIVth Workshop of the European Society for Isotope Research – ESIR 2017, 25-29.06.2017, Baile Govora, Romania
50. *Study of conducting mixture of carbon nanotubes/Polyaniline for development of a NH₃, CO₂ and CO selective gas sensor*, Spiridon I., Ionete R.E., Monea B.F., Stamatini I., **Iordache A.M.**, (2016). E-MRS Spring Meeting and Exhibit, 30.04-08.05.2016, Lille, France
51. *Investigation of Heavy Metal Content of Aromatic Plants Used as Spices and Condiments*, **Iordache A.M.**, Voica C., Costinel D., Ionete R.E., Culea M., (2016). The 34th Informal Meeting on Mass Spectrometry IMMS 34, 13-19.05.2016, Fiera di Primiero, Italia
52. *Comparison of fatty acids of some seed extracts*, Suvar S., Bleiziffer R., **Iordache A.M.**, Voica C., Culea M., (2016). The 34th Informal Meeting on Mass Spectrometry IMMS 34, 13-19.05.2016, Fiera di Primiero, Italia
53. *Multi-element analysis of mineral and trace elements in herbal plants by ICP-MS technique*, Voica C., **Iordache A.M.**, Feher I., Magdas D.M., (2016). The 34th Informal Meeting on Mass Spectrometry IMMS 34, 13-19.05.2016, Fiera di Primiero, Italia
54. *Comparison of amino acids and antioxidant capacity of some seed extracts*, Bleiziffer R., Suvar S., Podea P., **Iordache A.M.**, Mesaros C., Culea V., (2016). The 34th Informal Meeting on Mass Spectrometry IMMS 34, 13-19.05.2016, Fiera di Primiero, Italia
55. *Membrane Bioreactor (Mr) Technology – a New and Effective Treatment of Wastewater*, Zgavaroagea R.I., Covaliu C., Niculescu V., Miricioiu V., Paun N., **Iordache A.M.**, Neacșa M., (2016). The 21st Conference Progress in Cryogenics and Isotopes Separation, 19-21 October 2016, Calimanesti-Caciulata, Valcea, Romania
56. *Assessment of heavy metals in cosmetics products for health impact*, **Iordache A.M.**, Voica C., Geana E.I., Suvar S., Ionete R.E., Culea M., (2015). Book of abstract of 33rd Informal Meeting on Mass Spectrometry (33rd IMMS 2015), ISBN 978-83-940417-1-7, Szczyrk, Poland, pp.113
57. *Analysis of plasma and meat fatty acids in trough by GC/MS*, Suvar S., Horj E., Florescu D., **Iordache A.M.**, Gocan D., Culea M., (2015). Book of abstract of 33rd Informal Meeting on Mass Spectrometry (IMMS 2015), ISBN 978-83-940417-1-7, Szczyrk, Poland, pp.114
58. *Ion mobility –mass spectrometry of tyramine derivatives of hyaluronan oligosaccharides – a risk of data misinterpretation*, Slovakova K., Hermanova M., **Iordache A.M.**, Lemr K., (2014). Book of Abstract of 32nd Informal Meeting on Mass Spectrometry, No. 1/2014, ISBN 978-963-7067-26-6, Balaton, Hungary, p. 36.
59. *Direct – ink analysis by NanoDESI*, **Iordache A.M.**, Hartmanova L., Lorencova I., Frycak P., Havicek V., Lemr K.,

- (2014). Book of Abstract of 32nd Informal Meeting on Mass Spectrometry, No. 1/2014, ISBN 978-963-7067-26-6, Balaton, Hungary, p. 86.
60. *Ion Mobility-Mass Spectrometry of linear alcohol ethoxylates*, Slovakova K., **Iordache A.M.**, Lemr K., (2014). Book of Abstract of 20th International Mass Spectrometry Conference IMSC 2014, Switzerland, Geneva, p 425
 61. *Desorption nanoelectrospray – influence of surface wetting on desorbed ion intensity*, **Iordache A.M.**, (2014), The 1st Conference of POST-UP Project, Palacky University, Olomouc, Czech Republic, January 22-23, 2014, prezentare orala.
 62. *Elemental and isotopic fingerprinting-analytical tools towards traceability of the plants grown in different Ecosystems*, Costinel D., Ionete R.E., Dinca O.R., **Iordache A.M.**, Stefanescu I., (2014). International Conference “Food Analysis Congress: Safety, Quality, Novel Technologies, Spania, Barcelona, poster
 63. *Characterization and classification of Romanian wines based on elemental and organic fingerprints coupled with chemometrics*. Geana E.I., **Iordache A.M.**, Ionete R.E., Bala C., (2014). Book of Abstracts of the 13th International Symposium “Prospects for the 3rd Millennium Agriculture”, No. 1/2014, ISSN: 2392-6937, ISBN-L: 2392-6937, Cluj Napoca, p. 200
 64. *Isotopic dilution GC/MS method for PKU monitoring*, Suvar S., Horj E., **Iordache A.M.**, Mesaros C., Culea M., (2014). Book of Abstracts of 32nd Informal Meeting on Mass Spectrometry, No. 1/2014, ISBN 978-963-7067-26-6, Balatonszarzo, Hungary, pp 101
 65. *Free amino acids study during salami fermentation*, **Iordache A.M.**, Horj E., Lemr K., Culea M., (2013). Book of Abstract of 6th International Symposium on Recent Advances in Food Analysis (RAFA 2013), 5-8 November 2013, ISBN 978-80-7080-861-0, Prague, Czech Republic, pp 286.
 66. *ICP-MS determination of heavy metals in water, sediment and soil samples from Transylvania Area*, Voica C., **Iordache A.M.**, Geana I.E., Ionete R.E., (2012). Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, 24-27 May 2012, Brasov, Romania, IC-ANMBES 2012
 67. *Interlaboratory study for the determination of trace elements in surface waters*, **Iordache A.M.**, Sandu C., Voica C., Geana E.I., Ionete R.E., Culea M., (2012), Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, 24-27 May 2012, Brasov, Romania, IC-ANMBES 2012
 68. *Simultaneous determination of artificial sweeteners in possible counterfeited wines, using high performance liquid chromatography with DAD detection*, Geana E.I., **Iordache A.M.**, Ionete R.E., (2012), Conferinta Internationala CHIMIA 2012 „New trends in applied chemistry”, Constanta, Romania, 24-26 May 2012, “Ovidius University Annals of Chemistry”, ISSN: 1223-7221
 69. *ICP-MS multi-element analysis of certain Romanian wines and their provenance soils for geographical origin determination*, **Iordache A.M.**, Geana E.I., Ionete R.E., Marinescu A., Ranca A., Culea M., (2012). 30th Informal Meeting on Mass Spectrometry, 29 April-3 May 2012, Olomouc, Czech Republic, Chemica 49S, p. 82, 2012, ISBN: 978-80-244-3047- 8, ISSN: 0232-0061
 70. *The potentialities of multi-element composition and ⁸⁷Sr/⁸⁶Sr ratio of wines as traces of wine provenance*, **Iordache A.M.**, Voica C., Florescu D., Ionete R.E., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s1038, 2011, ISSN: 0009-2770
 71. *Low-levels speciation of elements in drinking waters using ICP-MS*, **Iordache A.M.**, Florescu D., Ionete R.E., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s1039, ISSN: 0009-2770
 72. *Fatty acids determination in biological samples by GC-MS*, **Iordache A.M.**, Florescu D., Horj E., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s1015, ISSN: 0009-2770
 73. *Trace of heavy metals in fish tissues, sediment and water from the Danube River in Romania*, Florescu D., **Iordache A.M.**, Sandru C., Ionete R.E., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s984, ISSN: 0009-2770
 74. *Diagnosis and monitoring by GC/MS*, Horj E., Florescu D., **Iordache A.M.**, Neamtu S., Culea M., (2011), 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s1048-s1049, ISSN: 0009-2770
 75. *SIM-GC/MS determination of BTEX in ambient air*, Florescu D., **Iordache A.M.**, Horj E., Ionete R.E., Stefanescu I., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s985, ISSN: 0009-2770
 76. *Leucine transmembranar transport study in human red cell*, Horj E., **Iordache A.M.**, Florescu D., Culea M., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, 105, s1048, ISSN: 0009-2770
 77. *Amino acids determination in dry fermented salami*, Culea M., Horj E., Florescu D., **Iordache A.M.**, Bara L., Pop C., (2011). 5th Meeting on Chemistry and Life, 14-16 September 2011, Brno, Czech Republic, Chemicke listy, s996, ISSN: 0009-2770
 78. *Application of ICP-MS to the detection of multielements in some Romanian wines*, **Iordache A.M.**, Florescu D., Ionete

- R.E., Culea M., (2011), Proceedings of Healthy Nutritional and Public Health IN-HNPH Brasov, 13-16 May, Brasov, p. 75, ISBN: 978-973-598-896-8
79. *Accreditation of drinking water analyses according to E.U. recommendation and adjusted with proper quality management system*, Florescu D., **Iordache A.M.**, Sandru C., Ionete R.E., Culea M., (2011). Proceedings of the 11th National Conference of Biophysics, 10-12 November, Sibiu, p. 52, ISSN: 2248-0749
 80. *Low-levels specification of elements in drinking water using ICP-MS*, **Iordache A.M.**, Florescu D., Ionete R.E., Horj E., Culea M., (2011). Proceedings of the 11th National Conference of Biophysics, 10-12 November, Sibiu, p.59, ISSN: 2248-0749
 81. *Caffeine test for diagnosis of cirrhosis by GC-MS*, Mesaros C., **Iordache A.M.**, Nicolascu I., Culea M., (2011). Proceedings of the 11th National Conference of Biophysics, 10-12 November Sibiu, p. 67, ISSN: 2248-0749
 82. *Application of multielement analysis for identification of wine origin*, **Iordache A.M.**, Florescu D., Ionete R.E., Culea M., (2011). Abstract book of the Physics Conference TIM-11, 24th-27th November 2011, p. 137, ISBN: 978-973-125-354- 1, Timisoara
 83. *Determination of total phenolic content of red wine by spectrophotometric method*, Florescu D., Horj E., **Iordache A.M.**, Ionete R.E., Culea M., (2011). Abstract book of the Physics Conference TIM-11, 24th-27th November 2011, Timisoara, ISBN: 978-973-125-354- 1, p. 134
 84. *ICP-MS multi-element analysis of Romanian wine samples – A comparative Study*, **Andreea Iordache**, Cezara Voica, Diana Florescu, Irina Geana, Roxana Ionete, Monica Culea, (2011), 12th International Balkan Workshop on Applied Physics, IBWAP 2011, Constanta, 6-8 iulie, p. 112
 85. *ICP-MS determination of heavy metals in surface waters from Transylvania*, Voica C., Kovacs M.H., Dehelean A., Ristoiu D., **Iordache A.M.**, (2011). 12th International Balkan Workshop on Applied Physics, IBWAP 2011, Constanta, 6-8 iulie, p. 109
 86. *Validation procedure for assessing total organic carbon in water samples*, Florescu D., **Iordache A.M.**, Costinel D., Horj E., Ionete R.E., Bratu I., Culea M., (2011). 12th International Balkan Workshop on Applied Physics, IBWAP 2011, Constanta, 6-8 iulie, p. 104
 87. *Isotopic dilution GC/MS for methionine determination in biological media*, Horj E., **Iordache A.M.**, Culea M., (2010). Abstract book of the Physics Conference TIM-10, 25th-27th November 2010, Timisoara, ISBN: 978-973-125-354- 1, p. 121
 88. *Physico-Chemical indicators of surface in optimum characterization of environmental pollution signature*, Florescu D., **Iordache A.M.**, Ionete R.E., Picioara I., Culea M., (2010). Abstract book of the Physics Conference TIM-10, 25th-27th November 2010, Timisoara, ISBN: 978-973-125-354- 1, p. 134
 89. *Metal Concentrations in sediment and fish from Topalu area*, **Iordache A.M.**, Sandru C., Geana I.E., Bara L., Ionete R.E., Culea M., (2010). 9th International Symposium Prospects for the 3rd Millennium Agriculture, 30th September-2nd October, Cluj-Napoca, Bulletin UASVM Agriculture, 67(1-2), p. 459, Print ISSN: 1843-5262, Electronic ISSN: 1843-536X
 90. *Determination of metals content from wines by inductively coupled plasma mass spectrometry*, **Iordache A.M.**, Geana I.E., Horj E., Pop C., Ionete R.E., (2010). 9th International Symposium Prospects for the 3rd Millennium Agriculture, 30th September-2nd October, Cluj-Napoca, Bulletin UASVM Agriculture, 67(2), p. 500, Print ISSN: 1843-5246, Electronic ISSN: 1843-5386, (CNCSIS B+, cod 485)
 91. *Determination of free fatty acids in sausage meat*, Pop C., Bara L., Horj E., **Iordache A.M.**, Laslo C., Culea M., (2010). 9th International Symposium Prospects for the 3rd Millennium Agriculture, 30th September-2nd October, Bulletin of UASVM Agriculture, Cluj-Napoca, vol. 67(2), p. 373-377, ISSN: 1843-5246, Electronic ISSN: 1843-5386
 92. *Amino acids determination in meat by GC-MS*, Bara L., Pop C., Horj E., **Iordache A.M.**, Laslo C., Culea M., (2010). 9th International Symposium Prospects for the 3rd Millennium Agriculture, 30th September-2nd October, Bulletin of UASVM Agriculture, Cluj-Napoca, vol. 67(2), p. 162-167, ISSN: 1843-5246, Electronic ISSN: 1843-5386
 93. *Simultaneous extraction methods for amino acids and fatty acids characterization of food*, **Iordache A.M.**, Horj E., Cozar O., Culea M., (2010). Conferinta Nationala de Fizica, CNF 2010, 23-25 septembrie 2010, carte de abstracte, p 169
 94. *Evaluating heavy metal contents in soils and sediments from an industrial area*, **Iordache A.M.**, Geana I.E., Sandru C., Culea M., (2010). Conferinta Nationala de Fizica, CNF 2010, 23-25 September 2010, Book of Abstracts, p. 169
 95. *Interlaboratory study to improve the quality of trace elements determinations in surface water*, Sandru C., Geana I.E., **Iordache A.M.**, Voica C., Dehelean A., Sandru C., Culea M., (2010). Conferinta Nationala de Fizica, CNF 2010, 23-25 septembrie 2010, Book of Abstracts, p. 233
 96. *Method validation for determination of metals in soil by ICP-MS*, Voica C., Dehelean A., **Iordache A.M.**, Biraruti I., (2010). Conferinta Nationala de Fizica, CNF 2010, 23-25 septembrie 2010, Book of Abstracts, p. 234
 97. *Determination of amino acid in plasma*, **Iordache A.M.**, Culea M., Horj E., Cozar O., (2010). Book of abstracts of the 11th International Balkan Workshop on Applied Physics, IBWAP Constanta, 7-9 iulie, p111, ISBN: 978-973-61-554-4
 98. *Comparison of three digestion methods for heavy metals determination in soils and sediments materials by ICP*

- techniques*, Geana I.E., **Iordache A.M.**, Voica C., Dehelean A., (2010). Book of abstracts of the First International Conference Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANNBES2010, 18th-20th June, Brasov, p. 125, ISBN: 978-973-598-722-0
99. *Mass spectrometric determination of methionine and selenium in plasma*, Horj E., **Iordache A.M.**, Cozar O., (2010). Book of abstracts of the First International Conference Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANNBES2010, 18th-20th June, Brasov, p87, ISBN: 978-973-598-722-0
 100. *Amino acid composition of two carp species by GC-MS*, **Iordache A.M.**, Horj E., Toma A.R., Cozar O., Culea M., (2010). Proceedings of the 37th Conference of Slovak Society of Chemical Engineering 24-28 May 2010, Tatranske Matliare, Slovakia, p. 182, ISBN: 978-80-227-3290-2
 101. *Fatty acid composition of two carp species by GC-MS*, Horj E., **Iordache A.M.**, Toma A., Cozar O., Culea M., (2010). Proceedings of the 37th International Conference of Slovak Society of Chemical Engineering 24-28 May 2010, Tatranske Matliare, Slovakia, p. 184, ISBN: 978-80-227-3290-2
 102. *Determination of glycine in biological fluids by isotopic dilution mass spectrometry*, Culea M., **Iordache A.M.**, Horj E., Cozar O., (2010). Proceedings of the 37th International Conference of Slovak Society of Chemical Engineering, 24-28 May 2010, Tatranske Matliare, Slovakia, p. 183, ISBN: 978-80-227-3290-2
 103. *Comparison of three methods for elemental determination in soils and sediments materials by ICP-MS technique*, Geana I.E., **Iordache A.M.**, Voica C., Dehelean A., Ionete R.E., Horj E., Cozar O., (2010). Proceedings of the 37th International Conference of Slovak Society of Chemical Engineering, 24-28 May 2010, Tatranske Matliare, Slovakia, p. 96, ISBN: 978-80-227-3290-2
 104. *Assessment of human impact on the environment through investigation on pollution of air, water, soil*, Saros G., **Iordache A.M.**, Geana I.E., Vremera R., Florescu D., (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 119, ISBN: 978-973-750-192-9
 105. *Identification of red grape varieties by defining the wine anthocyanin profile*, Geana I.E., **Iordache A.M.**, Ionete R.E., (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 152, ISBN: 978-973-750-192-9
 106. *The optimization of the method for metals content determination in Romanian wines by ICP-MS after microwave mineralization*, **Iordache A.M.**, Geana I.E., Ionete R.E., Culea M., (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 153, ISBN: 978-973-750-192-9
 107. *Interlaboratory study to improve the quality of trace element determination in surface waters*, Sandru C., **Iordache A.M.**, Geana I.E., Voica C., Ionete R.E., Florescu D., (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 132, ISBN: 978-973-750-192-9
 108. *Determination of trace elements in ambient particulate matter by inductively coupled plasma-mass spectrometry*, Geana I.E., **Iordache A.M.**, (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 140, ISBN: 978-973-750-192-9
 109. *Determination of metals content from wines by inductively coupled plasma mass spectrometry*, Geana I.E., **Iordache A.M.**, (2010). The 16th ICIT Conference Progress in Cryogenics and Isotopes Separation, 13-15 October, Calimanesti-Caciulata, Romania, p. 168, ISBN: 978-973-750-192-9
 110. *Evaluating heavy metal contents in soils using microwave digestion method and ICP-MS technique*, Geana I.E., **Iordache A.M.**, Ionete R.E., (2010). Proceedings of Nuclear 2010, The third Annual International Conference on Sustainable Development through Nuclear Research and Education, 26-28 May, Pitesti, p. 65-66, ISSN: 2066-2955
 111. *Characterization of some extracts for therapeutic use by GC-MS*, **Iordache A.M.**, Culea M., Cozar O., (2009). International Conference Processes in Isotopic and Molecules PIM, 24-26 septembrie, Cluj-Napoca, p. 37
 112. *Diagnosis by mass spectrometry*, Mesaroş C., **Iordache A.M.**, Culea M., Cozar O., Cosma C., (2009). The 10th National Conference of Biophysics, CNB 2009, 1-3 October, Cluj-Napoca, p. 110
 113. *GC-MS analysis of flavonoids in Orthosiphon stamineus Benth*, Mesaroş C., Culea M., **Iordache A.M.**, Cozar O., Cosma C., (2009). The 8th International Symposium Prospects for the 3rd Millennium Agriculture, Bulletin USAVM Agriculture, Cluj-Napoca, 66, 1, p. 547-548, <http://horticultura.usamvcj.ro/news/bulletin-uasvm-cluj-horticulture-in-isi-master>, Print ISSN: 1843-5246, Electronic ISSN: 1843-536
 114. *GC-MS characterization of the compounds in some essential oil*, Mesaroş C., Culea M., **Iordache A.M.**, Cozar O., (2009). The 8th International Symposium Prospects for the 3rd Millennium Agriculture, Bulletin USAVM Agriculture, Cluj-Napoca, 66, 1, 111-117 (CNCSIS B+, cited in Thompson BDI), Print ISSN: 1843-5246, Electronic ISSN: 1843-536, <http://horticultura.usamvcj.ro/news/bulletin-uasvm-cluj-horticulture-in-isi-master>
 115. *Amino Acids Profiles in Biological Media*, **Iordache A.M.**, Horj E., Toma A.R., Mesaroş C., Morar S., Culea M., (2009). Physics Conference TIM-09, 27th-28th November, Timișoara, p. 49-50
 116. *Fatty acids profile in fish plasma*, **Iordache A.M.**, Horj E., Toma A.R., Morar S., Culea M., (2009). Physics Conference TIM-09, 27th-28th November, Timișoara, p. 60
 117. *THMs determination by GC/MS*, Culea M., **Iordache A.M.**, Culea E., (2008). Annual International Conference on

- Sustainable Development through Nuclear Research and Education, 28-30 May, Pitesti, Romania, Proceedings of NUCLEAR 2008, Part II, p.505-512, ISBN: 978-973-0-05700-3
118. *Residual Pesticides Analysis In Wines By GC/MS*, Culea M., **Iordache A.M.**, Culea E., Cozar O., (2008). Annual International Conference on Sustainable Development through Nuclear Research and Education, 28-30 May 2008, Pitesti, Romania, Proceedings of NUCLEAR 2008, Part II, p. 499-504, ISBN: 978-973-0-05700
 119. *Stable isotopes signature (D/H 180/160, 130/120): Important Element in Paleoclimate Reconstruction*, Costinel D., **Iordache A.M.**, Vremera R., (2008). Annual International Conference on Sustainable Development through Nuclear Research and Education, 28-30 May 2008, Pitesti, Romania, Proceedings of NUCLEAR 2008, Part II, p. 491-494, ISBN: 978-973-0-05700
 120. *Natural juice authentication by GC-MS*, Culea M., **Iordache A.M.**, Cozar O., (2008). The 14th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, 29-31 October, Călimănești-Căciulata, Rm-Vâlcea, p. 287-290, ISSN: 1582-2575
 121. *Characterization of some biologic active compounds in herbs by GC-MS*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 14th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, 29-31 Oct., Călimănești-Căciulata, Rm-Vâlcea, p. 291, ISSN: 1582-2575
 122. *Characterization of sea buckthorn by gas chromatography-mass spectrometry*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 14th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, 29-31 Oct., Călimănești-Căciulata, Rm-Vâlcea, p. 291-292, ISSN: 1582-2575
 123. *The analysis of volatile organic compounds in gaseous and/or solid samples*, Vremera R., Costinel D., **Iordache A.M.**, Ionete R.E., (2008). The 14th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, 29-31 Oct., Călimănești-Căciulata, Rm-Vâlcea, p. 292-297, ISSN: 1582-2575
 124. *Applications of plasma spectroscopy and high performances liquid chromatography in environmental and food science*, **Iordache A.M.**, Biraruti E.I., Ionete R.E., (2008). The 14th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, 29-31 Oct., Călimănești-Căciulata, Rm-Vâlcea, p. 290, ISSN: 1582-2575
 125. *GC-MS measurements of bioactive compounds in some herbs*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 6th Aegean Analytical Chemistry Days (AACD), International Conference, Denizli, Turkey, 9-12 October, p. 313
 126. *Characterization of some plant extracts by GC-MS*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 4th Conference on Elementary Processes in Atomic Systems (CEAPS2008), Babes-Bolyai University, Cluj-Napoca, 18-20 June, p. 117, ISBN: 978-973-657-596-2
 127. *Gas Chromatography-Mass Spectrometry characterization of sea buckthorn*, **Iordache A.M.**, Minea R., Culea M., Lehene C., (2008). The 4th Meeting on Chemistry and Life 2008, Brno, Book of Abstract, 9-11 September, p 2.62, ISBN: 978-80-214-3715-9
 128. *Rapid Authentication of Natural Juices by GC-MS*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 4th Meeting on Chemistry and Life 2008, Brno, Book of Abstract, 9-11 September, p 2.63, ISBN: 978-80-214-3715-9
 129. *Comparative Extraction Methods of some biologic active compounds in herbs*, **Iordache A.M.**, Culea M., Cozar O., (2008). The 4th Meeting on Chemistry and Life 2008, Brno, Book of Abstract, 9-11 September, p 2.64, ISBN: 978-80-214-3715-9
 130. *Aminoacid Profiles Monitoring For Diagnosis*, Culea M., **Iordache A.M.**, Mesaros C., (2008). *The 4th Meeting on Chemistry and Life 2008*, Brno, Book of Abstract, 9-11 September, p 4.6, ISBN: 978-80-214-3715-9
 131. *Antibiotic Effects Of The Naphtoquinonic Derivative On Gram- Positive And Gram-Negative Germs*, Tamaian R., Paun N., Niculescu V., **Iordache A.M.**, Vremera R., Broscatean S., (2008). The 4th Meeting on Chemistry and Life 2008, Brno, Book of Abstract, 9-11 September, p 1.91, ISBN: 978-80-214-3715-9
 132. *Diagnosis of cirrhosis by GC/MS*, Mesaros C., Culea M., **Iordache A.M.**, (2008). The 4th Meeting on Chemistry and Life 2008, Brno, Book of Abstract, 9-11 September, p 4.15, ISBN: 978-80-214-3715-9
 133. *Characterization of allergens in different perfumes and herbs*, **Iordache A.M.**, Culea M., Cozar O., (2008). The XXIX European Congress on Molecular Spectroscopy (EUCMOS2008), Opatija, Croatia, August 31st- September 5th, p. 238, ISBN: 978-953-6690-76-3
 134. *Isotopic Dilution GC-MS for amino acids determination*, Culea M., Cozar O., **Iordache A.M.**, (2007). The 13th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, Călimănești-Căciulata, 7-9 November, Rm-Vâlcea, p. 49-52, ISSN: 1582-2575
 135. *Food products authentication based on isotopic analysis, in concordance with the Europeans standards*, Costinel D., Ionete R.E., Vremera R., Stanciu V., **Iordache A.M.**, (2007). The 13th ICIT Conference with international participation, Progress in Cryogenics and Isotopes Separation, Călimănești-Căciulata, 7-9 November, Rm-Vâlcea, p. 53, ISSN: 1582-2575
 136. *GC/MS study of sea buckthorn oil*, Culea M., **Iordache A.M.**, Nemtanu M., Minea R., (2007). The fifth conference PIM Isotopic and Molecular Processes, 20-22 September, Cluj-Napoca, p. 192
 137. *Gas chromatography-mass spectrometric characterization of seabuckthorn oil*, Culea M., **Iordache A.M.**, Panzaru S.C.,

- Nemtanu M., (2007). The IXth National Conference of Biophysics, 11-14 May, Carol Davila University of Medicine and Pharmacy, Bucharest, p. 42
138. *ID-GC-MS Diagnosis of metabolic diseases*, Culea M., Chiriac M., Culea E., Lehene C., **Iordache A.M.**, (2007). The IXth National Conference of Biophysics, 11-14 May, Carol Davila University of Medicine and Pharmacy, Bucharest, p. 70
139. *Raman study of UV-irradiated vitamin A*, **Iordache A.M.**, Cozar O., Jelic C., Leopold N., Chis V., (2007). The 4th International Conference on Advanced Vibrational Spectroscopy (ICAVS-4), Greece, Corfu, 10-15 June, p. 214
140. *Volatile Organic Compounds Measurement by GC/MS*, Culea M., Cozar O., **Iordache A.M.**, (2007). The 4th International Conference on Advanced Vibrational Spectroscopy (ICAVS-4), Greece, Corfu, 10-15 June, p. 267
141. *Amino acids determination in milk and cheese*, Culea M., Jimborean M., Pinteana A., Chiriac V., **Iordache A.M.**, (2007). The 4th International Conference on Advanced Vibrational Spectroscopy (ICAVS-4), Greece, Corfu, 10-15 June, p. 135
142. *THMs formation kinetics by chlorination of water*, **Iordache A.M.**, Culea M., (2007). The 4th International Conference on Advanced Vibrational Spectroscopy (ICAVS-4), Greece, Corfu, 10-15 June, p. 132
143. *Rapid diagnosis of some metabolic diseases*, Culea M., **Iordache A.M.**, (2007) The 4th International Conference on Advanced Vibrational Spectroscopy (ICAVS-4), Greece, Corfu, 10-15 June, p. 224

Director proiect
cercetare
stiintifică

1. **Contract nr. 20N/2023 (2023-2026) - Dezvoltarea tehnologiei inovative de separare a izotopilor litiului prin electromobilitate și algoritmi de inteligență artificială**, Suma totală: 8.185.783 lei, Perioada derulată 05.1.2023-24.11.2026.
2. **Contract de servicii nr. 5330/ 17.05.2022 - Servicii pentru etalonare și umplere canistre cu etaloane de apa grea**. Suma totala: 237.433 lei. Perioada 2022.
3. **Contract de servicii nr. 626/24.05.2021 - Servicii de analize de mediu**. Suma totala: 102.816 Lei Perioada 2021.
4. **Contract de servicii și furnizare nr. 41/25.01.2019 - Servicii pentru etalonare și umplere canistre cu etaloane de apă grea**. Suma totala: 213.698 Lei. Perioada derulată 2019.
5. **PN Ctr. Nr. 9N/2019-2022 — Tehnici avansate pentru identificarea surselor de contaminare și a reacțiilor biochimice în ecosistemele acvatice**. Suma totala: 11.000.000 Lei. Perioada derulată 16.04.2019-14.04.2022.
6. **PN Ctr. nr. 1N/2018 — Evaluarea impactului deversărilor de ape uzate asupra mediului prin investigații analitice avansate bazate pe tehnici nucleare și conexe**. Suma totala: 2.500.000 Lei. Perioada derulată 04.01.2018-10.12.2018.
7. **Ctr. nr. 32-127/2008 Proiect PN II — Determinarea mecanismului prin care poluanți la nivel de urme, organici și anorganici, cu potențial toxic, pot pătrunde în apele care alimentează mari aglomerări urbane din județele Cluj și Sălaj**. Suma totala: 1.940.900 Lei. Perioada derulată 2008-2011.
8. **Ctr. nr. 1376/2015 - Servicii de etalonare și umplere canistre cu etaloane de apă grea**. 2016-2019, Responsabil contract de servicii și furnizare. Suma totala: 295.598 Lei. Perioada derulată 2016.

Colaborator
proiect
cercetare
stiintifică

1. **PN ctr. 19N/2009 — "Investigatii teoretice si experimentale privind dezvoltarea de membrane compozite utilizate la purificarea de combustibili conventionali/ biocombustibili gazosi"**, 2015, Colaborator
2. **PN ctr. 19N/2009 — "Cercetari privind aplicarea metodelor de analiza izotopica si multi-element in vederea definirii autenticitatii si clasificarii geografice a vinurilor romanesti"**, 2009-2011, Persoana cheie -participare realizare proiect
3. **PN ctr. 19N/ 2009 — "Cercetari privind dezvoltarea de metode de control al unor contaminanti si aditivi in alimentatie"**, 2-015, Persoana cheie -participare realizare proiect
4. **PN Crt. 1N/2018 — "Cercetări privind dezvoltarea de metode analitice avansate de investigare a produselor alimentare ecologice de origine vegetală sau animală"**, 2018, Persoană cheie-participare realizare proiect
5. **PN Ctr. 19N/ 2009 — "Evaluarea impactului antropie asupra mediului inconjurator prin investigatii asupra poluantilor din aer, apa, sol si compararea cu o zona protejata de Parc National"**, 2009-2011, Persoana cheie -participare realizare proiect
6. **PN ctr. 13N/2006 — "Dezvoltarea unui sistem de urmarire a influentei compusilor organici volatili in controlul calitatii alimentelor, conform standardelor UE"**, 2006-2008, Colaborator
7. **Ctr. ID 501/2007 PNCDI II — "Studii spectroscopice si teoretice pe sisteme moleculare complexe de interes biomedical"**, 2007-2009, Persoana cheie -participare realizare proiect
8. **Ctr. 61002/2007 PNCDI II — "Obținerea și caracterizarea de noi medicamente –țintă cu substanța activă de natura naftochinonica"**, 2007-2010, Persoana cheie -participare realizare proiect
9. **Ctr. Biotech/86/2006 CEEEX — "Aplicarea tratamentului cu fascicule de electroni accelerati in vederea decontaminarii microbiene a suplimentelor nutritive din catina"**, 2006-2008, Persoana cheie-participare realizare proiect
10. **Ctr. Viasan/166/2006 CEEEX — "Cercetari privind diagnosticare si control utilizand biomarkeri (BioMarkDiag)"**, 2006-2008, Persoana cheie-participare realizare proiect
11. **Ctr. 1311/2006 CNCSIS — "Studii privind controlul, autentificarea si monitorizarea unor nutrienti si contaminanti"**, 2006-2008, Persoana cheie -participare realizare proiect

12. **Ctr. 52162/2008 Proiect PNII** — "Definirea profilului aromatic al vinurilor din soiuri autohtone prin tehnici izotopice IRMS si gaz cromatografice, ca element de autentificare a acestor produse pe piata europeana", 2008-2011, Colaborator
13. **Ctr. 52140/2008 Proiect PNII** — "Trasabilitatea alimentelor utilizând metode izotopice. Studiu de caz: mierea si vinul (IZOTRAS)", 2008-2011, Persoana cheie – participare realizare proiect
14. **Ctr.52158/2008 Proiect PNII** — "Cercetări de identificare și de valorificare a bioformelor de Trichogramma din agro-și silvo-ecosisteme, impactul și managementul introducerii nanomateriale bioactive în tehnologia de înmultire a oofagului", 2008-2011, Colaborator
15. **Ctr. 31021/2007 PNCDI II** — "Sistem informatic fuzzy de simulare si evaluare a scenariilor de risc tehnologic si ecologic si a modurilor de actiune in contextul schimbarilor climatice", 2007-2010, Colaborator
16. **Proiect PN** — "Implementarea metodelor de analiza prin GC/MS a urmelor de pesticide si analiza izotopica a apei potabile, in vederea consolidarii aquis-ului comunitar de mediu in Romania", 2006-2008, Colaborator
17. **Proiect international POST-UP CZ.1.07/2.3.00/30.0004** — "*Support for the creation of excellent research teams and intersectoral mobility at Palacký University in Olomouc, Palacky University, Faculty of Science, Czech Republic*" 2012-2015, Persoana cheie-participare realizare proiect internațional -mobilitate.

Afiliere Institutul Național de Cercetare-Dezvoltare pentru Tehnologii Criogenice și Izotopice – ICSI Rm. Vâlcea, ROMÂNIA/Department of Analytical Chemistry

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ANEXE

Se vor furniza la cerere.

15 April 2026

Andreea Maria IORDACHE

